# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, D.C. 20549**

# FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the quarterly period ended March 31, 2020**

**or**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from to**

**Commission file number: 001-34720**

# TELENAV, INC.
**(Exact name of registrant as specified in its charter)**

| | |
|---|---|
| **Delaware** | **77-0521800** |
| **(State or other jurisdiction of incorporation or organization)** | **(I.R.S. Employer Identification Number)** |

**4655 Great America Parkway, Suite 300**
**Santa Clara, California 95054**
**(Address of principal executive offices, including zip code)**

**(408) 245-3800**
**(Registrant's telephone number, including area code)**

Securities registered pursuant to Section 12(b) of the Act:

| Title of each class | Trading Symbol(s) | Name of each exchange on which registered |
|---|---|---|
| Common stock, $0.001 Par Value per Share | TNAV | The NASDAQ Global Market |

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | |
|---|---|---|---|
| Large accelerated filer | ☐ | Accelerated filer | ☒ |
| Non-accelerated filer | ☐ | Smaller reporting company | ☐ |
| | | Emerging growth company | ☐ |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of March 31, 2020, there were 47,287,665 shares of the Registrant's Common Stock outstanding.

**TELENAV, INC.**

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# PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements.

### TELENAV, INC.
### CONDENSED CONSOLIDATED BALANCE SHEETS
### (in thousands, except par value)
### (unaudited)

| | March 31, 2020 | June 30, 2019 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 16,476 | $ 27,275 |
| Short-term investments | 107,273 | 72,203 |
| Accounts receivable, net of allowances of $6 and $7 at March 31, 2020 and June 30, 2019, respectively | 41,926 | 69,781 |
| Restricted cash | 1,541 | 1,950 |
| Deferred costs | 29,744 | 18,752 |
| Prepaid expenses and other current assets | 3,477 | 3,784 |
| Assets of discontinued operations | — | 6,330 |
| Total current assets | 200,437 | 200,075 |
| Property and equipment, net | 5,411 | 5,583 |
| Operating lease right-of-use assets | 7,909 | — |
| Deferred income taxes, non-current | 1,081 | 998 |
| Goodwill and intangible assets, net | 14,255 | 15,701 |
| Deferred costs, non-current | 52,954 | 61,050 |
| Other assets | 33,504 | 1,414 |
| Assets of discontinued operations, non-current | — | 12,194 |
| Total assets | $ 315,551 | $ 297,015 |
| **Liabilities and stockholders' equity** | | |
| Current liabilities: | | |
| Trade accounts payable | $ 24,082 | $ 16,061 |
| Accrued expenses | 36,208 | 48,899 |
| Operating lease liabilities | 3,161 | — |
| Deferred revenue | 43,841 | 31,270 |
| Income taxes payable | 537 | 800 |
| Liabilities of discontinued operations | — | 3,373 |
| Total current liabilities | 107,829 | 100,403 |
| Deferred rent, non-current | — | 1,266 |
| Operating lease liabilities, non-current | 5,785 | — |
| Deferred revenue, non-current | 99,361 | 103,865 |
| Other long-term liabilities | 667 | 811 |
| Liabilities of discontinued operations, non-current | — | 30 |
| Commitments and contingencies | — | — |
| Stockholders' equity: | | |
| Preferred stock, $0.001 par value: 50,000 shares authorized; no shares issued or outstanding | — | — |
| Common stock, $0.001 par value: 600,000 shares authorized; 47,288 and 46,911 shares issued and outstanding at March 31, 2020 and June 30, 2019, respectively | 47 | 47 |
| Additional paid-in capital | 189,387 | 182,349 |
| Accumulated other comprehensive loss | (2,004) | (1,477) |
| Accumulated deficit | (85,521) | (90,279) |
| Total stockholders' equity | 101,909 | 90,640 |
| Total liabilities and stockholders' equity | $ 315,551 | $ 297,015 |

See accompanying Notes to Condensed Consolidated Financial Statements.

## TELENAV, INC.

## CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
**(in thousands, except per share amounts)**
**(unaudited)**

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Revenue: | | | | |
| Product | $ 52,106 | $ 41,723 | $ 169,639 | $ 124,050 |
| Services | 12,390 | 6,817 | 35,361 | 20,902 |
| Total revenue | 64,496 | 48,540 | 205,000 | 144,952 |
| Cost of revenue: | | | | |
| Product | 27,664 | 23,532 | 86,087 | 72,135 |
| Services | 7,859 | 3,917 | 20,009 | 11,762 |
| Total cost of revenue | 35,523 | 27,449 | 106,096 | 83,897 |
| Gross profit | 28,973 | 21,091 | 98,904 | 61,055 |
| Operating expenses: | | | | |
| Research and development | 21,617 | 19,322 | 61,997 | 55,580 |
| Sales and marketing | 2,166 | 2,167 | 6,246 | 5,535 |
| General and administrative | 6,403 | 5,523 | 20,118 | 16,694 |
| Legal settlements and contingencies | — | — | — | 650 |
| Total operating expenses | 30,186 | 27,012 | 88,361 | 78,459 |
| Income (loss) from operations | (1,213) | (5,921) | 10,543 | (17,404) |
| Other income, net | 1,088 | 581 | 2,245 | 2,703 |
| Income (loss) from continuing operations before provision for income taxes | (125) | (5,340) | 12,788 | (14,701) |
| Provision for income taxes | 505 | 194 | 1,121 | 1,036 |
| Equity in net (income) loss of equity method investees | 103 | — | (694) | — |
| Income (loss) from continuing operations | (733) | (5,534) | 12,361 | (15,737) |
| Discontinued operations: | | | | |
| Income (loss) from operations of Advertising business, net of tax | — | (1,947) | 832 | (3,895) |
| Loss from sale of Advertising business | — | — | (4,874) | — |
| Loss on discontinued operations | — | (1,947) | (4,042) | (3,895) |
| Net income (loss) | $ (733) | $ (7,481) | $ 8,319 | $ (19,632) |
| Basic income (loss) per share: | | | | |
| Income (loss) from continuing operations | $ (0.02) | $ (0.12) | $ 0.26 | $ (0.35) |
| Loss on discontinued operations | — | (0.04) | (0.08) | (0.09) |
| Net income (loss) | $ (0.02) | $ (0.16) | $ 0.17 | $ (0.43) |
| Diluted income (loss) per share: | | | | |
| Income (loss) from continuing operations | $ (0.02) | $ (0.12) | $ 0.25 | $ (0.35) |
| Loss on discontinued operations | — | (0.04) | (0.08) | (0.09) |
| Net income (loss) | $ (0.02) | $ (0.16) | $ 0.17 | $ (0.43) |
| Weighted average shares used in computing income (loss) per share: | | | | |
| Basic | 47,902 | 45,585 | 48,053 | 45,347 |
| Diluted | 47,902 | 45,585 | 49,022 | 45,347 |
| Stock-based compensation expense included in continuing operations above: | | | | |
| Cost of revenue | $ 12 | $ 19 | $ 41 | $ 59 |
| Research and development | 1,156 | 1,107 | 2,874 | 3,522 |
| Sales and marketing | 250 | 172 | 575 | 505 |
| General and administrative | 541 | 390 | 1,699 | 1,525 |
| Total stock-based compensation expense | $ 1,959 | $ 1,688 | $ 5,189 | $ 5,611 |

See accompanying Notes to Condensed Consolidated Financial Statements.

**TELENAV, INC.**

**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**
**(in thousands)**
**(unaudited)**

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Net income (loss) | $ (733) | $ (7,481) | $ 8,319 | $ (19,632) |
| Other comprehensive income (loss): | | | | |
| Foreign currency translation adjustment, net of tax | (164) | (54) | (267) | (402) |
| Available-for-sale securities: | | | | |
| Unrealized gain (loss) on available-for-sale securities, net of tax | (290) | 328 | (246) | 514 |
| Reclassification adjustments for gain (loss) on available-for-sale securities recognized, net of tax | (12) | 13 | (14) | 20 |
| Net increase (decrease) from available-for-sale securities, net of tax | (302) | 341 | (260) | 534 |
| Other comprehensive income (loss), net of tax | (466) | 287 | (527) | 132 |
| Comprehensive income (loss) | $ (1,199) | $ (7,194) | $ 7,792 | $ (19,500) |

See accompanying Notes to Condensed Consolidated Financial Statements.

## TELENAV, INC.

## CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS’ EQUITY
## (in thousands)
## (unaudited)

| Nine Months Ended March 31, 2020 | Common Stock Shares | Common Stock Amount | Additional Paid-in Capital | Accumulated Other Comprehensive Loss | Accumulated Deficit | Total Stockholders' Equity |
|---|---|---|---|---|---|---|
| Balance at June 30, 2019 | 46,911 | $ 47 | $ 182,349 | $ (1,477) | $ (90,279) | $ 90,640 |
| Issuance of common stock upon exercise of stock options | 1,326 | 1 | 8,340 | — | — | 8,341 |
| Release of restricted stock units | 329 | 1 | (1,273) | — | — | (1,272) |
| Stock-based compensation expense, continuing operations | — | — | 1,752 | — | — | 1,752 |
| Stock-based compensation expense, discontinued operations | — | — | 887 | — | — | 887 |
| Foreign currency translation adjustment, net of tax | — | — | — | (310) | — | (310) |
| Unrealized net loss on available-for-sale securities, net of tax | — | — | — | 58 | — | 58 |
| Net loss | — | — | — | — | (3,954) | (3,954) |
| Balance at September 30, 2019 | 48,566 | 49 | 192,055 | (1,729) | (94,233) | 96,142 |
| Issuance of common stock upon exercise of stock options | — | — | — | — | — | — |
| Release of restricted stock units | 352 | — | (317) | — | — | (317) |
| Repurchases of common stock | (767) | (1) | (2,623) | — | (1,395) | (4,019) |
| Stock-based compensation expense, continuing operations | — | — | 1,478 | — | — | 1,478 |
| Foreign currency translation adjustment, net of tax | — | — | — | 207 | — | 207 |
| Unrealized net gain on available-for-sale securities, net of tax | — | — | — | (16) | — | (16) |
| Net income | — | — | — | — | 13,006 | 13,006 |
| Balance at December 31, 2019 | 48,151 | 48 | 190,593 | (1,538) | (82,622) | 106,481 |
| Issuance of common stock upon exercise of stock options | 17 | — | 84 | — | — | 84 |
| Release of restricted stock units | 45 | — | (82) | — | — | (82) |
| Repurchases of common stock | (925) | (1) | (3,167) | — | (2,166) | (5,334) |
| Stock-based compensation expense | — | — | 1,959 | — | — | 1,959 |
| Foreign currency translation adjustment, net of tax | — | — | — | (164) | — | (164) |
| Unrealized net gain on available-for-sale securities, net of tax | — | — | — | (302) | — | (302) |
| Net loss | — | — | — | — | (733) | (733) |
| Balance at March 31, 2020 | 47,288 | $ 47 | $ 189,387 | $ (2,004) | $ (85,521) | $ 101,909 |
| | | | | | | |
| **Nine Months Ended March 31, 2019** | | | | | | |
| Balance at June 30, 2018 | 44,871 | $ 45 | $ 167,895 | $ (1,855) | $ (57,202) | $ 108,883 |
| Issuance of common stock upon exercise of stock options | 5 | — | 25 | — | — | 25 |
| Release of restricted stock units | 385 | — | (1,205) | — | — | (1,205) |
| Stock-based compensation expense, continuing operations | — | — | 2,048 | — | — | 2,048 |
| Stock-based compensation expense, discontinued operations | — | — | 221 | — | — | 221 |
| Foreign currency translation adjustment, net of tax | — | — | — | (217) | — | (217) |
| Unrealized net loss on available-for-sale securities, net of tax | — | — | — | 91 | — | 91 |
| Net loss | — | — | — | — | (7,570) | (7,570) |
| Balance at September 30, 2018 | 45,261 | 45 | 168,984 | (1,981) | (64,772) | 102,276 |
| Issuance of common stock upon exercise of stock options | — | — | 1 | — | — | 1 |
| Release of restricted stock units | 280 | 1 | (353) | — | — | (352) |
| Stock-based compensation expense, continuing operations | — | — | 1,875 | — | — | 1,875 |
| Stock-based compensation expense, discontinued operations | — | — | 240 | — | — | 240 |
| Foreign currency translation adjustment, net of tax | — | — | — | (131) | — | (131) |
| Unrealized net loss on available-for-sale securities, net of tax | — | — | — | 102 | — | 102 |
| Net loss | — | — | — | — | (4,581) | (4,581) |
| Balance at December 31, 2018 | 45,541 | 46 | 170,747 | (2,010) | (69,353) | 99,430 |
| Issuance of common stock upon exercise of stock options | 244 | — | 1,330 | — | — | 1,330 |
| Release of restricted stock units | 79 | — | (273) | — | — | (273) |
| Repurchase of common stock | (221) | — | (714) | — | (589) | (1,303) |
| Stock-based compensation expense | — | — | 1,907 | — | — | 1,907 |
| Foreign currency translation adjustment, net of tax | — | — | — | (54) | — | (54) |
| Unrealized net loss on available-for-sale securities, net of tax | — | — | — | 341 | — | 341 |
| Net loss | — | — | — | — | (7,481) | (7,481) |
| Balance at March 31, 2019 | 45,643 | $ 46 | $ 172,997 | $ (1,723) | $ (77,423) | $ 93,897 |

See accompanying Notes to Condensed Consolidated Financial Statements.

# TELENAV, INC.
## CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
### (in thousands)
### (unaudited)

| | Nine Months Ended March 31, 2020 | Nine Months Ended March 31, 2019 |
|---|---|---|
| **Operating activities** | | |
| Net income (loss) | $ 8,319 | $ (19,632) |
| Loss on discontinued operations | 4,042 | 3,895 |
| Income (loss) from continuing operations | 12,361 | (15,737) |
| Adjustments to reconcile net income (loss) to net cash provided by operating activities: | | |
| Stock-based compensation expense | 5,189 | 5,611 |
| Depreciation and amortization | 2,685 | 2,982 |
| Operating lease amortization, net of accretion | 2,153 | — |
| Accretion of net premium on short-term investments | 157 | (15) |
| Unrealized gain on non-marketable equity investments | — | (1,260) |
| Equity in net income of equity method investees | (694) | — |
| Gain on sale of intellectual property and workforce to Grab | (45) | — |
| Non-cash revenue associated with grant of perpetual license to Grab | (5,831) | — |
| Other | (38) | (22) |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | 28,334 | (11,581) |
| Deferred income taxes | (110) | 209 |
| Deferred costs | (2,924) | (13,934) |
| Prepaid expenses and other current assets | 1,463 | (162) |
| Other assets | (21) | (123) |
| Trade accounts payable | 7,913 | 12,020 |
| Accrued expenses and other liabilities | (13,910) | (1,728) |
| Income taxes payable | (252) | 160 |
| Deferred rent | — | 488 |
| Operating lease liabilities | (2,791) | — |
| Deferred revenue | 8,042 | 29,281 |
| Net cash provided by operating activities | 41,681 | 6,189 |
| **Investing activities** | | |
| Purchases of property and equipment | (1,320) | (956) |
| Purchases of short-term investments | (67,347) | (31,044) |
| Purchase of long-term investments | (9,500) | — |
| Proceeds from sales and maturities of short-term investments | 31,789 | 34,214 |
| Net cash provided by (used in) investing activities | (46,378) | 2,214 |
| **Financing activities** | | |
| Proceeds from exercise of stock options | 8,390 | 1,356 |
| Tax withholdings related to net share settlements of restricted stock units | (1,230) | (1,831) |
| Repurchase of common stock | (9,353) | (1,303) |
| Net cash used in financing activities | (2,193) | (1,778) |
| Effect of exchange rate changes on cash, cash equivalents and restricted cash | (343) | (401) |
| Net increase (decrease) in cash, cash equivalents and restricted cash, continuing operations | (7,233) | 6,224 |
| Net cash used in discontinued operations | (3,975) | (3,154) |
| Cash, cash equivalents and restricted cash, beginning of period | 29,225 | 20,099 |
| Cash, cash equivalents and restricted cash, end of period | $ 18,017 | $ 23,169 |
| **Supplemental disclosure of cash flow information** | | |
| Income taxes paid, net | $ 1,626 | $ 730 |
| Non-cash investing: Investment in inMarket Media, LLC acquired in exchange for sale of Advertising business | $ 15,600 | $ — |
| Non-cash sale of assets to Grab in exchange for equity investment and software | $ 7,012 | $ — |
| Cash flows from discontinued operations: | | |
| Net cash used in operating activities | $ (3,569) | $ (3,154) |
| Net cash used in financing activities | (406) | — |
| Net cash transferred from continuing operations | 3,975 | 3,154 |
| Net change in cash and cash equivalents from discontinued operations | — | — |
| Cash and cash equivalents of discontinued operations, beginning of period | — | — |
| Cash and cash equivalents of discontinued operations, end of period | $ — | $ — |
| **Reconciliation of cash, cash equivalents and restricted cash to the condensed consolidated balance sheets** | | |
| Cash and cash equivalents | $ 16,476 | $ 21,254 |
| Restricted cash | 1,541 | 1,915 |
| Total cash, cash equivalents and restricted cash | $ 18,017 | $ 23,169 |

See accompanying Notes to Condensed Consolidated Financial Statements.

**TELENAV, INC.**

**Notes to Condensed Consolidated Financial Statements**

**(unaudited)**

## 1. Summary of business and significant accounting policies

***Description of business***

Telenav, Inc., also referred to in this report as "we," "our" or "us," was incorporated in September 1999 in the State of Delaware. We are a leading provider of connected car and location-based products and services. We utilize our automotive navigation platform to deliver these products and services. Our automotive navigation platform allows us to deliver enhanced location-based services to automobile manufacturers, as well as original equipment manufacturers and tier one suppliers, to which we refer collectively as tier ones. Our automotive solutions primarily include navigation systems built into vehicles, or on-board, mobile phone based navigation systems, or brought-in, and advanced navigation solutions that offer on-board functionality combined with cloud functionality, or hybrid. Our fiscal year ends on June 30, and in this report we refer to the fiscal year ended June 30, 2019 as "fiscal 2019" and the fiscal year ending June 30, 2020 as "fiscal 2020."

Commencing July 1, 2019, we operate in a single segment, automotive. Through June 30, 2019, we operated in three segments - automotive, advertising and mobile navigation. In August 2019, we completed the disposition of our digital advertising operations (the "Ads Business") and have presented the results of operations for the Ads Business as discontinued operations for all prior periods presented. See Note 12. Our mobile navigation services business represented less than 5% of total revenue for the three and nine months ended March 31, 2020 and we expect the business to continue to decline. Our chief executive officer, or CEO, the chief operating decision maker, does not review mobile navigation revenue and cost of revenue separately. As a result, we have combined the mobile navigation business with the automotive business in a single segment.

***Basis of presentation***

The unaudited condensed consolidated financial statements and accompanying notes have been prepared in accordance with accounting principles generally accepted in the United States of America, or GAAP. The condensed consolidated financial statements include the accounts of Telenav, Inc. and its wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation. The financial statements include all adjustments (consisting only of normal recurring adjustments) that our management believes are necessary for a fair presentation of the periods presented. These interim financial results are not necessarily indicative of results expected for the full fiscal year or for any subsequent interim period.

Our condensed consolidated financial statements also include the financial results of Shanghai Jitu Software Development Ltd., or Jitu, located in China. Based on our contractual arrangements with the shareholders of Jitu, we have determined that Jitu is a variable interest entity, or VIE, for which we are the primary beneficiary and are required to consolidate in accordance with Accounting Standards Codification, or ASC, subtopic 810-10, or ASC 810-10, *Consolidation: Overall*. The results of Jitu did not have a material impact on our financial statements for the nine months ended March 31, 2020 and 2019.

The condensed consolidated financial statements and related financial information should be read in conjunction with the audited consolidated financial statements and the related notes thereto for fiscal 2020, included in our Annual Report on Form 10-K for fiscal 2019 filed with the U.S. Securities and Exchange Commission, or SEC, on August 22, 2019, which we refer to as the Form 10-K.

Effective July 1, 2019, we adopted the requirements of Accounting Standards Update, or ASU, No. 2016-02, *Leases* (ASC 842) as discussed in the section titled "*Recently adopted accounting pronouncements*" of this Note 1. All amounts and disclosures set forth in this Form 10-Q have been updated to comply with this standard.

Certain prior period balances have been reclassified to conform to the current period presentation of discontinued operations.

***Significant accounting policies***

With the exception of changes in accounting policies associated with our adoption of the new lease accounting standard, there have been no material changes to our significant accounting policies as compared to the significant accounting policies described in our Form 10-K.

***Use of estimates***

The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Significant estimates and assumptions made by us include the determination of revenue recognition and deferred revenue, including estimating and allocating the transaction price of customer contracts, the recoverability of accounts receivable and short-term investments, the determination of acquired intangibles and assessment of goodwill for impairment, the fair value of stock-based awards issued, the determination of income taxes and the recoverability of deferred tax assets. Actual results could differ from those estimates.

In March 2020, the World Health Organization declared the outbreak of the novel coronavirus first identified in China in late 2019 (COVID-19) as a pandemic, which continues to spread throughout the U.S. and the world. The extent of the impact of the COVID-19 pandemic on our operational and financial performance will depend on future developments, including the duration and spread of the outbreak, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume, all of which are uncertain and we cannot predict. During the three months ended March 31, 2020, this uncertainty resulted in a higher level of judgment related to our estimates and assumptions concerning short-term investments, long-lived assets, non-marketable equity and debt investments, goodwill, and variable consideration related to revenue recognition. We expect uncertainties around our key accounting estimates to continue to evolve depending on the duration and degree of impact associated with the COVID-19 pandemic. Our estimates may change as new events occur and additional information emerges, and such changes are recognized or disclosed in our consolidated financial statements.

***Disaggregation of revenue***

In order to further depict how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors, the following table depicts the disaggregation of revenue according to revenue type and pattern of recognition (in thousands):

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Product | | | | |
| On-board automotive navigation solutions (point in time)[1] | $ 52,106 | $ 41,723 | $ 169,639 | $ 124,050 |
| Total product revenue | 52,106 | 41,723 | 169,639 | 124,050 |
| Services | | | | |
| Brought-in automotive navigation solutions (over time)[2] | 9,632 | 4,250 | 24,641 | 12,272 |
| Automotive maintenance and support and other (over time) | 153 | 42 | 3,028 | 697 |
| Mobile navigation services (over time) | 2,605 | 2,525 | 7,692 | 7,933 |
| Total services revenue | 12,390 | 6,817 | 35,361 | 20,902 |
| Total revenue | $ 64,496 | $ 48,540 | $ 205,000 | $ 144,952 |

(1)Includes i) royalties earned and recognized at the point in time usage occurs, ii) map updates and iii) customized software development fees.
(2)Includes royalties earned and recognized over time from the allocation of transaction price to service obligations for hybrid automotive solutions.

***Contract assets***

Contract assets relate to our rights to consideration for performance obligations satisfied but not billed at the reporting date. As of March 31, 2020 and June 30, 2019, we had no contract assets.

***Deferred costs***

Changes in the balance of total deferred costs (current and non-current) during the nine months ended March 31, 2020 were as follows (in thousands):

| | Deferred Costs | | |
|---|---|---|---|
| | Content | Development | Total |
| Balance, June 30, 2019 | $ 71,466 | $ 8,336 | $ 79,802 |
| Content licensing costs incurred | 97,826 | — | 97,826 |
| Customized software development costs incurred | — | 2,950 | 2,950 |
| Less: cost of revenue recognized | (92,903) | (4,977) | (97,880) |
| Balance, March 31, 2020 | $ 76,389 | $ 6,309 | $ 82,698 |

***Concentrations of risk and significant customers***

Revenue related to products and services provided through Ford Motor Company and affiliated entities, or Ford, comprised 48% and 59% of total revenue for the three months ended March 31, 2020 and 2019, respectively, and 46% and 64% for the nine months ended March 31, 2020 and 2019, respectively. As of March 31, 2020 and June 30, 2019, receivables due from Ford were 43% and 33% of total accounts receivable, respectively.

Revenue related to products and services provided through General Motors Holdings and its affiliates, or GM, comprised 39% and 21% of total revenue for the three months ended March 31, 2020 and 2019, respectively, and 31% and 19% for the nine months ended March 31, 2020 and 2019, respectively. As of March 31, 2020 and June 30, 2019, receivables due from GM were 37% and 15% of total accounts receivable, respectively.

Revenue related to products and services provided to affiliates of Grab Holdings, Inc., which, collectively with certain of its affiliates, we refer to as Grab, comprised less than 10% and 10% of total revenue for the three and nine months ended March 31, 2020, respectively.

Receivables due from Xevo, Inc., a tier one supplier for certain Toyota Motor Corporation, or Toyota, solutions were less than 10% and 29% of total accounts receivable as of March 31, 2020 and June 30, 2019, respectively.

***Restricted cash***

As of March 31, 2020 and June 30, 2019, we had restricted cash of $1.5 million and $2.0 million, respectively, on our consolidated balance sheets, comprised primarily of prepayments from a customer.

***Accumulated other comprehensive loss, net of tax***

The components of accumulated other comprehensive loss, net of related taxes, and activity as of March 31, 2020, were as follows (in thousands):

| | Foreign Currency Translation Adjustments | Unrealized Gains (Losses) on Available-for-Sale Securities | Total |
|---|---|---|---|
| Balance, net of tax as of June 30, 2019 | $ (1,623) | $ 146 | $ (1,477) |
| Other comprehensive income (loss) before reclassifications, net of tax | (267) | (246) | (513) |
| Amount reclassified from accumulated other comprehensive loss, net of tax | — | (14) | (14) |
| Other comprehensive income (loss), net of tax | (267) | (260) | (527) |
| Balance, net of tax as of March 31, 2020 | $ (1,890) | $ (114) | $ (2,004) |

The amount of income tax benefit allocated to each component of accumulated other comprehensive loss was not material for the nine months ended March 31, 2020.

***Recently adopted accounting pronouncements***

In August 2018, the Financial Accounting Standards Board, or FASB, issued ASU 2018-15, *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, or ASU 2018-15, which requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in

ASC 350-40 to determine which implementation costs to defer and recognize as an asset. We early adopted ASU 2018-15 on July 1, 2019 on a prospective basis, and it did not have a material impact on our financial position or results of operations.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (ASC 842) which supersedes the guidance in topic ASC 840, Leases. The new standard, including subsequent amendments, requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to previous guidance for operating leases under ASC 840, Leases.

We adopted ASC 842, effective July 1, 2019. We adopted the standard using the modified retrospective transition approach applying the new standard to all leases existing at the date of initial application and not restating comparative periods. The most significant impact was the recognition of right-of-use, or ROU, assets and lease liabilities for operating leases that were not previously recorded. For information regarding the impact of ASC 842 adoption, see Leases and Note 6.

*Leases*

On July 1, 2019, we adopted ASC 842 using the modified retrospective transition approach by applying the new standard to all leases existing at the date of initial application. Results and disclosure requirements for reporting periods beginning after July 1, 2019 are presented under ASC 842, while prior period amounts have not been adjusted and continue to be reported in accordance with our historical accounting.

We elected the package of practical expedients permitted under the transition guidance, which allowed us to carry forward our historical lease classification, our assessment on whether a contract was or contains a lease, and our initial direct costs for any leases that existed prior to July 1, 2019. We also elected to keep leases with an initial term of 12 months or less off the balance sheet and recognize the associated lease payments in the consolidated statements of income on a straight-line basis over the lease term.

Upon adoption, we recognized total ROU assets of $11.7 million, with corresponding liabilities of $13.0 million on the condensed consolidated balance sheets. The adoption did not impact our beginning retained earnings, or our prior year condensed consolidated statements of operations and statements of cash flows.

We recognize operating lease ROU assets and operating lease liabilities at the commencement date based on the present value of the future minimum lease payments over the lease term. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at the commencement date in determining the present value of future payments. The operating lease ROU asset also includes any lease payments we made and excludes lease incentives and initial direct costs we incurred. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term.

We include operating leases in operating lease right-of-use assets, operating lease liabilities and operating lease liabilities, non-current on our condensed consolidated balance sheets.

***Recent accounting pronouncements not yet adopted***

In December 2019, the FASB issued ASU 2019-12, Simplifying the Accounting for Income Taxes, which simplifies accounting for income taxes by revising or clarifying existing guidance in ASC 740, as well as removing certain exceptions within ASC 740. This guidance is effective for us on July 1, 2021 with early adoption permitted. We are evaluating the impact of the adoption of this standard on our consolidated financial statements, but we do not expect it to have a material impact.

With the exception of the recently adopted accounting pronouncements and recent accounting pronouncements not yet adopted discussed above, there have been no other changes in accounting pronouncements during the nine months ended March 31, 2020, as compared to the recent accounting pronouncements described in our Annual Report on Form 10-K for fiscal 2019, that are of significance or potential significance to us.

## 2. Net income (loss) per share

Basic income (loss) per share is calculated by dividing income (loss) by the weighted-average number of common shares outstanding for the period. Diluted income (loss) per share is computed by dividing income (loss) by the weighted-average number of common shares outstanding for the period, including potential dilutive common shares assuming the dilutive effect of outstanding stock options and restricted stock units using the treasury-stock method.

The following table presents the calculation of basic and diluted net loss per share (in thousands, except per share amounts):

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Income (loss) from continuing operations | $ (733) | $ (5,534) | $ 12,361 | $ (15,737) |
| Loss on discontinued operations | — | (1,947) | (4,042) | (3,895) |
| Net income (loss) | $ (733) | $ (7,481) | $ 8,319 | $ (19,632) |
| Shares used to compute basic income (loss) per share | 47,902 | 45,585 | 48,053 | 45,347 |
| Dilutive potential common shares: | | | | |
| Stock options | — | — | 50 | — |
| Restricted stock units | — | — | 909 | — |
| Employee stock purchase plan | — | — | 10 | — |
| Shares used to compute diluted income (loss) per share | 47,902 | 45,585 | 49,022 | 45,347 |
| Basic income (loss) per share: | | | | |
| Income (loss) from continuing operations | $ (0.02) | $ (0.12) | $ 0.26 | $ (0.35) |
| Loss on discontinued operations | — | (0.04) | (0.08) | (0.09) |
| Net income (loss) | $ (0.02) | $ (0.16) | $ 0.17 | $ (0.43) |
| Diluted income (loss) per share: | | | | |
| Income (loss) from continuing operations | $ (0.02) | $ (0.12) | $ 0.25 | $ (0.35) |
| Loss on discontinued operations | — | (0.04) | (0.08) | (0.09) |
| Net income (loss) | $ (0.02) | $ (0.16) | $ 0.17 | $ (0.43) |
| Potential common stock equivalents not included in the calculation of diluted income per share as the effect would be anti-dilutive | — | — | 1,748 | — |

A total of 1,300,000 outstanding performance-based restricted stock units, as described further in Note 9, were excluded from the diluted shares calculation above because they are contingently issuable and none of the performance milestones had been met.

## 3. Cash, cash equivalents and short-term investments

Cash and cash equivalents consist of unrestricted cash and highly liquid fixed-income investments with original maturities of three months or less at the time of purchase, including money market funds and commercial paper. Short-term investments consist of readily marketable debt securities with a remaining maturity of more than three months from the date of purchase. Short-term investments are classified as current assets, even though maturities may extend beyond one year, because they represent investments of cash available for operations. We classify all cash equivalents and short-term investments as “available for sale,” as these investments are free of trading restrictions. Marketable debt securities are carried at fair value, with the unrealized gains and losses, net of tax, reported as accumulated other comprehensive income (loss) and included as a separate component of stockholders’ equity. Gains and losses are recognized when realized. When we have determined that an other-than-temporary decline in fair value has occurred, the amount of the decline that is related to a credit loss is recognized in earnings. Gains and losses are determined using the specific identification method. We had no material realized gains or losses in the nine months ended March 31, 2020 or 2019.

**TELENAV, INC.**

**Notes to Condensed Consolidated Financial Statements—(Continued)**

**(unaudited)**

Short-term investments as of June 30, 2019 also included marketable equity securities, which are carried at fair value with unrealized gains and losses recognized in other income (expense), net. We had no net realized gains (losses) from marketable equity securities in the nine months ended March 31, 2020 or 2019. As of March 31, 2020, we had no marketable equity securities.

Cash, cash equivalents and short-term investments consisted of the following as of March 31, 2020 (in thousands):

| Description | Amortized Cost | Unrealized Gains | Unrealized Losses | Estimated Fair Value |
|---|---|---|---|---|
| Cash | $ 15,594 | $ — | $ — | $ 15,594 |
| Cash equivalents: | | | | |
| Money market mutual funds | 382 | — | — | 382 |
| Commercial paper | 500 | — | — | 500 |
| Total cash equivalents | 882 | — | — | 882 |
| Total cash and cash equivalents | 16,476 | — | — | 16,476 |
| Short-term investments: | | | | |
| U.S. treasury securities | 2,615 | 54 | — | 2,669 |
| U.S. agency securities | 3,809 | 62 | — | 3,871 |
| Asset-backed securities | 20,610 | 106 | (74) | 20,642 |
| Municipal securities | 9,415 | 43 | — | 9,458 |
| Commercial paper | 3,193 | 2 | — | 3,195 |
| Corporate bonds | 67,601 | 181 | (344) | 67,438 |
| Total short-term investments | 107,243 | 448 | (418) | 107,273 |
| Cash, cash equivalents and short-term investments | $ 123,719 | $ 448 | $ (418) | $ 123,749 |

Cash, cash equivalents and short-term investments consisted of the following as of June 30, 2019 (in thousands):

| Description | Amortized Cost | Unrealized Gains | Unrealized Losses | Estimated Fair Value |
|---|---|---|---|---|
| Cash | $ 25,987 | $ — | $ — | $ 25,987 |
| Cash equivalents: | | | | |
| Money market mutual funds | 790 | — | — | 790 |
| Commercial paper | 498 | — | — | 498 |
| Total cash equivalents | 1,288 | — | — | 1,288 |
| Total cash and cash equivalents | 27,275 | — | — | 27,275 |
| Short-term investments: | | | | |
| U.S. treasury securities | 3,570 | 6 | (4) | 3,572 |
| U.S. agency securities | 3,002 | 9 | (2) | 3,009 |
| Asset-backed securities | 12,319 | 104 | (10) | 12,413 |
| Municipal securities | 4,124 | 16 | — | 4,140 |
| Commercial paper | 1,986 | — | — | 1,986 |
| Corporate bonds | 45,492 | 269 | (27) | 45,734 |
| Total debt securities | 70,493 | 404 | (43) | 70,854 |
| Marketable equity securities | 250 | 1,099 | — | 1,349 |
| Total short-term investments | 70,743 | 1,503 | (43) | 72,203 |
| Cash, cash equivalents and short-term investments | $ 98,018 | $ 1,503 | $ (43) | $ 99,478 |

The following table summarizes the fair value and gross unrealized losses related to available-for-sale securities, aggregated by investment category, that have been in an unrealized loss position for less than 12 months or a continuous unrealized loss position for 12 months or greater, as of March 31, 2020 and June 30, 2019 (in thousands):

**TELENAV, INC.**

**Notes to Condensed Consolidated Financial Statements—(Continued)**

**(unaudited)**

| | March 31, 2020 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Less than 12 Months | | | | 12 Months or Greater | | | | Total | | | |
| | Fair Value | | Unrealized Losses | | Fair Value | | Unrealized Losses | | Fair Value | | Unrealized Losses | |
| Asset-backed securities | $ | 7,671 | $ | (74) | $ | — | $ | — | $ | 7,671 | $ | (74) |
| Corporate bonds | | 40,090 | | (344) | | — | | — | | 40,090 | | (344) |
| Total | $ | 47,761 | $ | (418) | $ | — | $ | — | $ | 47,761 | $ | (418) |

| | June 30, 2019 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Less than 12 Months | | | | 12 Months or Greater | | | | Total | | | |
| | Fair Value | | Unrealized Losses | | Fair Value | | Unrealized Losses | | Fair Value | | Unrealized Losses | |
| U.S. treasury securities | $ | — | $ | — | $ | 2,992 | $ | (5) | $ | 2,992 | $ | (5) |
| U.S. agency securities | | — | | — | | 998 | | (1) | | 998 | | (1) |
| Asset-backed securities | | — | | — | | 3,537 | | (11) | | 3,537 | | (11) |
| Commercial paper | | 493 | | (1) | | — | | — | | 493 | | (1) |
| Corporate bonds | | 4,600 | | (3) | | 14,615 | | (24) | | 19,215 | | (27) |
| Total | $ | 5,093 | $ | (4) | $ | 22,142 | $ | (41) | $ | 27,235 | $ | (45) |

There were 131 securities and 11 securities in an unrealized loss position for less than 12 months at March 31, 2020 and at June 30, 2019, respectively, and no securities and 51 securities in an unrealized loss position for 12 months or greater at March 31, 2020 and June 30, 2019, respectively.

The following table summarizes the cost and estimated fair value of short-term fixed income securities classified as short-term investments based on stated maturities as of March 31, 2020 (in thousands):

| | Amortized Cost | | Estimated Fair Value | |
|---|---|---|---|---|
| Due within one year | $ | 44,564 | $ | 44,549 |
| Due between one and two years | | 44,235 | | 44,345 |
| Due between two and three years | | 18,444 | | 18,379 |
| Total | $ | 107,243 | $ | 107,273 |

Declines in fair value judged to be other-than-temporary on securities available for sale are included as a component of other income (expense), net. In order to determine whether a decline in value is other-than-temporary, we evaluate, among other factors: the duration and extent to which the fair value has been less than the carrying value and our intent and ability to retain the investment for a period of time sufficient to allow for any anticipated recovery in fair market value. As of March 31, 2020, we did not consider any of our short-term investments to be other-than-temporarily impaired.

## 4. Fair value of financial instruments

*Cash equivalents and short-term investments*

We measure certain financial instruments at fair value on a recurring basis. We utilize a hierarchy, which consists of three levels, for disclosure of the inputs used to determine the fair value of our financial instruments.

Level 1 valuations are based on quoted prices in active markets for identical assets or liabilities.

Level 2 valuations are based on inputs that are observable, either directly or indirectly, other than quoted prices included within Level 1. Such inputs used in determining fair value for Level 2 valuations include quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 valuations are based upon information that is unobservable and significant to the overall fair value measurement.

Where applicable, we use quoted prices in active markets for similar assets to determine fair value of Level 2 short-term investments. If quoted prices in active markets for identical assets are not available to determine fair value, we use quoted prices for similar assets and liabilities or inputs that are observable either directly or indirectly. If quoted prices for identical or similar assets are not available, we use third-party valuations utilizing underlying assets assumptions.

All of our cash equivalents and short-term investments are classified within Level 1 or Level 2. As of March 31, 2020 and June 30, 2019, we did not have any short-term investments that require Level 3 valuations. The fair values of these financial instruments were determined using the following inputs at March 31, 2020 (in thousands):

| | Fair Value Measurements at March 31, 2020 Using | | | |
|---|---|---|---|---|
| | | Quoted Prices in Active Markets for Identical Assets | Significant Other Observable Inputs | Significant Unobservable Inputs |
| Description | Total | (Level 1) | (Level 2) | (Level 3) |
| Cash equivalents: | | | | |
| Money market mutual funds | $ 383 | $ 383 | $ — | $ — |
| Commercial paper | 500 | — | 500 | — |
| Total cash equivalents | 883 | 383 | 500 | — |
| Short-term investments: | | | | |
| U.S. treasury securities | 2,669 | 2,669 | — | — |
| U.S. agency securities | 3,871 | — | 3,871 | — |
| Asset-backed securities | 20,642 | — | 20,642 | — |
| Municipal securities | 9,458 | — | 9,458 | — |
| Commercial paper | 3,195 | — | 3,195 | — |
| Corporate bonds | 67,438 | — | 67,438 | — |
| Total short-term investments | 107,273 | 2,669 | 104,604 | — |
| Cash equivalents and short-term investments | $ 108,156 | $ 3,052 | $ 105,104 | $ — |

The fair values of our financial instruments were determined using the following inputs at June 30, 2019 (in thousands):

| | Fair Value Measurements at June 30, 2019 Using | | | |
|---|---|---|---|---|
| | | Quoted Prices in Active Markets for Identical Assets | Significant Other Observable Inputs | Significant Unobservable Inputs |
| Description | Total | (Level 1) | (Level 2) | (Level 3) |
| Cash equivalents: | | | | |
| Money market mutual funds | $ 790 | $ 790 | $ — | $ — |
| Commercial paper | 498 | — | 498 | — |
| Total cash equivalents | 1,288 | 790 | 498 | — |
| Short-term investments: | | | | |
| U.S. treasury securities | 3,572 | 3,572 | — | — |
| U.S. agency securities | 3,009 | — | 3,009 | — |
| Asset-backed securities | 12,413 | — | 12,413 | — |
| Municipal securities | 4,140 | — | 4,140 | — |
| Commercial paper | 1,986 | — | 1,986 | — |
| Corporate bonds | 45,734 | — | 45,734 | — |
| Total debt securities | 70,854 | 3,572 | 67,282 | — |
| Marketable equity securities | 1,349 | 1,349 | — | — |
| Total short-term investments | 72,203 | 4,921 | 67,282 | — |
| Cash equivalents and short-term investments | $ 73,491 | $ 5,711 | $ 67,780 | $ — |

Accretion of net premium on short-term investments totaled $157,000 and $(15,000) in the nine months ended March 31, 2020 and 2019, respectively.

There were no transfers between Level 1 and Level 2 financial instruments in the nine months ended March 31, 2020 and 2019.

We did not have any financial liabilities measured at fair value on a recurring basis as of March 31, 2020 or June 30, 2019.

*Non-marketable equity investments*

Our non-marketable equity securities are investments in privately held companies without readily determinable market values.

The carrying value of our non-marketable equity securities is measured at cost and adjusted to fair value for observable transactions for identical or similar investments of the same issuer or impairment (referred to as the measurement alternative). All gains and losses on non-marketable equity securities, realized and unrealized, are recognized in other income (expense), net. Non-marketable equity securities that we remeasure are classified within Level 3 in the fair value hierarchy because we estimate the value based on valuation methods using the observable transaction price at the transaction date and other unobservable inputs including volatility, rights, and obligations of the securities we hold.

In January 2020, we completed the sale of certain intellectual property and workforce associated with the OpenTerra Platform in exchange for consideration that included a non-marketable equity interest in Grab Holdings, Inc. ordinary shares valued at $6.2 million. See Note 13.

Our net unrealized gains from non-marketable equity securities were zero and $1.3 million in the nine months ended March 31, 2020 and 2019, respectively. Our net unrealized gain of $1.3 million in the nine months ended March 31, 2019 was due to the remeasurement to fair value of non-marketable equity securities upon the adoption of the measurement alternative on July 1, 2018.

The carrying value of our non-marketable equity securities carried at cost and adjusted under the measurement alternative, none of which required remeasurement to fair value, was $6,670,000 and $458,000 at March 31, 2020 and June 30, 2019, respectively.

*Non-marketable equity investments accounted for under the equity method*

In August 2019, we completed the disposition of our Ads Business in exchange for a non-marketable equity investment in inMarket Media, LLC, or inMarket, valued at $15.6 million. See Note 12. In assessing the fair value of our investment in inMarket, we made assumptions regarding estimated future cash flows, weighted average cost of capital and timing over which the cash flows will occur, amongst other factors.

An investment in a limited liability company such as inMarket that maintains a specific ownership account for each investor is deemed to be similar to an investment in a limited partnership. Accordingly, because we hold more than a 3% to 5% ownership interest in inMarket, we are required to account for our inMarket investment under the equity method of accounting and record our proportionate share of investee earnings each period.

In January 2020, we invested $4.0 million in exchange for Series B preferred units and a warrant to purchase additional preferred units in a privately held limited liability company. The warrant expires on the earlier of (i) July 5, 2021, (ii) acceptance of a purchase offer from another entity, or (iii) an initial public offering of the issuer’s common stock. The exercise price of the warrant is variable depending on the achievement of certain performance conditions by the issuer.

The warrant meets the definition of a derivative financial instrument. Accordingly, we allocated the $4.0 million cost of the investment first to the fair value of the warrant, with the residual allocated to the preferred units. The fair value of the warrant at issuance was determined to be $448,000, with the remaining $3.6 million allocated to the preferred units. In assessing the fair value of the warrant, we utilized a Black-Scholes option pricing model incorporating assumptions regarding probability of achievement of performance conditions, underlying equity value, expected term and risk free rate. The underlying equity used in the option pricing model was determined primarily based on revenue and earnings multiples for comparable companies, amongst other factors. The warrant is accounted for separately and marked to market each reporting period, with any gain or loss reported in other income, net in our condensed consolidated statement of operations. The mark-to-market adjustment at March 31, 2020 was not material. Similar to the inMarket investment, we account for the $3.6 million investment in preferred units under the equity method of accounting because we hold more than a 3% to 5% ownership interest in the investee.

We recognized income (loss) of $(103,000) and $694,000 related to our proportionate share of investments accounted for under the equity method for the three and nine months ended March 31, 2020, respectively. The carrying value of our non-marketable equity investments accounted for under the equity method was $19.8 million at March 31, 2020. The carrying value of the warrant was $448,000 at March 31, 2020. We did not hold any such investments at June 30, 2019.

*Non-marketable debt investments*

In the three months ended December 31, 2019, we invested $1.5 million in the form of a convertible note receivable in a privately held company without a readily determinable market value. The note receivable matures on October 31, 2021 or upon request for payment by a majority of note holders, or otherwise upon a change of control, qualified financing event or event of default involving the privately held company. The note converts to preferred stock or common stock upon certain events as defined, including a qualified preferred stock financing round or a change in control of ownership. Interest accrues annually at 6.5% and is due in full upon maturity.

In the three months ended September 30, 2019, we invested $2.0 million in the form of a convertible note receivable in a privately held company without a readily determinable market value. We invested an additional $2.0 million in the three months ended March 31, 2020, increasing the principal amount of the convertible note receivable to a total of $4.0 million. The note receivable matures upon request for payment by a majority of note holders on or after August 23, 2021, or otherwise upon a change of control, qualified financing event or event of default involving the privately held company. The note converts to preferred stock or common stock upon certain events as defined, including a qualified preferred stock financing round or a change in control of ownership. Interest accrues annually at 6% and is due in full upon maturity.

The convertible notes are classified as available for sale and are carried at fair value within Level 3, with any unrealized gains and losses, net of tax, reported as accumulated other comprehensive income (loss) and included as a separate component of stockholders' equity. Gains and losses are recognized when realized. We did not have any unrealized or realized gains or losses in the three and nine months ended March 31, 2020. The carrying value of our non-marketable debt investments was $5.5 million at March 31, 2020. We did not hold any non-marketable debt investments at June 30, 2019.

## 5. Leases

We have entered into various non-cancelable office space operating leases with original lease periods expiring between 2020 and 2024. These do not contain material variable rent payments, residual value guarantees, covenants or other restrictions.

Operating lease costs for the three and nine months ended March 31, 2020 were $833,000 and $2.4 million, respectively. The weighted-average remaining term of our operating leases was 3.1 years and the weighted-average discount rate used to measure the present value of the operating lease liabilities was 5.0% as of March 31, 2020.

Maturities of our operating lease liabilities, which do not include short-term leases, as of March 31, 2020 were as follows (in thousands):

| Fiscal Year | | |
|---|---|---|
| 2020 | $ | 868 |
| 2021 | | 3,119 |
| 2022 | | 2,753 |
| 2023 | | 2,310 |
| 2024 | | 619 |
| Total lease payments | | 9,669 |
| Less: imputed interest | | (723) |
| Total operating lease liabilities | $ | 8,946 |

Cash payments included in the measurement of our operating lease liabilities were $1.0 million and $2.8 million for the three and nine months ended March 31, 2020, respectively.

## 6. Balance sheet information

***Goodwill and intangible assets, net***

Goodwill as of March 31, 2020 and June 30, 2019 was $14.3 million and $26.1 million, respectively. The reduction in goodwill of $11.8 million was due to the sale of the Ads Business to inMarket. See Note 12.

Intangible assets consisted of the following (in thousands):

| | March 31, 2020 | June 30, 2019 |
|---|---|---|
| Acquired developed technology | $ 6,775 | $ 13,875 |
| Less accumulated amortization | (6,775) | (12,494) |
| Intangible assets, net | $ — | $ 1,381 |

In connection with the sale of intellectual property and workforce to Grab in January 2020, we offset the remaining net intangible assets balance of $945,000 associated with the OpenTerra Platform against the consideration received. See Note 13.

Acquired developed technology was amortized on a straight-line basis over the expected useful life. Amortization expense related to intangibles was zero and $218,000 for the three months ended March 31, 2020 and 2019, respectively, and $436,000 and $785,000 for the nine months ended March 31, 2020 and 2019, respectively.

***Other assets***

Other assets consisted of the following (in thousands):

| | March 31, 2020 | June 30, 2019 |
|---|---|---|
| Deposits and other assets | $ 1,040 | $ 956 |
| Non-marketable equity investments | 6,670 | 458 |
| Warrant to purchase non-marketable equity investment units | 448 | — |
| Non-marketable equity investments accounted for under the equity method | 19,846 | — |
| Non-marketable debt investments | 5,500 | — |
| Total other assets | $ 33,504 | $ 1,414 |

***Accrued expenses***

Accrued expenses consisted of the following (in thousands):

| | March 31, 2020 | June 30, 2019 |
|---|---|---|
| Accrued compensation and benefits | $ 13,477 | $ 13,288 |
| Accrued royalties | 10,599 | 21,604 |
| Customer overpayments and related reserves | 2,431 | 4,291 |
| Other accrued expenses | 9,701 | 9,716 |
| Total accrued expenses | $ 36,208 | $ 48,899 |

## 7. Deferred revenue and remaining performance obligations

*Deferred revenue*

Deferred revenue, which is a contract liability, consists primarily of payments received in advance of revenue recognition under our contracts with customers and is recognized upon transfer of control. Changes in the balance of total deferred revenue (current and non-current) during the nine months ended March 31, 2020 were as follows (in thousands):

| | | |
|---|---|---|
| Beginning balance, June 30, 2019 | $ | 135,135 |
| Revenue recognized that was included in beginning balance | | (48,941) |
| Amount billed, net of revenue recognized that was not included in beginning balance | | 57,008 |
| Ending balance, March 31, 2020 | $ | 143,202 |

The cumulative adjustment as a result of changes in the estimate of the transaction price of customer contracts during the three and nine months ended March 31, 2020 was a net decrease in revenue recognized of less than $50,000 and a net increase in revenue recognized of $402,000, respectively. In addition, the amount of revenue recognized in the three and nine months ended March 31, 2020 from performance obligations satisfied or partially satisfied in previous periods was $91,000 and $402,000, respectively.

*Remaining performance obligations*

Transaction price allocated to the remaining performance obligations represents contracted revenue that has not yet been recognized, which includes deferred revenue and amounts that are expected to be invoiced and recognized as revenue in future periods. As of March 31, 2020, the aggregate amount of the transaction price allocated to remaining performance obligations was $75.5 million, which is expected to be recognized over a remaining period of approximately 1 to 7 years. This amount excludes the variable consideration that falls under the exemption for usage-based royalties promised in exchange for a license of intellectual property.

## 8. Commitments and contingencies

***Guarantees and indemnifications***

Our agreements with our customers generally include certain provisions for indemnifying them against liabilities if our products and services infringe a third party’s intellectual property rights or for other specified matters. We have in the past received indemnification requests or notices of their intent to seek indemnification in the future from our customers with respect to specific litigation claims in which our customers have been named as defendants. The maximum amount of potential future indemnification is unlimited.

We have agreed to indemnify our directors, officers and certain other employees for certain events or occurrences, subject to certain limits, while such persons are or were serving at our request in such capacity. We may terminate the indemnification agreements with these persons upon the termination of their services with us, but termination will not affect claims for indemnification related to events occurring prior to the effective date of termination. The maximum amount of potential future indemnification is unlimited. We have a directors’ and officers’ insurance policy that limits our potential exposure. We believe that any financial exposure related to these indemnification agreements is not material.

***Other contractual commitments***

As of March 31, 2020, we had $12.9 million of future minimum non-cancelable financial commitments primarily related to license fees due to certain of our third-party content providers, regardless of usage level. These commitments are primarily due within five years.

***Contingencies***

From time to time, we may become involved in legal proceedings, claims and litigation arising in the ordinary course of business. When we believe a loss or a cost of indemnification is probable and which we can reasonably estimate, we accrue our estimate of the loss or cost of indemnification in our consolidated financial statements. Where we cannot determine the outcome of these matters, we do not make a provision in our financial statements until the loss or cost of indemnification, if any, is probable and can be reasonably estimated or the outcome becomes known. We expense legal fees related to these matters as they are incurred.

In addition, we have received, and expect to continue to receive, demands for indemnification from our customers, which demands can be very expensive to settle or defend, and we have in the past offered to contribute to settlement amounts and incurred legal fees in connection with certain of these indemnity demands. Furthermore, in response to these demands, we may be required to assume control of and bear all costs associated with the defense of our customers in compliance with our contractual commitments.

**TELENAV, INC.**

**Notes to Condensed Consolidated Financial Statements—(Continued)**

**(unaudited)**

Legal proceedings are subject to inherent uncertainties. Unfavorable outcomes could have a material adverse impact on our business, financial position, cash flows or overall trends in results of our operations.

## 9. Stock-based compensation

Under our 2009 Equity Incentive Plan, 2011 Stock Option and Grant Plan and 2019 Equity Incentive Plan, eligible employees, directors and consultants are able to participate in our future performance through awards of nonqualified stock options, incentive stock options and restricted stock units as authorized by our board of directors. In addition, we have granted restricted common stock in connection with certain acquisitions.

A summary of our stock option activity is as follows (in thousands except per share and contractual life amounts):

| | Number of Shares | Weighted Average Exercise Price | Weighted Average Remaining Contractual Life (years) | Aggregate Intrinsic Value |
|---|---|---|---|---|
| Options outstanding as of June 30, 2019 | 3,409 | $ 6.49 | | |
| Granted | 55 | 4.92 | | |
| Exercised | (1,343) | 6.27 | | |
| Canceled or expired | (402) | 6.58 | | |
| Options outstanding as of March 31, 2020 | 1,719 | $ 6.60 | 5.25 | $ — |
| As of March 31, 2020: | | | | |
| Options vested and expected to vest | 1,695 | $ 6.62 | 5.21 | $ — |
| Options exercisable | 1,442 | $ 6.86 | 4.76 | $ — |

A summary of our restricted stock unit, or RSU, activity is as follows (in thousands except contractual life amounts):

| | Number of Shares | Weighted Average Remaining Contractual Life (years) | Aggregate Intrinsic Value |
|---|---|---|---|
| RSUs outstanding as of June 30, 2019 | 2,637 | | |
| Granted | 1,584 | | |
| Vested | (991) | | |
| Canceled | (629) | | |
| RSUs outstanding as of March 31, 2020 | 2,601 | 1.58 | $ 11,237 |
| As of March 31, 2020: | | | |
| RSUs expected to vest | 2,232 | 1.47 | $ 9,643 |

***Performance-based RSUs***

In February 2020, the Compensation Committee of our board of directors (the "Compensation Committee") approved the grant under our 2019 Equity Incentive Plan of performance-based RSUs covering a target of 500,000 shares of common stock under individual grants to certain of our executive officers, which we refer to as the 2020 PSU Awards. The 2020 PSU Awards are subject to four performance milestones, each requiring achievement of a specified trailing average closing stock price for a 30-trading day period on or before the three-year anniversary of the 2020 PSU Awards' grant date. In the event our board of directors approves entering a transaction which, if consummated, would constitute a change in control of the Company, the performance milestones are increased with respect to shares not already eligible to vest under the 2020 PSU Award, and the performance period is extended to the four-year anniversary of the 2020 PSU Awards' grant date. Achieving each individual stock price performance milestone will result in one quarter of the shares subject to the 2020 PSU Award becoming eligible to vest. If a stock price performance milestone is achieved, then the shares that became eligible to vest will vest in four (4) equal quarterly installments as of the ensuing March 10, June 10, September 10 and December 10 following the date of certification of the date the performance milestone was achieved, in each case subject to the respective executive's continued service with the Company through the applicable vesting date. Vesting under the 2020 PSU Award may be accelerated under certain conditions involving a change in control of our Company, including as provided under respective change in control agreements entered between us and the executive. The maximum number of shares subject to the 2020 PSU Award that may vest is 500,000. No shares had vested as of March 31, 2020 under the 2020 PSU Awards.

In September 2019, the Compensation Committee approved the grant under our 2009 Equity Incentive Plan of performance-based RSUs covering a target of 560,000 shares of common stock under individual grants to several of our executive officers, which we refer to as the 2019 PSU Awards. The 2019 PSU Awards are subject to four performance milestones, each requiring achievement of a specified trailing average closing stock price for a 30 trading day period on or before the three-year anniversary of the 2019 PSU Awards' grant date. Achieving each individual stock price performance milestone will result in one quarter of the shares subject to the 2019 PSU Award becoming eligible to vest. If a stock price performance milestone is achieved, then one half of the shares that became eligible to vest under the 2019 PSU Award upon achievement of that stock price performance milestone will vest on the later of November 1, 2020, or the date that the Compensation Committee certifies achievement of the milestone, and the remaining one half of the shares that became eligible to vest will vest on the one-year anniversary of the date the performance milestone was achieved, in each case subject to the respective executive's continued service with the Company through the applicable vesting date. The 2019 PSU Award milestones are subject to change upon a change in control, as defined in the agreement. The maximum number of shares subject to the 2019 PSU Award that may vest is 560,000. No shares had vested as of March 31, 2020 under the 2019 PSU Awards.

In October 2018, the Compensation Committee approved the grant under our 2009 Equity Incentive Plan of performance-based RSUs covering a target of 240,000 shares of common stock to Dr. HP Jin, our CEO, which we refer to as the CEO PSU Award. The CEO PSU Award is subject to four performance milestones, each requiring achievement of a specified trailing average closing stock price for a 30 trading day period on or before the three-year anniversary of the CEO PSU Award's grant date. Achieving each individual stock price performance milestone will result in one quarter of the shares subject to the CEO PSU Award becoming eligible to vest. If a stock price performance milestone is achieved, then one half of the shares that became eligible to vest under the CEO PSU Award upon achievement of that stock price performance milestone will vest on the later of November 1, 2019, or the date that the Compensation Committee certifies achievement of the milestone, and the remaining one half of the shares that became eligible to vest will vest on the one-year anniversary of the date the performance milestone was achieved, in each case subject to Dr. Jin's continued service with the Company through the applicable vesting date. The CEO PSU Award milestones are subject to change upon a change in control, as defined in the agreement. The maximum number of shares subject to the CEO PSU Award that may vest is 240,000. No shares had vested as of March 31, 2020 under the CEO PSU Award.

Since achievement of the awards is dependent on a market condition, stock-based compensation expense associated with these awards is recognized regardless of whether the market condition is satisfied, provided that the requisite service period has been met. We utilized the Monte Carlo valuation method to determine the fair value and derived service periods of each of the stock price performance milestones. Total stock-based compensation expense associated with all PSU Awards, included in the stock-based compensation expense table below, was $528,000 and $780,000 for the three and nine months ended March 31, 2020, and was not material for all prior periods presented.

As of March 31, 2020, no performance-based RSU awards had been earned or canceled, and 1,300,000 shares subject to performance-based RSU awards remained outstanding.

***Shares available for grant***

On July 1, 2019, pursuant to the annual increase provisions of our 2009 Equity Incentive Plan, or the 2009 Plan, the number of shares available for grant under this plan increased by 1,666,666 shares. This was the last annual increase in the shares reserved for issuance under our 2009 Plan, and the plan expired in October 2019 as to new awards. In September 2019, our board of directors also terminated the 2011 Stock Option and Grant Plan, or the 2011 Plan. In November 2019, our stockholders approved the 2019 Equity Incentive Plan, or the 2019 Plan, pursuant to which 5,700,000 shares are initially reserved for future grants and up to an additional 5,800,000 shares are reserved to the extent shares subject to grants under the 2009 Plan were outstanding as of November 20, 2019 but later expire or otherwise terminate without having been exercised in full (in which case the shares subject to such grants will be returned to the 2019 Plan and available for future issuance). The 2019 Plan became effective on November 20, 2019 and will automatically terminate 10 years from its date of adoption by our board of directors. In connection with the adoption of the 2019 Plan, a total of approximately 5,342,000 shares expired which had been previously available but unissued under the 2009 Plan and 2011 Plan. A summary of our shares available for grant activity is as follows (in thousands):

**TELENAV, INC.**

**Notes to Condensed Consolidated Financial Statements—(Continued)**

**(unaudited)**

| | Number of Shares |
|---|---|
| Shares available for grant as of June 30, 2019 | 4,472 |
| Annual share increase authorized under 2009 Plan | 1,667 |
| Granted | (1,681) |
| RSUs withheld for taxes in net share settlements | 251 |
| Canceled | 633 |
| Expired under 2009 and 2011 Plans | (5,342) |
| Shares available under 2009 and 2011 Plans upon termination on November 20, 2019 | — |
| Initial shares authorized under 2019 Plan on November 20, 2019 | 5,700 |
| Shares added from 5,800,000 reserved share pool available(1) | 483 |
| Granted | (1,019) |
| Shares available for grant as of March 31, 2020 | 5,164 |

(1) Additional shares are available up to a maximum of 5,800,000 shares only to the extent shares subject to grants under the 2009 Plan were outstanding as of November 20, 2019 but later expire or otherwise terminate without having been exercised in full.

***Employee Stock Purchase Plan***

In November 2019, the Company's stockholders approved the 2019 Employee Stock Purchase Plan, or ESPP, which became effective on November 20, 2019. A total of 2,500,000 shares were authorized for issuance to participating employees upon adoption of the ESPP. The ESPP provides for 12-month offering periods beginning March 1 and September 1 of each year, and each offering period will consist of two six-month purchase periods. The initial offering period commenced on March 1, 2020 and will end on March 1, 2021. On each purchase date, eligible employees will purchase the shares at a price per share equal to 85% of the lesser of (i) the fair market value of our stock on the enrollment date of the offering period or (ii) the fair market value of our stock on the exercise date.

***Stock-based compensation expense***

The following table summarizes the stock-based compensation expense for continuing operations recorded for stock options, RSUs, including performance-based RSUs, and ESPP purchase rights (in thousands):

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Stock option awards | $ 156 | $ 378 | $ 690 | $ 1,211 |
| RSU awards | 1,672 | 1,310 | 4,368 | 4,400 |
| ESPP | 131 | — | 131 | — |
| Total stock-based compensation expense | $ 1,959 | $ 1,688 | $ 5,189 | $ 5,611 |

We use valuation pricing models to determine the fair value of stock-based awards. The determination of the fair value of stock-based payment awards on the date of grant is affected by the stock price as well as assumptions regarding a number of complex and subjective variables. These variables include expected stock price volatility over the term of the awards, actual and projected employee stock option exercise behaviors, risk-free interest rates and expected dividends. The weighted average assumptions used to value stock option awards granted and the resulting weighted average grant date fair value per share were as follows:

| | Nine Months Ended March 31, | |
|---|---|---|
| | 2020 | 2019 |
| Expected volatility | 48% | 39% |
| Expected term (in years) | 5.65 | 6.87 |
| Risk-free interest rate | 1.58% | 2.99% |
| Dividend yield | —% | —% |
| Weighted average grant date fair value per share | $ 2.27 | $ 2.32 |

No stock option awards were granted during the three months ended March 31, 2020 and 2019.

The weighted average assumptions used to value ESPP purchase rights during the initial offering period beginning March 1, 2020 were as follows:

| | |
|---|---|
| Expected volatility | 93% |
| Expected term (in years) | 0.75 |
| Risk-free interest rate | 0.92% |
| Dividend yield | —% |

**10. Stock repurchase program**

In February 2019, our board of directors authorized a program for the repurchase of up to $20.0 million of our shares of common stock through open market purchases. The term of the program is 18 months. The timing and amount of repurchase transactions under this program will depend on market conditions, cash flow and other considerations. Under this program, we utilized $5.3 million of cash to repurchase 925,624 shares of our common stock at an average purchase price of $5.76 per share during the three months ended March 31, 2020. We utilized $9.4 million of cash to repurchase 1,692,207 shares of our common stock at an average purchase price of $5.53 per share during the nine months ended March 31, 2020. As of March 31, 2020, the remaining authorized amount of stock repurchases that may be made under this repurchase program was $9.3 million.

Repurchased shares are retired and designated as authorized but unissued shares. We use the par value method of accounting for our stock repurchases. Under the par value method, common stock is first charged with the par value of the shares involved. The excess of the cost of shares acquired over the par value is allocated to additional paid-in capital, or APIC, based on an estimated average sales price per issued share with the excess amounts charged to retained earnings. As a result of our stock repurchases during the nine months ended March 31, 2020, we reduced common stock and APIC by an aggregate of $5.8 million and charged $3.6 million to retained earnings.

**11. Income taxes**

For interim reporting purposes, we calculate an annual estimated tax rate and apply that rate to actual results to estimate our taxes. In cases when we cannot reliably estimate an annual estimated tax rate, actual tax expense or the “cutoff method” is utilized as the estimate.

The effective tax rate for the periods presented is the result of the mix of forecasted fiscal year income earned or loss incurred in various tax jurisdictions that apply a broad range of income tax rates. Our provision for income taxes for continuing operations was $1.1 million in the nine months ended March 31, 2020 compared to $1.0 million in the nine months ended March 31, 2019 and was comprised primarily of foreign withholding taxes and income taxes in foreign jurisdictions where we have profit. Our effective tax provision rate of 8% of income from continuing operations for the nine months ended March 31, 2020 was less than the tax amount computed at the U.S. federal statutory income tax rate due primarily to the application of the cutoff method to compute US taxes. Our effective tax provision rate of 7% of loss from continuing operations for the nine months ended March 31, 2019 was greater than the tax amount computed at the U.S. federal statutory income tax rate due primarily to losses for which no benefit will be recognized since the tax assets are not likely to be realized due to the lack of current and forecasted future income. Although the total income tax provision did not change for the nine months ended March 31, 2019, taxes were allocated to discontinued operations in an amount equal to the difference between the tax originally computed on loss from operations and the tax recomputed on the amount of loss from continuing operations.

We record liabilities related to unrecognized tax benefits in accordance with authoritative guidance on accounting for uncertain tax positions. As of March 31, 2020 and June 30, 2019, our cumulative unrecognized tax benefits were $5.2 million and $4.6 million, respectively. Included in the balance of unrecognized tax benefits at March 31, 2020 and June 30, 2019 was $77,000 and $77,000, respectively, that if recognized, would affect the effective tax rate.

We recognize interest and penalties related to unrecognized tax benefits as part of our provision for federal, state and foreign income taxes. We accrued zero for the payment of interest and penalties at March 31, 2020 and June 30, 2019.

We file income tax returns with the Internal Revenue Service, or IRS, California and various states and foreign tax jurisdictions in which we have filing obligations. The statute of limitations remains open from fiscal 2017 for federal tax purposes, from fiscal 2014 in state jurisdictions and from fiscal 2013 in foreign jurisdictions. Fiscal years outside the normal statute of limitation remain open to audit by tax authorities due to tax attributes generated in those early years which have been carried forward and may be audited in subsequent years when utilized.

Due to operating losses in previous years and continued earnings volatility, we maintain a valuation allowance on the majority of our deferred tax assets. Our valuation allowance at June 30, 2019 was $48.4 million. In evaluating our ability to recover our deferred tax assets each quarter, we consider all available positive and negative evidence, including current and previous operating results, ability to carryback losses for a tax refund, and forecasts of future operating results.

On March 27, 2020, the U.S. government enacted new tax legislation commonly referred to as the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act. The CARES Act includes several significant business tax provisions to provide liquidity to businesses affected by the economic impact of COVID-19. Specifically, the CARES Act repeals the 80% limitation on the use of net operating losses for tax years 2018, 2019, and 2020; allows the carryback of net operating losses arising in tax years 2018, 2019, and 2020 to the prior five tax years; suspends the excess business loss rules, accelerates refunds of alternative minimum tax credits; and loosens the business interest limitations. The measure also adds an employee retention credit and deferral on the payment of social security taxes incurred from March 27, 2020 through December 31, 2020. The provisions of the CARES Act are not expected have a material impact to our financial statements.

**12. Sale of Ads Business**

On August 16, 2019, we completed the disposition of our Ads Business to inMarket, which we refer to as the inMarket Transaction. In consideration, inMarket issued to us limited liability company units of inMarket representing a 14.5%-member interest in inMarket at the time of the closing of the inMarket Transaction. We also received a perpetual, non-exclusive, irrevocable, royalty-free license under software and other intellectual property rights being assigned to inMarket as part of the inMarket Transaction, as set forth in the Asset Purchase Agreement, dated August 8, 2019, by and among Telenav, Thinknear, Inc., a wholly owned subsidiary of Telenav, and inMarket, as amended. Pursuant to the terms of a Transition Services Agreement, we also agreed to provide inMarket with transition services for a period of time generally not to exceed eight months following the closing of the inMarket Transaction.

The historical financial results attributable to the Ads Business are presented as discontinued operations in our condensed consolidated statements of operations for all periods presented. The carrying amounts of assets and liabilities included as part of discontinued operations have been classified as assets of discontinued operations and liabilities of discontinued operations, respectively, in our condensed consolidated balance sheet at June 30, 2019.

Reconciliations of the carrying amounts of major classes of assets and liabilities included as part of discontinued operations to the amounts presented separately in our June 30, 2019 condensed consolidated balance sheet are presented in the following table:

| | | June 30, 2019 |
|---|---|---|
| Assets | | |
| Accounts receivable | $ | 6,011 |
| Prepaid and other current assets | | 319 |
| Assets of discontinued operations | $ | 6,330 |
| | | |
| Property and equipment, net | $ | 72 |
| Operating lease right-of-use assets | | — |
| Deferred income taxes, non-current | | (59) |
| Goodwill and intangible assets, net | | 11,786 |
| Other assets | | 395 |
| Assets of discontinued operations, non-current | $ | 12,194 |
| | | |
| Liabilities | | |
| Accounts payable | $ | 974 |
| Accrued expenses | | 2,399 |
| Operating lease liabilities | | — |
| Liabilities of discontinued operations | $ | 3,373 |
| | | |
| Deferred rent, non-current | $ | 30 |
| Operating lease liabilities, non-current | | — |
| Liabilities of discontinued operations, non-current | $ | 30 |

Reconciliations of the major line items comprising loss from operations of the Ads Business included as part of discontinued operations to the amounts presented separately in our statements of operations for the three and nine months ended March 31, 2020 and 2019 are presented in the following tables:

| | Three Months Ended March 31, | | | | Nine Months Ended March 31, | | | |
|---|---|---|---|---|---|---|---|---|
| | 2020 | | 2019 | | 2020 | | 2019 | |
| Revenue - services | $ | — | $ | 4,529 | $ | 3,614 | $ | 17,492 |
| Cost of revenue - services | | — | | 2,178 | | 1,335 | | 8,683 |
| Gross profit | | — | | 2,351 | | 2,279 | | 8,809 |
| Operating expenses: | | | | | | | | |
| Research and development | | — | | 1,186 | | 697 | | 4,121 |
| Sales and marketing | | — | | 3,098 | | 750 | | 8,600 |
| General and administrative | | — | | — | | — | | — |
| Total operating expenses | | — | | 4,284 | | 1,447 | | 12,721 |
| Provision for (benefit from) income taxes | | — | | 14 | | — | | (17) |
| Income (loss) from operations of Ads Business | $ | — | $ | (1,947) | $ | 832 | $ | (3,895) |

Our 14.5% member interest in inMarket was valued at $15.6 million at the closing of the inMarket Transaction and is recorded in other assets on our condensed consolidated balance sheet at March 31, 2020. See Note 4. Our loss from the sale of the Ads Business of $4.9 million included $1.9 million comprising severance for Ads Business employees who were not offered employment with inMarket and acceleration of stock-based awards vesting for certain Ads Business executives who were not offered employment with inMarket, and $363,000 comprising legal fees and third-party consulting fees associated with the inMarket Transaction.

**13. Sale of intellectual property and workforce**

In August 2019, we entered into certain agreements with affiliates of Grab, including: (i) a services agreement pursuant to which we agreed to provide certain services to Grab through certain of our employees designated to work on our OpenTerra Platform; (ii) a license agreement pursuant to which we granted to Grab a perpetual license to certain intellectual property associated with the OpenTerra Platform; and (iii) an asset purchase agreement pursuant to which we sold certain intellectual property associated with the OpenTerra Platform to Grab and facilitated offers for employment or consulting arrangements by Grab of certain of our OpenTerra employees.

In January 2020, Grab completed the acquisition of assets pursuant to which we sold certain intellectual property associated with the OpenTerra Platform to Grab and facilitated the making of offers for employment or consulting arrangements by Grab to certain of our OpenTerra employees in exchange for a non-marketable equity interest in Grab Holdings, Inc. ordinary shares. We also received a perpetual, royalty-free license under the OpenTerra intellectual property rights assigned to Grab. Grab's acquired workforce consisted of 59 of our employees.

Total consideration including cash, as well as equity compensation received upon sale of the assets, was allocated between the license and services (subject to ASC 606), and the assets (not within the scope of ASC 606) based on standalone selling prices. The standalone selling price for the rights acquired under the asset purchase agreement was estimated based on comparing the rights transferred under the perpetual license as compared to the incremental rights transferred under the asset purchase agreement if such incremental rights were transferred separately in similar circumstances and to similar customers. The value of the equity compensation was based on the most recently available valuation information and is subject to variability. To determine the fair market value of these ordinary shares, we used all information reasonably available from Grab Holdings, Inc. regarding the assessment of its board of directors of the fair market value of the ordinary shares, including the limited number of arms' length sales of Grab Holdings, Inc.'s ordinary shares and a review of financial statements provided by Grab Holdings, Inc.  Because there is no public trading market for Grab Holdings, Inc.'s ordinary shares and because Grab does not prepare its financial statements in accordance with GAAP or file its financial statements with the SEC or another securities regulatory body, we relied on the most current information available to assess the fair market value of Grab Holdings, Inc.'s ordinary shares. We determined the value of the perpetual license received under the OpenTerra intellectual property rights assigned to Grab based upon the discounted estimated future cash flows to be received associated with the license.

We recorded a $6.2 million non-marketable equity investment in Grab Holdings, Inc. (see Note 4) and an $800,000 capitalized software asset representing the perpetual license received, and we recognized a gain on the sale of $45,000. The non-marketable equity investment and capitalized software are recorded in Other assets and Property and equipment net, respectively, on our condensed consolidated balance sheet, and the gain on sale is recorded as other income in our condensed consolidated statement of operations.

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

*You should read the following discussion and analysis together with our condensed consolidated financial statements and the notes to those statements included elsewhere in this Form 10-Q. This Form 10-Q contains forward-looking statements that we based on our beliefs and assumptions and on information currently available to us. The forward-looking statements are contained principally in the sections entitled "Risk Factors" and this Management's Discussion and Analysis of Financial Condition and Results of Operations. Forward-looking statements include information concerning our possible or assumed future results of operations, accounting for and future sources of revenue, expectations regarding expenses, business strategies, financing plans, competitive position, industry environment, potential growth opportunities, retention and expansion of existing customer relationships and the effects of competition. Forward-looking statements include statements that are not historical facts and can be identified by terms such as "anticipates," "believes," "could," "seeks," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would" or similar expressions and the negatives of those terms.*

*Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. We discuss these risks in greater detail in "Risk Factors" and elsewhere in this Form 10-Q. Given these uncertainties, you should not place undue reliance on these forward-looking statements. .*

*Forward-looking statements represent our beliefs and assumptions only as of the date of this Form 10-Q. Except as required by law, we assume no obligation to update these forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. You should read this Form 10-Q completely and with the understanding that our actual future results may be materially different from what we expect.*

*Investors and others should note that we announce material financial information to our investors using our investor relations website (http://investor.telenav.com), SEC filings, press releases, public conference calls and webcasts. We use these channels to communicate with our investors and the public about our company, our products and services and other issues. It is possible that the information we post on our investor relations website could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in our company to review the information we post on our investor relations website.*

*In this Form 10-Q, "we," "us," "our," the "Company" and "Telenav" refer to Telenav, Inc. and its subsidiaries. We operate on a fiscal year ending June 30 and refer to the fiscal year ended June 30, 2019 as "fiscal 2019," the fiscal year ending June 30, 2020 as "fiscal 2020" and the fiscal year ending June 30, 2021 as "fiscal 2021."*

### *Overview*

Telenav is a leading provider of location-based products and services for connected cars. We utilize our connected car platform to deliver these products and services. Our connected car platform allows us to deliver enhanced location-based navigation services to automobile manufacturers and tier one suppliers, or tier ones. In addition, as discussed below, until August 2019, we utilized our advertising platform, which we refer to as our Ads Business, to deliver highly targeted advertising services to advertisers and advertising agencies by leveraging our location expertise. We reported results through June 30, 2019 in three business segments: automotive, advertising and mobile navigation. Commencing with the three months ended September 30, 2019, we report results in a single segment, automotive. Our mobile navigation services business, which generates revenue from our partnerships with wireless carriers that sell our navigation services to their subscribers, represented less than 5% of total revenue for the three and nine months ended March 31, 2020 and we expect the business to continue to decline. Our chief executive officer, or CEO, who is the chief operating decision maker, does not review mobile navigation revenue and cost of revenue separately. As a result, we have combined the mobile navigation business with the automotive business in a single segment.

We derive revenue primarily from automobile manufacturers and tier ones whose vehicles or systems incorporate our proprietary personalized navigation and connected car software products and services. These manufacturers and tier ones generally do not provide us with any volume or revenue guarantees.

We offer four variations of our connected car products and services to our automobile manufacturer and tier one customers for distribution with their vehicles and systems. First, we offer on-board navigation systems that are built into vehicles with all key elements of the system residing in the vehicle as a self-contained application along with the related software and content. Our on-board navigation products do not require access to the Internet or wireless networks to function. Second, we offer advanced navigation solutions that contain on-board functionality and also add cloud functionality, such as cloud search, cloud routing, map updates and "live" data. We refer to these solutions as hybrid navigation. Third, we offer mobile phone-based navigation solutions that run on the phone and provide an interactive map and navigation instructions to the vehicle's video screen and audio system, which we refer to as brought-in navigation. Finally, we offer a software development kit, or SDK, that enables our customers to add mapping and location capabilities to their cloud, mobile and on-board automotive applications. We believe our history as a supplier of cloud-based navigation services combined with our proven track record of delivering navigation solutions to three of the top five global automobile manufacturers provides us a unique advantage in the automotive navigation marketplace over our competitors.

We provide our automotive navigation products and services to automobile manufacturers such as Ford Motor Company and affiliated entities, or Ford, which represented 46% of our revenue in the nine months ended March 31, 2020, General Motors Holdings and its affiliates, or GM, which represented 31% of our revenue in the nine months ended March 31, 2020, and Toyota Motor Corporation, or Toyota. We also provide our products and services indirectly through tier ones such as Xevo Inc., or Xevo, for certain Toyota solutions, LG Electronics, Inc., or LG, for certain Opel Automobile GmbH, or Opel, solutions and Panasonic Automotive Systems Company of America, or Panasonic, for certain Fiat Chrysler Automobiles, or FCA, solutions.

We generate product revenue from the delivery of customized software and royalties we receive from the distribution of this customized software in certain automotive navigation applications, map updates to the software and customized software development. We generate services revenue from brought-in automotive navigation solutions and mobile navigation services.

Ford utilizes our on-board automotive navigation product in its Ford SYNC® platform. Ford pays us a royalty fee on SYNC 3 on-board solutions as our software is installed in the vehicle. We also derive product revenue from map update fees.

We generate automotive services revenue primarily from our brought-in automotive navigation solutions. We earn a fee for each new vehicle owner who downloads and activates the associated mobile application featuring GM's branded mobile and web-based applications, whereby we provide enhanced search capabilities for contracted service periods. We also earn a fee for each new Toyota and Lexus vehicle sold and enabled to connect with our Scout GPS Link mobile application, similarly provided over a contracted service period.

For its hybrid navigation solutions, GM pays us a royalty fee as the SD card is shipped for installation in vehicles; this royalty includes a fee for the initial connected service to be provided once the vehicle is sold. GM will pay us an additional service fee for connected solution subscriptions for each end user that elects to renew its OnStar Connected Navigation or Connected Navigation subscription with GM.

Through August 2019, we generated services revenue from our Ads Business through the delivery of advertising impressions based on the specific terms of the advertising contract. In August 2019, we sold the Ads Business to inMarket Media, LLC, which we refer to as inMarket. inMarket acquired substantially all of the assets and assumed certain liabilities related to and used in the Ads Business. In exchange, inMarket issued to Telenav limited-liability units of inMarket representing a 14.5%-member interest in inMarket at the time of closing of the inMarket Transaction. In addition, inMarket granted to us a perpetual, non-exclusive, irrevocable, royalty-free, license back to the software and other intellectual property rights being assigned to inMarket as part of the inMarket Transaction. For the three and nine months ended March 31, 2020 and for all prior comparative periods, we reported the operating results of the Ads Business and the loss on its sale as discontinued operations in our condensed consolidated financial statements.

In August 2019, we entered into certain agreements with affiliates of Grab Holdings, Inc., which, collectively with certain of its affiliates, we refer to as Grab, including: (i) a services agreement pursuant to which we agreed to provide certain services to Grab through certain of our employees designated to work on our OpenTerra Platform; (ii) a license agreement pursuant to which we granted to Grab a perpetual license to certain intellectual property associated with the OpenTerra Platform; and (iii) an asset purchase agreement pursuant to which Grab agreed to purchase certain intellectual property associated with the OpenTerra Platform to Grab, subject to certain customary closing conditions, and facilitated offers for employment or consulting arrangements by Grab to certain of our OpenTerra employees. The transactions contemplated by the services agreement, license agreement and asset purchase agreement together comprise the “Grab Transaction.” The consideration for the services agreement, license agreement and asset purchase agreement was a mix of cash and Grab Holdings, Inc. ordinary shares. We completed the asset sale to Grab on January 1, 2020. See Note 13 to our condensed consolidated financial statements.

For a discussion of trends, uncertainties and other factors that could impact our business, financial condition and operating results, see the section entitled "Risk Factors" in Part II, Item 1A, which is incorporated herein by reference.

***Impact of coronavirus (COVID-19) pandemic***

In March 2020, the World Health Organization declared the outbreak of the novel coronavirus first identified in China in late 2019 (COVID-19) as a pandemic, which continues to spread throughout the U.S. and the world. In response, businesses and governments, including businesses and the federal and state governments in the U.S., have implemented numerous measures to contain the virus, including travel bans and restrictions, quarantines, shelter-in-place orders, and business limitations and shutdowns. These measures have impacted and will continue to impact our workforce and operations, and those of our customers and vendors. As such, we expect the impact to our business and results of operations to be significant, and to continue for some period.

Our top priority is the health and safety of our employees and their families, as well as our automobile manufacturer customers and tier one partners. Despite the challenges we and our suppliers and partners face, we believe we will be able to continue to deliver our personalized navigation and connected car software products and services to our customers and partners, without compromising our employees' safety. Like many companies, we have put in place work-from-home procedures, which we expect to continue to maintain. We believe our employees have the necessary tools and technology to remain connected and productive while working from home offices around the world. We believe these cumulative efforts should allow us to continue to deliver our products and services.

However, the COVID-19 outbreak has caused and will continue to cause disruption to our business operations that may impact our ability to develop and design our products in a timely manner or meet required milestones or customer commitments. In addition, public health problems resulting from COVID-19 and precautionary measures instituted by governments and businesses worldwide to mitigate its spread have contributed to a general, significant and continuing downturn in the global economy. The shutdowns announced late in our quarter ended March 31, 2020 of manufacturing operations by Ford, GM and other automobile manufacturer partners did not have a substantial impact to our financial results for the quarter. However, we anticipate that COVID-19 will have a direct impact on the demand for our products and on our operating results in the three months ending June 30, 2020 and beyond. The extent of the impact of the COVID-19 pandemic on our operational and financial performance will depend on future developments, including the duration and spread of the outbreak, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume, all of which are uncertain and we cannot predict.

Our revenue and prospects for continued business directly depend upon the volume of new vehicles being produced by Ford, GM, Toyota and others. The COVID-19 outbreak, related adverse public health developments and prospects for a global recession have directly impacted the businesses of our automobile manufacturer partners, such as GM, Ford, Toyota and others. The recently announced shutdowns of manufacturing operations by Ford, GM and our other automobile manufacturer partners will decrease our revenue, operating results, financial condition and cash flows while they continue and until our automobile manufacturer partners resume full production. In addition, a sustained economic recession will negatively impact demand for new vehicles, even when production resumes. Should these conditions continue, they would also negatively impact our ability to maintain cash balances to support our operations and future investments. In light of the COVID-19 pandemic and likely economic recession, demand forecasts from our automobile manufacturer partners are likely to be revised and may not be reliable indicators of actual future production. Our outlook remains uncertain in the immediate to short term as we cannot predict when that resumption of production may occur, and at what level our partners may resume production. Once production does resume, it is likely that for an extended period the production rate will be substantially below maximum production or levels which preceded the COVID-19 shutdown. As a result, it may be difficult for us to forecast our revenue and to adjust costs appropriately if customer demand forecasts are inaccurate. For these reasons, we determined not to provide public guidance to investors concerning our forecasted operating results for the quarter ending June 30, 2020.

In the short to medium-term, we may benefit from cost savings, including reduced growth in employee compensation costs primarily due to slower hiring, reductions in travel and employee-related expenses as our sales and marketing activities shift from an in-person to an online format and other factors associated with our work-from-home procedures. We anticipate a slight increase in overall aging of accounts receivable; however, we do not expect to be negatively impacted by a material increase in our allowance for doubtful accounts. Although we expect to manage our operating expenses closely, we expect to continue to use our cash to make investments in companies where we believe they present opportunities for synergies across our product offering or to expand our technology and in-car commerce ecosystem and to continue to develop our products for future automobile model years.

Over the longer term, once meaningful manufacturing production has resumed, we believe there may be new opportunities with our existing OEM partners to increase the lifetime value of our existing programs. However, there are many uncertainties, and we expect to see continued impact from the COVID-19 pandemic in future periods. In addition to the aforementioned uncertainties in the auto industry, changes in how we and companies worldwide conduct business, including but not limited to restrictions on travel and in-person meetings, may cause increasing disruption in the timing and results of our product development and sales and marketing initiatives. We will continue to evaluate the nature and extent of the impact of COVID-19 to our business.

See “Risk Factors" in Part II, Item 1A for further discussion of the potential impact of COVID-19 and its related public health measures on our business.

***Key operating and financial performance metrics***

We monitor the key operating and financial performance metrics set forth in the tables below to help us evaluate growth trends, establish budgets, measure the effectiveness of our sales and marketing efforts and assess our operational efficiencies. Certain of these measures such as billings, changes in deferred revenue and deferred costs, adjusted earnings before interest, taxes, depreciation and amortization, or adjusted EBITDA and free cash flow are not measures we calculated in accordance with U.S. generally accepted accounting principles, or GAAP, and you should not consider them as an alternative to any measure of financial performance we calculated and presented in accordance with GAAP. In addition, these non-GAAP measures may not be comparable to similarly titled measures of other companies because other companies may not calculate them in the same manner that we do.

Our key operating and financial performance metrics are as follows (in thousands, except percentages and per share amounts):

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Revenue | $ 64,496 | $ 48,540 | $ 205,000 | $ 144,952 |
| Revenue from Ford as a percentage of total revenue | 48% | 59% | 46% | 64% |
| Revenue from GM as a percentage of total revenue | 39% | 21% | 31% | 19% |
| Billings (Non-GAAP) | $ 63,527 | $ 64,587 | $ 213,067 | $ 174,233 |
| Billings to Ford as a percentage of total billings (Non-GAAP) | 48% | 59% | 44% | 60% |
| Billings to GM as a percentage of total billings (Non-GAAP) | 38% | 22% | 31% | 21% |
| Increase (decrease) in deferred revenue | $ (969) | $ 16,047 | $ 8,067 | $ 29,281 |
| Increase in deferred costs | $ 935 | $ 6,894 | $ 2,896 | $ 13,934 |
| Gross profit | $ 28,973 | $ 21,091 | $ 98,904 | $ 61,055 |
| Gross margin | 45% | 43% | 48% | 42% |
| Income (loss) from continuing operations | $ (733) | $ (5,534) | $ 12,361 | $ (15,737) |
| Net income (loss) | $ (733) | $ (7,481) | $ 8,319 | $ (19,632) |
| Diluted income (loss) from continuing operations per share | $ (0.02) | $ (0.12) | $ 0.25 | $ (0.35) |
| Diluted net income (loss) per share | $ (0.02) | $ (0.16) | $ 0.17 | $ (0.43) |
| Adjusted EBITDA (Non-GAAP) | $ 1,575 | $ (3,267) | $ 18,417 | $ (8,161) |
| Net cash provided by operating activities | $ 7,168 | $ 1,230 | $ 41,681 | $ 6,189 |
| Free cash flow (Non-GAAP) | $ 6,926 | $ 719 | $ 40,361 | $ 5,233 |

Gross margin is our gross profit, or total revenue less cost of revenue, which we express as a percentage of our total revenue. Our gross margin has been and will continue to be impacted by the increasing percentage of our revenue base we derive from automotive navigation solutions, which generally have higher associated third-party content costs than our mobile navigation offerings provided through wireless carriers.

Billings equals revenue we recognize plus the change in deferred revenue from the beginning to the end of the applicable period. We have also provided a breakdown of the calculation of the change in deferred revenue, which we add to revenue in calculating our non-GAAP billings metric. In connection with our presentation of the change in deferred revenue, we have provided a similar presentation of the change in the related deferred costs. We include in such deferred costs primarily costs associated with third-party content and certain development costs associated with our customized software solutions whereby we earn customized engineering fees. As we enter into more hybrid and brought-in navigation programs, deferred revenue and deferred costs become larger components of our operating results, so we believe these metrics are useful in evaluating cash flows.

We consider billings to be a useful metric for management and investors because billings drive revenue and deferred revenue, which is an important indicator of our business. There are a number of limitations related to the use of billings versus revenue calculated in accordance with GAAP. First, we include in billings amounts that we have not yet recognized as revenue. For example, we cannot fully recognize billings related to certain brought-in solutions as revenue in a given period due to requirements for ongoing map updates and provisioning of services such as hosting, monitoring, customer support and, for certain customers, additional period content and associated technology costs. Second, we may calculate billings in a manner that is different from peer companies that report similar financial measures, making comparisons between companies more difficult. When we use this measure, we attempt to compensate for these limitations by providing specific information regarding billings and how they relate to revenue calculated in accordance with GAAP.

We measure adjusted EBITDA, a non-GAAP financial measure, as our GAAP net loss adjusted for discontinued operations and from which we exclude the impact of stock-based compensation expense, depreciation and amortization, other income (expense), net, provision (benefit) for income taxes, and other applicable items such as legal settlements and contingencies and merger and acquisition, or M&A, transaction expenses, net of tax. Stock-based compensation expense relates to equity incentive awards which we grant to our employees, directors, and consultants. Legal settlements and contingencies represent settlements, offers we made to settle, or loss accruals relating to litigation or other disputes in which we are a party or the indemnitor of a party. M&A transaction expenses relate primarily to costs associated with transactions, such as the inMarket Transaction and the Grab Transaction.

Adjusted EBITDA, while generally a measure of profitability, can also represent a loss. Adjusted EBITDA is a key measure we use to understand and evaluate our core operating performance and trends, to prepare and approve our annual budget and to develop short- and long-term operational plans. In particular, we believe that the exclusion of the expenses we eliminate in calculating adjusted EBITDA can provide a useful measure for period-to-period comparisons of our core business. Accordingly, we believe that adjusted EBITDA generally provides useful information to investors and others in understanding and evaluating our operating results in the same manner as we do.

Free cash flow is a non-GAAP financial measure we define as net cash provided by (used in) operating activities less purchases of property and equipment. We consider free cash flow to be a liquidity measure that provides useful information to management and investors about the amount of cash (used in) generated by our business after purchases of property and equipment.

These non-GAAP measures have limitations as analytical tools and you should not consider them in isolation or as substitutes for our financial results as reported under GAAP. Some of these limitations are:

- we expect to incur additional costs in the future due to requirements to provide ongoing provisioning of services such as hosting, monitoring and customer support; accordingly, deferred costs do not reflect all costs associated with billings;
- we may have to replace in the future assets being depreciated and amortized, and adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditures;
- adjusted EBITDA does not reflect the potentially dilutive impact of equity-based compensation;
- adjusted EBITDAs does not reflect the use of cash for net share settlements of RSUs;
- adjusted EBITDA does not reflect tax payments that historically have represented a reduction in cash available to us or tax benefits that may arise as a result of generating net losses; and
- other companies may calculate adjusted EBITDA, free cash flow or similarly titled measures differently, which reduces the usefulness of these measures as a comparison.

Because of these and other limitations, you should consider billings, adjusted EBITDA and free cash flow alongside other GAAP-based financial performance measures.

We reconcile the most directly comparable GAAP financial measure to each non-GAAP financial metric used. We present the following table reconciliations of revenue to billings, deferred revenue to the change in deferred revenue, deferred costs to the change in deferred costs, net loss to adjusted EBITDA, and net loss and net cash flow used in operating activities to free cash flow for each of the periods indicated (dollars in thousands):

**Reconciliation of Revenue to Billings**

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Revenue | $ 64,496 | $ 48,540 | $ 205,000 | $ 144,952 |
| Adjustments: | | | | |
| Change in deferred revenue | (969) | 16,047 | 8,067 | 29,281 |
| Billings | $ 63,527 | $ 64,587 | $ 213,067 | $ 174,233 |

**Reconciliation of Deferred Revenue to Change in Deferred Revenue**
**Reconciliation of Deferred Costs to Change in Deferred Costs**

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Deferred revenue, end of period | $ 143,202 | $ 103,819 | $ 143,202 | $ 103,819 |
| Deferred revenue, beginning of period | 144,171 | 87,772 | 135,135 | 74,538 |
| Change in deferred revenue | $ (969) | $ 16,047 | $ 8,067 | $ 29,281 |
| | | | | |
| Deferred costs, end of period | $ 82,698 | $ 72,359 | $ 82,698 | $ 72,359 |
| Deferred costs, beginning of period | 81,763 | 65,465 | 79,802 | 58,425 |
| Change in deferred costs(1) | $ 935 | $ 6,894 | $ 2,896 | $ 13,934 |

(1) Deferred costs primarily include costs associated with third-party content and in connection with certain customized software solutions, the costs incurred to develop those solutions. We expect to incur additional costs in the future due to requirements to provide ongoing map updates and provisioning of services such as hosting, monitoring, customer support and, for certain customers, additional period content and associated technology costs.

**Reconciliation of Revenue to Billings - Ford and GM**

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Revenue from Ford | $ 30,777 | $ 28,838 | $ 94,241 | $ 92,162 |
| Adjustments: | | | | |
| Change in deferred revenue attributed to Ford | (548) | 9,168 | (1,145) | 12,259 |
| Billings to Ford | $ 30,229 | $ 38,006 | $ 93,096 | $ 104,421 |
| Billings to Ford as a percentage of total billings | 48% | 59% | 44% | 60% |
| | | | | |
| Revenue from GM | $ 25,415 | $ 10,196 | $ 64,574 | $ 27,178 |
| Adjustments: | | | | |
| Change in deferred revenue attributed to GM | (1,012) | 3,743 | 1,629 | 9,200 |
| Billings to GM | $ 24,403 | $ 13,939 | $ 66,203 | $ 36,378 |
| Billings to GM as a percentage of total billings | 38% | 22% | 31% | 21% |

## Reconciliation of Net Income (Loss) to Adjusted EBITDA

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Net income (loss) | $ (733) | $ (7,481) | $ 8,319 | $ (19,632) |
| Loss on discontinued operations | — | 1,947 | 4,042 | 3,895 |
| Income (loss) from continuing operations | (733) | (5,534) | 12,361 | (15,737) |
| Adjustments: | | | | |
| Legal settlement and contingencies | — | — | — | 650 |
| Stock-based compensation expense | 1,959 | 1,688 | 5,189 | 5,611 |
| Depreciation and amortization expense | 829 | 966 | 2,685 | 2,982 |
| Other income, net | (1,088) | (581) | (2,245) | (2,703) |
| Provision for income taxes | 505 | 194 | 1,121 | 1,036 |
| Equity in net (income) loss of equity method investees | 103 | — | (694) | — |
| Adjusted EBITDA | $ 1,575 | $ (3,267) | $ 18,417 | $ (8,161) |

## Reconciliation of Net Income (Loss) to Free Cash Flow

| | Three Months Ended March 31, | | Nine Months Ended March 31, | |
|---|---|---|---|---|
| | 2020 | 2019 | 2020 | 2019 |
| Net income (loss) | $ (733) | $ (7,481) | $ 8,319 | $ (19,632) |
| Loss on discontinued operations | — | 1,947 | 4,042 | 3,895 |
| Income (loss) from continuing operations | (733) | (5,534) | 12,361 | (15,737) |
| Adjustments to reconcile net income (loss) to net cash provided by operating activities: | | | | |
| Change in deferred revenue [(1)] | (994) | 16,047 | 8,042 | 29,281 |
| Change in deferred costs [(2)] | (963) | (6,894) | (2,924) | (13,934) |
| Changes in other operating assets and liabilities | 11,904 | (5,019) | 20,626 | (717) |
| Other adjustments [(3)] | (2,046) | 2,630 | 3,576 | 7,296 |
| Net cash provided by operating activities | 7,168 | 1,230 | 41,681 | 6,189 |
| Less: Purchases of property and equipment | (242) | (511) | (1,320) | (956) |
| Free cash flow | $ 6,926 | $ 719 | $ 40,361 | $ 5,233 |

[(1)] Consists of product royalties, customized software development fees, service fees and subscription fees.

[(2)] Consists primarily of third-party content costs and customized software development expenses.

[(3)] Consist primarily of depreciation and amortization, stock-based compensation expense and other non-cash items.

***Key components of our results of operations***

*Sources of revenue*

*Overview*. We classify our revenue as either product or services revenue. Product revenue consists primarily of revenue we receive from the delivery of customized software and royalties from the distribution of this customized software in certain automotive navigation applications, map updates to the software and customized software development. Services revenue consists primarily of revenue we derive from our brought-in automotive navigation services and the cloud functionality included in our hybrid automotive solutions.

Commencing July 1, 2019, we operate in a single segment, automotive. Our CEO, who is the chief operating decision maker, does not review mobile navigation revenue and cost of revenue separately. As a result, we have combined the mobile navigation services business with the automotive business in a single segment.

In the nine months ended March 31, 2020 and 2019, revenue from Ford represented 46% and 64% of our total revenue, respectively, and revenue from GM comprised 31% and 19% of total revenue, respectively.

Our contract with Ford covers a broad range of products and services that we provide to Ford. On March 28, 2018, we entered into an amendment with Ford that extends the term of the agreement from December 31, 2018 to December 31, 2020 for each jurisdiction in which we currently provide our products to Ford. On December 14, 2017, Ford also selected us to provide its next-generation navigation solution in North America, subject to certain conditions. The terms of this next-generation navigation solution were embodied in an amendment executed in December 2018. With respect to North America production, this amendment extended the term of the agreement to December 31, 2022, which term Ford may further extend at its option subject to certain conditions. We were not awarded the contracts for Europe, South America and Australia and New Zealand. Garmin announced in January 2020 that it had entered into a relationship with Ford to integrate Garmin’s navigation technology into Ford’s next-generation SYNC communications and entertainment system. A substantial portion of our revenue, and, to a lesser extent, gross profit, is impacted by the underlying licensed content cost negotiated through HERE North America, LLC, or HERE, and other content providers and we cannot predict the impact on our revenue and gross profit of any changes between Ford and the map or other content providers.

Our contract with GM includes the provision of our on-board, hybrid, and brought-in navigation solutions across a wide assortment of GM vehicles. Our mobile navigation SDK powers GM’s branded mobile and web-based applications and is covered under a services agreement that was entered into June 13, 2014 and extended to December 31, 2019. In November 2019, the term of this agreement was extended to December 31, 2020. Our on-board and hybrid navigation solutions for GM are covered under a product and services agreement that became effective February 1, 2017. These solutions began shipping in a limited number of vehicles beginning with model year 2017 and currently are gradually expanding across additional regions and models. In May 2017, additional vehicles through model year 2025 were added to this products and services agreement, which terminates on December 31, 2026. On September 5, 2019, GM announced that it intended to utilize Google Auto Services, or GAS, solutions on certain models beginning with model year 2022.

*Product revenue*. Our automotive product revenue is generated primarily from on-board and hybrid automotive navigation solutions provided to Ford and GM. Our on-board solutions consist of software, memory card, map and point of interest, or POI, data loaded in the vehicle that provides voice-guided turn by turn navigation displayed on the vehicle screen. Our hybrid navigation solutions contain on-board software functionality and also add cloud functionality such as cloud search, cloud routing, map updates and “live” data.

We generally earn royalties for on-board navigation solutions at various points in time, depending upon the individual customer agreement. We earn each royalty upon either the re-imaging of the software on each individual memory card or the time at which each vehicle is produced.

We recognize revenue from on-board automotive navigation solutions upon transfer of control of the customized software and any associated integrated content together forming a distinct performance obligation. Transfer of control generally occurs at a point in time upon acceptance. We recognize any royalties for the use of distinct software combined with integrated content, with an allocation of the transaction price based on the relative standalone selling price, or SSP, of map updates, specified upgrades, and other services as applicable, at the later of when we earn the royalties or when we transfer control of the related performance obligation.

For hybrid automotive solutions, we generally recognize as product revenue the transaction price we allocated to the on-board component as described above, and we generally recognize as services revenue the transaction price allocated to the included cloud functionality based on SSP. Since the on-board software is still the predominant item in the hybrid solution, the royalties recognition guidance applies as it does for on-board navigation solutions described above. Our brought-in automotive navigation solutions as described below are subject to variable consideration and constraint guidance.

We primarily derive our product revenue from Ford from Ford's SYNC 3 on-board solutions. In each geography where we provide navigation products to it, Ford also provides a map update program under which Ford owners in North America, South America, China and Europe with SYNC 3, and in Australia and New Zealand with SYNC 2 or SYNC 3, are eligible to receive annual map updates at no additional cost through the applicable contractual period. We earn an annual compilation fee and a per unit fee for these updates included in the pricing arrangement. We anticipate that we will continue to depend on Ford for a material portion of our revenue for the foreseeable future.

We also have agreements with GM. In February 2017, GM launched its first model featuring integration of our hybrid navigation solution in North America, the 2017 Cadillac CTS and CTS-V. Our solution is currently available in North America on select 2020 models of Cadillac, GMC, Chevrolet and Buick. GM has also launched vehicles with our hybrid navigation solution in China and the Middle East. Our on-board and connected navigation solution is scheduled to become available in additional regions and GM models for model years 2021 through 2025. We anticipate that we will continue to depend on GM for a material portion of our revenue for the foreseeable future.

We provide entry level on-board navigation through LG, a tier one supplier for the Opel and Vauxhall line of vehicles, for the European market. This solution launched in Opel's Adam, Corsa, Karl and Zafira model vehicles in July 2017. We expect these products to be made available in other select vehicles for model years 2020 to 2022. We continue to engage in development of similar solutions for Opel and Vauxhall vehicles.

We recognized product revenue over time under the Grab Transaction as the software development occurred and Grab obtained control as the software was modified and enhanced. We recognized services revenue for implementation services as they were performed, and we recognize software support and maintenance over the term of the obligation. The asset sale to Grab was completed on January 1, 2020. See Note 13 to our condensed consolidated financial statements.

*Services revenue*. We derive services revenue primarily from our brought-in automotive navigation solutions and, to a lesser extent, from the cloud functionality that is a component of our hybrid automotive navigation solutions as discussed above. Royalties for brought-in navigation solutions are earned upon vehicle sales reporting or upon initial usage by the end user.

Since these contracts typically contain a substantial amount of variable consideration that we are required to estimate and include in the transaction price, we include in the transaction price only variable consideration such that it is probable that a risk of significant revenue reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved. We estimate total variable consideration to be received at contract inception and we update this estimate at each reporting date. We utilize the expected value method and consider expected unit volume combined with a risk-based probability based on factors including, but not limited to: model year cycles, customer history, technology life cycles, nature of competition and other contract-specific factors. Because customers of our brought-in automotive navigation solutions simultaneously receive and consume the benefit from our performance, we recognize revenue ratably over the period the services obligation is expected to be fulfilled, generally 8 to 12 years, as this provides a faithful depiction of the transfer of control.

In October 2017, we amended our agreement with Ford to provide certain connected services for SYNC 3 in North America, Europe and China. Ford launched connected search across various model year 2018 SYNC 3 vehicles in North America using its FordPass™ and Lincoln Way™ mobile applications. The vast majority of Ford vehicles with SYNC 3 produced in North America and Europe during the three months ended March 31, 2020 were capable of providing connected services.

GM offers its OnStar RemoteLink feature including our location-based services platform, and we earn a one-time fee for each new vehicle owner who downloads the associated MyBrand mobile application, including a localized version offered in Europe for the Opel and Vauxhall brands.

We have a partnership with Toyota for brought-in navigation services where our Scout GPS Link mobile application is available in select Entune® Audio equipped Toyota vehicles in North America and in select Lexus Enform® equipped Lexus models. Toyota and Lexus vehicles enabled to connect with our Scout GPS Link began shipping in August 2015 and September 2016, respectively. We earn a one-time fee for each new Toyota or Lexus sold and enabled to connect to our Scout GPS Link mobile application.

In addition, our Scout GPS Link and Xevo's Xevo™ Engine Link provide brought-in navigation services, including a fully interactive moving map, for select Toyota vehicles equipped with Entune 3.0 Audio, as well as select Lexus vehicles equipped with Lexus Enform. Our fully interactive solution first became available on select model year 2018 Toyota Camry and Sienna and Lexus NX and RC models, and was expanded to select model year 2019 Toyota Corolla hatchback, Avalon, CHR and RAV4 models, as well as Lexus UX and select model year 2020 Corolla, Prius, Avalon and Sienna models. On most Toyota and Lexus models, a premium embedded connected navigation option is also available that provides connected search, powered by our platform.

While we have seen expansion of our latest version of Scout GPS Link solution across more Toyota and Lexus models in fiscal 2019 and fiscal 2020, we expect that Toyota may limit or reduce the number of models or vehicles on which Scout GPS Link is offered by Toyota and Lexus, beginning in model year 2021, due in part to the offering of alternative brought-in solutions such as Apple’s CarPlay, which Toyota is offering across certain Toyota models, and the expanded offering of Google’s Android Auto solution across more automobile manufacturers.

During the fourth quarter of fiscal 2019, Telenav entered into an amended agreement with Xevo. The amended agreement provided a one-time $17.0 million cash pre-payment in the first quarter of fiscal 2020 in exchange for removing a contractual minimum unit commitment that otherwise would have resulted in a payment to us in fiscal 2027. We recorded the receivable as deferred revenue in the fourth quarter of fiscal 2019, and we are recognizing it as revenue over future periods. We expect our contract with Xevo relating to the implementation of our solutions in Toyota and Lexus vehicles to remain in place through 2026, and we are exploring additional opportunities with Xevo and Toyota as well.

We generate mobile navigation revenue from our partnerships with wireless carriers who sell our navigation services to their subscribers either as a standalone service or in a bundle with other data or services. We include mobile navigation revenue with automotive revenue for all periods presented.

*Revenue concentrations*. We generated 72% and 81% of our revenue in the United States in the nine months ended March 31, 2020 and 2019, respectively. With respect to revenue we receive from automobile manufacturers and tier ones for sales of vehicles in other countries, we classify the majority of that revenue as being generated in the United States, because we provide deliverables to and receive compensation from the manufacturer’s or tier one’s United States’ entity. It is possible that this classification may change in the future, as existing and new customers may elect to contract through subsidiaries. For example, in fiscal 2017 Ford assigned certain contract rights for its production of vehicles with our SYNC 3 products to its joint venture in China.

*Cost of revenue*

We classify our cost of revenue as either cost of product revenue or cost of services revenue. Cost of product revenue consists primarily of the cost of third-party content we incur in providing our on-board automotive navigation solutions, memory cards and recognition of deferred software development costs. Cost of services revenue consists primarily of the costs associated with third-party content we incur in providing our brought-in automotive navigation solutions, data center operations and outsourced hosting services, software maintenance, customer support, the amortization of capitalized software, recognition of deferred customized software development costs, stock-based compensation and amortization of acquired developed technology.

We capitalize and defer recognition of certain third-party, royalty-based content costs associated with the fulfillment of future automotive product and services obligations, and we recognize these deferred content costs as cost of revenue as we transfer control of the related performance obligation. We recognize the deferred revenue and related deferred costs as we transfer control of the related performance obligation. As such, we will also incur ongoing costs of revenue for network operations, hosting and data center, customer service support, and other related costs over time.

We also capitalize and defer recognition of certain costs, primarily payroll and related compensation and benefits expense, of customized software we develop for customers. We begin deferring development costs when they relate directly to a contract or specific anticipated contract and we incur such costs to satisfy performance obligations in the future, provided we expect to recover such costs. We recognize these deferred software development costs as cost of revenue upon transfer of control of the associated performance obligation.

We primarily provide navigation service customer support through a third-party provider to whom we provide training and assistance with problem resolution. In addition, we use outsourced, hosting services and industry standard hardware to provide our navigation services. We generally maintain at least 99.9% uptime every month, excluding designated periods of maintenance. Our internal targets for service uptime are even higher.

*Operating expenses*

We generally classify our operating expenses into three categories: research and development, sales and marketing and general and administrative. Our operating expenses consist primarily of personnel costs, which include salaries, bonuses, payroll taxes, employee benefit costs and stock-based compensation expense. Other expenses include third-party contractor and temporary staffing services, legal, audit, tax consulting and other professional service fees, facilities-related costs including rent expense and marketing program costs. We allocate stock-based compensation expense resulting from the amortization of the fair value of stock-based awards granted based on the department in which the award holder works. We allocate overhead, such as rent and depreciation, to each expense category based on headcount. In addition, when we incur legal settlements, make offers to settle contingencies or accrue losses relating to litigation or other disputes in which we are a party, or the indemnitor of a party, we classify such operating expense amounts separately as legal settlements and contingencies.

*Research and development*. Research and development expenses consist primarily of personnel costs for our development and product management employees and related costs of outside consultants and temporary staffing. We have focused our research and development efforts on improving the ease of use and functionality of our existing products and services, as well as developing new products and services. In addition to our U.S. employee base, a significant number of our research and development employees are located in our development centers in China and Romania; as a result, a portion of our research and development expense is subject to changes in foreign exchange rates, notably the Chinese Renminbi, or RMB, the Romanian Leu, or RON, and the Euro.

*Sales and marketing*. Sales and marketing expenses consist primarily of personnel costs for our sales and marketing staff and the cost of marketing programs, advertising and promotional activities. Our sales and marketing activities include the costs of our business development efforts. Our automobile manufacturer partners and tier ones also provide primary marketing for our on-board and brought-in navigation services.

*General and administrative*. General and administrative expenses consist primarily of personnel costs for our executive, finance, legal, human resources and administrative personnel, legal, audit and tax consulting and other professional services and corporate expenses.

*Legal settlements and contingencies*. Legal settlements and contingencies represent settlements, offers made to settle, or loss accruals relating to litigation or other disputes in which we are a party or the indemnitor of a party.

*Other income (expense), net*. Other income (expense), net consists primarily of interest we earn on our cash and cash equivalents and short-term investments, gain or loss on investments, unrealized gains or losses on non-marketable equity investments and foreign currency gains or losses.

*Provision for income taxes*. Our provision for income taxes primarily consists of corporate income taxes related to profits earned in foreign jurisdictions, foreign withholding taxes, and changes to our tax reserves. Our effective tax rate could fluctuate significantly from period to period, particularly in those periods in which we incur losses, due to our inability to benefit from net operating losses since we are not likely to realize the tax assets due to the lack of current and forecasted future income. For interim reporting purposes, we calculate an annual estimated tax rate and apply that rate to actual results to estimate our taxes. In cases when we cannot reliably estimate an annual estimated tax rate, we utilize the actual tax expense as the estimate. Furthermore, on a quarterly basis our tax rates can fluctuate due to changes in our tax reserves resulting from the settlement of tax audits or the expiration of the statute of limitations. Our effective tax rate could also fluctuate due to a change in our earnings or loss projections, changes in the valuation of our deferred tax assets or liabilities, or changes in tax laws, regulations, or accounting principles, as well as the expiration and retroactive reinstatement of tax holidays.

*Equity in net income of equity method investees*. Equity in net income of equity method investees includes our proportionate share of equity in our non-marketable equity investments.

***Critical accounting policies and estimates***

We prepare our condensed consolidated financial statements in accordance with GAAP. In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP and does not require our judgment in its application. In other cases, we exercise judgment in selecting among available alternative accounting policies that allow different accounting treatment for similar transactions. The preparation of condensed consolidated financial statements also requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses and related disclosures. We base our estimates on historical experience and various other assumptions that we believe are reasonable under the circumstances. In many instances, we could reasonably use different accounting estimates, and in some instances changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. To the extent that there are differences between our estimates and actual results, our future financial condition, results of operations and cash flows will be affected.

There have been no material changes in our critical accounting policies and estimates during the nine months ended March 31, 2020 as compared to the critical accounting policies and estimates disclosed in Part II, Item 7 of our Annual Report on Form 10-K for fiscal 2019, except as described in Note 1 to our condensed consolidated financial statements, “Summary of business and significant accounting policies.”

***Recent Accounting Pronouncements***

For information with respect to recent accounting pronouncements and the impact of these pronouncements on our consolidated financial statements, see Note 1 to our condensed consolidated financial statements, “Summary of business and significant accounting policies.”

### *Results of operations*

The following tables set forth our results of operations for the three and nine months ended March 31, 2020 and 2019, as well as a percentage that each line item represents of our total revenue for those periods. We use the additional key metrics presented above in addition to the financial measures reflected in the condensed consolidated statements of operations data to help us evaluate growth trends, establish budgets and measure the effectiveness of our sales and marketing efforts. The period to period comparison of financial results is not necessarily indicative of financial results to be achieved in future periods.

| Consolidated Statements of Operations Data | Three Months Ended March 31, 2020 | Three Months Ended March 31, 2019 | Nine Months Ended March 31, 2020 | Nine Months Ended March 31, 2019 |
|---|---|---|---|---|
| | (in thousands) | | | |
| Revenue: | | | | |
| Product | $ 52,106 | $ 41,723 | $ 169,639 | $ 124,050 |
| Services | 12,390 | 6,817 | 35,361 | 20,902 |
| Total revenue | 64,496 | 48,540 | 205,000 | 144,952 |
| Cost of revenue: | | | | |
| Product | 27,664 | 23,532 | 86,087 | 72,135 |
| Services | 7,859 | 3,917 | 20,009 | 11,762 |
| Total cost of revenue | 35,523 | 27,449 | 106,096 | 83,897 |
| Gross profit | 28,973 | 21,091 | 98,904 | 61,055 |
| Operating expenses: | | | | |
| Research and development | 21,617 | 19,322 | 61,997 | 55,580 |
| Sales and marketing | 2,166 | 2,167 | 6,246 | 5,535 |
| General and administrative | 6,403 | 5,523 | 20,118 | 16,694 |
| Legal settlements and contingencies | — | — | — | 650 |
| Total operating expenses | 30,186 | 27,012 | 88,361 | 78,459 |
| Income (loss) from operations | (1,213) | (5,921) | 10,543 | (17,404) |
| Other income, net | 1,088 | 581 | 2,245 | 2,703 |
| Income (loss) from continuing operations before provision for income taxes | (125) | (5,340) | 12,788 | (14,701) |
| Provision for income taxes | 505 | 194 | 1,121 | 1,036 |
| Equity in net (income) loss of equity method investees | 103 | — | (694) | — |
| Income (loss) from continuing operations | (733) | (5,534) | 12,361 | (15,737) |
| Loss on discontinued operations | — | (1,947) | (4,042) | (3,895) |
| Net income (loss) | $ (733) | $ (7,481) | $ 8,319 | $ (19,632) |
| | (as a percentage of revenue) | | | |
| Revenue: | | | | |
| Product | 81 % | 86 % | 83 % | 86 % |
| Services | 19 % | 14 % | 17 % | 14 % |
| Total revenue | 100 % | 100 % | 100 % | 100 % |
| Cost of revenue: | | | | |
| Product | 43 % | 49 % | 42 % | 50 % |
| Services | 12 % | 8 % | 10 % | 8 % |
| Total cost of revenue | 55 % | 57 % | 52 % | 58 % |
| Gross profit | 45 % | 43 % | 48 % | 42 % |
| Operating expenses: | | | | |
| Research and development | 34 % | 40 % | 30 % | 38 % |
| Sales and marketing | 3 % | 4 % | 3 % | 4 % |
| General and administrative | 10 % | 11 % | 10 % | 12 % |
| Legal settlements and contingencies | — % | — % | — % | — % |
| Total operating expenses | 47 % | 55 % | 43 % | 54 % |
| Income (loss) from operations | (2)% | (12)% | 5 % | (12)% |
| Other income, net | 2 % | 1 % | 1 % | 2 % |
| Income (loss) from continuing operations before provision for income taxes | — % | (11)% | 6 % | (10)% |
| Provision for income taxes | 1 % | — % | — % | 1 % |
| Equity in net (income) loss of equity method investees | — % | — % | — % | — % |
| Income (loss) from continuing operations | (1)% | (11)% | 6 % | (11)% |
| Loss on discontinued operations | — % | (4)% | (2)% | (3)% |
| Net income (loss) | (1)% | (15)% | 4 % | (14)% |

*Comparison of the three and nine months ended March 31, 2020 and 2019*

*Revenue, cost of revenue and gross profit*.

*Revenue*. Product revenue increased 25% to $52.1 million in the three months ended March 31, 2020 from $41.7 million in the three months ended March 31, 2019, and increased 37% to $169.6 million in the nine months ended March 31, 2020 from $124.1 million in the nine months ended March 31, 2019. The increase in product revenue for the comparable three and nine months was due primarily to an increase in customized software development revenue of $5.0 million and $20.9 million, respectively, resulting from increased product development and, in the comparable nine months, product associated with Grab, and an increase in royalty revenue of $5.6 million and $20.3 million, respectively, resulting primarily from an overall higher volume of automotive navigation units. In addition, the increase in the comparable nine months was driven by an increase in map update revenue of $4.4 million. Services revenue increased 82% to $12.4 million in the three months ended March 31, 2020 from $6.8 million in the three months ended March 31, 2019, and increased 69% to $35.4 million in the nine months ended March 31, 2020 from $20.9 million in the nine months ended March 31, 2019. The increase in services revenue for the comparable three and nine months was due primarily to increased revenue from our brought-in automotive solutions.

*Cost of revenue*. Our cost of product revenue increased 18% to $27.7 million in the three months ended March 31, 2020 from $23.5 million in the three months ended March 31, 2019, and increased 19% to $86.1 million in the nine months ended March 31, 2020 from $72.1 million in the nine months ended March 31, 2019. The increase in the comparable three and nine months was due primarily to increased third-party content costs associated with increased automotive navigation unit volume and, in the comparable nine months, increased map update revenue. Our cost of services revenue increased 101% to $7.9 million in the three months ended March 31, 2020 from $3.9 million in the three months ended March 31, 2019, and increased 70% to $20.0 million in the nine months ended March 31, 2020 from $11.8 million in the nine months ended March 31, 2019. The increase in the comparable three and nine months was due primarily to an increase in content costs associated with increased revenue from brought-in solutions. The increase in total cost of revenue of $8.1 million and $22.2 million in the comparable three and nine months, respectively, was due primarily to an increase in third-party content costs of $6.0 million and $18.7 million, respectively, and to a lesser extent an increase in deferred development costs recognized.

*Gross profit*. Our gross profit increased 37% to $29.0 million in the three months ended March 31, 2020 from $21.1 million in the three months ended March 31, 2019, and increased 62% to $98.9 million in the nine months ended March 31, 2020 from $61.1 million in the nine months ended March 31, 2019. Our gross margin increased to 45% in the three months ended March 31, 2020 from 43% in the three months ended March 31, 2019 and increased to 48% in the nine months ended March 31, 2020 from 42% in the nine months ended March 31, 2019. The increase in gross margin for the comparable three and nine months was due primarily to a significantly higher margin earned on customized software development revenue. The increase in gross margin for the comparable nine months was partially offset by a decrease in gross margin resulting from increased map update revenue, which carries a higher relative cost and lower gross margin.

*Revenue concentrations*. In the three months ended March 31, 2020 and 2019, revenue from Ford represented 48% and 59% of our total revenue, respectively, and revenue from GM comprised 39% and 21% of our total revenue, respectively. In the nine months ended March 31, 2020 and 2019, revenue from Ford represented 46% and 64% of our total revenue, respectively, and revenue from GM comprised 31% and 19% of our total revenue, respectively. In the three and nine months ended March 31, 2020, revenue from Grab represented less than 10% and 10% of our total revenue, respectively.

We primarily sell our services in the United States. In the three months ended March 31, 2020 and 2019, revenue derived from U.S. sources represented 82% and 77% of our total revenue, respectively. In the nine months ended March 31, 2020 and 2019, revenue derived from U.S. sources represented 72% and 81% of our total revenue, respectively.

*Operating expenses*

Our total operating expenses increased 12% to $30.2 million in the three months ended March 31, 2020 from $27.0 million in the three months ended March 31, 2019, and increased 13% to $88.4 million in the nine months ended March 31, 2020 from $78.5 million in the nine months ended March 31, 2019. The increase in the comparable three and nine months was due primarily to an increase in payroll and related compensation and benefits expense and an increase in outside consulting services.

*Research and development*. Our research and development expenses increased 12% to $21.6 million in the three months ended March 31, 2020 from $19.3 million in the three months ended March 31, 2019, and increased 12% to $62.0 million in the nine months ended March 31, 2020 from $55.6 million in the nine months ended March 31, 2019. The increase in the comparable three and nine months was due primarily to increases in payroll and related compensation and benefits expense of

$1.3 million and $5.3 million, respectively, hardware and software expenses of $1.7 million and $1.5 million, respectively, and outside consulting services of $0.2 million and $1.9 million, respectively. The increase in the comparable three and nine months was partially offset by a decrease of $0.6 million and $1.5 million, respectively, primarily as a result of increased use of personnel for software maintenance reclassified to cost of services revenue in the three and nine months ended March 31, 2020. In addition, the increase in the comparable nine months was partially offset by a decrease of $1.5 million as a result of higher capitalized deferred development costs. As a percentage of revenue, research and development expenses decreased to 34% in the three months ended March 31, 2020 from 40% in the three months ended March 31, 2019, and decreased to 30% in the nine months ended March 31, 2020 from 38% in the nine months ended March 31, 2019. The total number of research and development personnel increased slightly to 605 at March 31, 2020 from 601 at March 31, 2019. We believe that as we deliver our contracted customer requirements for our automotive customers and establish relationships with new automobile manufacturers and tier ones, revenue from those research and development efforts will lag the related expenses.

*Sales and marketing*. Our sales and marketing expenses were comparable at $2.2 million in the three months ended March 31, 2020 and 2019, and increased 13% to $6.2 million in the nine months ended March 31, 2020 from $5.5 million in the nine months ended March 31, 2019. The increase in the comparable nine months was due primarily to an increase in payroll and related compensation and benefits expense of $0.7 million and outside consulting services of $0.2 million, partially offset by a decrease in marketing and travel-related expenses of $0.2 million. As a percentage of revenue, sales and marketing expenses were 3% in the three and nine months ended March 31, 2020 and 4% in the three and nine months ended March 31, 2019. The total number of sales and marketing personnel was 22 at March 31, 2020 and 2019.

*General and administrative*. Our general and administrative expenses increased 16% to $6.4 million in the three months ended March 31, 2020 from $5.5 million in the three months ended March 31, 2019, and increased 21% to $20.1 million in the nine months ended March 31, 2020 from $16.7 million in the nine months ended March 31, 2019. The increase in the comparable three and nine months was due primarily to an increase in payroll and related compensation and benefits expense of $0.8 million and $2.0 million, respectively, and, in the comparable nine months, an increase in outside consulting services of $0.8 million. As a percentage of revenue, general and administrative expenses decreased to 10% in the three months ended March 31, 2020 from 11% in the three months ended March 31, 2019, and decreased to 10% in the nine months ended March 31, 2020 from 12% in the nine months ended March 31, 2019. The total number of general and administrative personnel increased 15% to 63 at March 31, 2020 from 55 at March 31, 2019.

*Other income, net*. Our other income, net increased to $1.1 million in the three months ended March 31, 2020 compared to $0.6 million in the three months ended March 31, 2019, and decreased to $2.2 million in the nine months ended March 31, 2020 compared to $2.7 million in the nine months ended March 31, 2019. The increase in the comparable three months was due primarily to an increase in interest income of $0.3 million from short-term investments and non-marketable debt investments. The decrease in the comparable nine months was due primarily to the inclusion in the nine months ended March 31, 2019 of an unrealized gain of $1.3 million recorded on non-marketable equity investments resulting from a change in accounting for such investments due to our adoption of ASU 2016-01 effective July 1, 2018. This decrease was partially offset by an increase in interest income of $0.7 million in the nine months ended March 31, 2020.

*Provision for income taxes*. For interim reporting purposes, we calculate an annual estimated tax rate and apply that rate to actual results to estimate our taxes. In cases when we cannot reliably estimate an annual estimated tax rate, actual tax expense or the “cutoff method” is utilized as the estimate.

Our provision for income taxes was $0.5 million in the three months ended March 31, 2020 compared to $0.2 million in the three months ended March 31, 2019, and $1.1 million in the nine months ended March 31, 2020 compared to $1.0 million in the nine months ended March 31, 2019. Our provision for income taxes of $1.1 million and $1.0 million in the nine months ended March 31, 2020 and 2019, respectively, was comprised primarily of foreign withholding taxes and income taxes in foreign jurisdictions where we have profit. Our effective tax provision rate of 8% of income from continuing operations for the nine months ended March 31, 2020 was less than the tax amount computed at the U.S. federal statutory income tax rate due primarily to the application of the cutoff method to compute US taxes. Our effective tax provision rate of 7% of loss from continuing operations for the nine months ended March 31, 2019 was greater than the tax amount computed at the U.S. federal statutory income tax rate due primarily to losses for which no benefit will be recognized since the tax assets are not likely to be realized due to the lack of current and forecasted future income. Although the total income tax provision did not change for the three and nine months ended March 31, 2019, taxes were allocated to discontinued operations in an amount equal to the difference between the tax originally computed on loss from operations and the tax recomputed on the amount of loss from continuing operations.

We anticipate that our foreign tax withholding obligations will continue into the future and that we will not be able to benefit from an offsetting deduction in the United States for an extended period of time given our existing net operating loss carryforwards.

We record liabilities related to uncertain tax positions in accordance with authoritative guidance on accounting for uncertainty in income taxes. As of March 31, 2020 and June 30, 2019, our cumulative unrecognized tax benefits were $5.2 million and $4.6 million, respectively. Included in the balance of unrecognized tax benefits at March 31, 2020 and June 30, 2019 was $0.1 million and $0.1 million that if recognized, would affect the effective tax rate.

We recognize interest and penalties related to unrecognized tax benefits as part of our provision for income taxes. We accrued zero for the payment of interest and penalties at March 31, 2020 and June 30, 2019.

We file income tax returns with the Internal Revenue Service, or IRS, California, various states and foreign tax jurisdictions in which we have filing obligations. The statute of limitations remains open from fiscal 2017 for federal tax purposes, from fiscal 2014 in state jurisdictions, and from fiscal 2013 in foreign jurisdictions. Fiscal years outside the normal statute of limitations remain open to audit by tax authorities due to tax attributes generated in those early years which have been carried forward and may be audited in subsequent years when utilized.

Due to operating losses in previous years and continued earnings volatility, we maintain a valuation allowance on the majority of our foreign deferred tax assets. Our valuation allowance at June 30, 2019 was $48.4 million. In evaluating our ability to recover our deferred tax assets each quarter, we consider all available positive and negative evidence, including current and previous operating results, ability to carryback losses for a tax refund, and forecasts of future operating results.

*Equity in net income of equity method investee*. Equity in net income of equity method investee for the three and nine months ended March 31, 2020 includes our proportionate share of equity in our non-marketable inMarket equity investment.

*Loss on discontinued operations*.

Our loss on discontinued operations of $4.0 million in the nine months ended March 31, 2020 consisted of income of $0.8 million from operations of our Ads Business offset by a loss of $4.9 million from the sale of our Ads Business in August 2019. Our loss from the sale of the Ads Business of $4.9 million included $1.9 million comprising severance for Ads Business employees who were not offered employment with inMarket and acceleration of stock-based awards vesting for certain Ads Business executives who were not offered employment with inMarket, and $0.4 million comprising legal fees and third-party consulting fees associated with the inMarket Transaction.

Our loss on discontinued operations in the three and nine months ended March 31, 2019 consisted of a $1.9 million loss and a $3.9 million loss, respectively, from operations of our Ads Business.

***Liquidity and capital resources***

The following table sets forth the major sources and uses of cash, cash equivalents and restricted cash for continuing operations for each of the periods set forth below (in thousands):

| | Nine Months Ended March 31, 2020 | Nine Months Ended March 31, 2019 |
|---|---|---|
| Net cash provided by operating activities | $ 41,681 | $ 6,189 |
| Net cash provided by (used in) investing activities | (46,378) | 2,214 |
| Net cash used in financing activities | (2,193) | (1,778) |
| Effect of exchange rate changes on cash, cash equivalents and restricted cash | (343) | (401) |
| Net increase (decrease) in cash, cash equivalents and restricted cash, continuing operations | $ (7,233) | $ 6,224 |

At March 31, 2020, we had cash, cash equivalents and short-term investments of $123.7 million, which primarily consisted of corporate bonds, asset-backed securities, municipal securities, U.S. agency securities, commercial paper and U.S. treasury securities held. Our cash, cash equivalents and short-term investments are held and managed by financial institutions that are required to adhere to our investment policy.

Our accounts receivable are heavily concentrated in a small number of customers. As of March 31, 2020, our accounts receivable balance was $41.9 million, of which Ford and GM represented 43% and 37%, respectively.

Our future capital requirements will depend on many factors, including our ability to continue to increase our billings and control our expenses in fiscal 2020 and beyond, whether and when we return to profitability on a quarterly basis particularly in light of automobile manufacturing plant closures and the anticipated economic recession resulting from the COVID-19 pandemic, the timing and extent of expenditures to support development efforts, the extent of our research and development and sales and marketing activities and the size of our related headcount, the introduction of our new and enhanced service and product offerings and the timing and scale of the introduction of vehicles including our navigation products relative to when we are required to develop the product. We believe our cash, cash equivalents and short-term investments will be sufficient to satisfy our financial obligations through at least the next 12 months. However, we expect to continue to use cash in operating activities in the remainder of fiscal 2020 due to automobile manufacturing plant closures and weak demand for new vehicles, and we may experience greater than expected cash usage in operating activities if revenue or collections are lower than we anticipate or we incur greater than expected cost of revenue or operating expenses. Our revenue and operating results could be lower than we anticipate if, among other reasons, our customers, on two of which we substantially depend for a large portion of our billings and revenue, limit or terminate our relationships with them, if those automobile manufacturer partners do not timely reopen automobile manufacturing plants or demand for new vehicles is weak due to COVID-19 related recessionary trends, we fail to successfully compete in our highly competitive market or our revenue falls more than we anticipate or does not grow as we expect or we are required to record losses related to our ownership interest in inMarket. In the future, we may acquire businesses or technologies or license technologies from third parties, and we may decide to raise additional capital through debt or equity financing to the extent we believe this is necessary to successfully complete these acquisitions or license these technologies. However, additional financing may not be available to us on favorable terms, if at all, at the time we make such determinations, which could have a material adverse effect on our business, operating results, financial condition and liquidity and cash position.

*Net cash provided by operating activities*. Net cash provided by operating activities was $41.7 million and $6.2 million in the nine months ended March 31, 2020 and 2019, respectively. Cash provided by or used in operating activities is affected by anticipated growth in our automotive business and increases in our operating costs, which are primarily driven by headcount related costs and royalty payments for portions of the content provided in our products. In the nine months ended March 31, 2020, cash provided by operating activities was primarily the result of net income of $8.3 million, adjusted for loss from discontinued operations of $4.0 million, and non-cash charges for stock-based compensation of $5.2 million, depreciation and amortization of $2.7 million, operating lease amortization, net of accretion, of $2.2 million, partially offset by non-cash revenue of $5.8 million, and $25.7 million from changes in our operating assets and liabilities. In the nine months ended March 31, 2019, cash provided by operating activities was primarily the result of a net loss of $19.6 million, adjusted for loss from discontinued operations of $3.9 million, which was more than offset by non-cash charges for stock-based compensation of $5.6 million, depreciation and amortization of $3.0 million and $14.6 million from changes in our operating assets and liabilities.

*Net cash provided by (used in) investing activities*. Our investing activities (used) provided $(46.4) million and $2.2 million during the nine months ended March 31, 2020 and 2019, respectively. Cash flows from investing activities have historically been affected by purchases, sales and maturities of short-term investments, purchases of property and equipment, internal software development costs, and acquisitions. In the nine months ended March 31, 2020, cash used in investing activities was principally the result of purchases of short-term investments, net of proceeds from sales and maturities of $35.6 million, purchases of long-term investments of $9.5 million and purchases of property and equipment of $1.3 million. In the nine months ended March 31, 2019, cash provided by investing activities was principally the result of proceeds from sales and maturities of short-term investments, net of purchases, of $3.2 million, partially offset by purchases of property and equipment of $1.0 million.

*Net cash used in financing activities*. During the nine months ended March 31, 2020 and 2019, our financing activities used cash of $2.2 million and $1.8 million, respectively. In the nine months ended March 31, 2020, we received cash of $8.4 million provided from the exercise of stock options, which was more than offset by repurchases of our common stock of $9.4 million and the utilization of $1.2 million for payment of tax withholdings related to net share settlements of RSUs. In the nine months ended March 31, 2019, we received cash of $1.4 million provided from the exercise of stock options, which was more than offset by repurchases of our common stock of $1.3 million and the utilization of $1.8 million for payment of tax withholdings related to net share settlements of RSUs.

***Contractual obligations, commitments and contingencies***

As of March 31, 2020, we had $22.6 million of future minimum non-cancelable financial commitments primarily related to office space under operating leases and license fees due to certain of our third-party content providers, regardless of usage level. These commitments are primarily due within five years.

## Item 3. Quantitative and Qualitative Disclosures about Market Risk.

Except for the broad effects of COVID-19 as a result of its negative impact on the global economy and financial markets, there have been no material changes in market risk from the information provided in our Annual Report on Form 10-K for fiscal 2019.

## Item 4. Controls and Procedures.

***Evaluation of Disclosure Controls and Procedures***

Our management, with the participation of our CEO and our Chief Financial Officer, or CFO, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2020. Based on the evaluation of our disclosure controls and procedures as of March 31, 2020, our CEO and CFO concluded that, as of such date, our disclosure controls and procedures were not effective due to the existence of the material weaknesses in internal control over financial reporting described below.

During the three months ended December 31, 2018, we identified certain errors related to our implementation of ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606) (“ASC 606”) due to our internal control over financial reporting relating to supervision and review of the financial models supporting our revenue recognition accounting and disclosures not operating effectively, which we refer to as the “December 2018 Control Deficiency.” We concluded that, because the December 2018 Control Deficiency created a more than remote likelihood of a material misstatement not being prevented or detected on a timely basis, this deficiency constituted a material weakness in internal control over financial reporting. While the original remediation plan adopted shortly after the discovery of the errors relating to our adoption of ASC 606 was fully implemented during the third quarter of fiscal 2019, during the fourth quarter of fiscal 2019, we decided to implement additional remediation measures to further address the December 2018 Control Deficiency. The material weakness will not be deemed remediated until the affected internal controls have been tested and determined to be operating effectively.

In connection with the preparation of our quarterly financial statements for the three months ended December 31, 2019, we identified certain errors related to our revenue recognition for the Grab Transaction due to the complexity of evaluating the relationship of the various elements of the transaction that we had not identified timely and accounted for appropriately in our financial statements for the three months ended September 30, 2019 or the press release and related investor conference call and presentation regarding our results for the three and six months ended December 31, 2019, which we refer to as the “December 2019 Control Deficiency.” Based on these findings, our management identified a material weakness in our review controls over unusual or non-recurring and significant transactions. Specifically, we had not designed our controls properly to provide reasonable assurance that we timely identify and assess the accounting implications of terms in unusual or non-recurring agreements. Accordingly, our CEO and CFO concluded that, at December 31, 2019, our internal control over financial reporting was not effective.

A description of our remediation plans for the December 2018 Control Deficiency and December 2019 Control Deficiency are set forth below.

The December 2019 Control Deficiency and related material weakness resulted in a restatement of previously issued consolidated financial statements for the three months ended September 30, 2019 as described in our Form 10-Q/A for the three months ended September 30, 2019 filed on February 12, 2020. Notwithstanding the December 2018 Control Deficiency and December 2019 Control Deficiency, based on the additional analyses and procedures performed, we believe this Quarterly Report on Form 10-Q for the three months ended March 31, 2020 fairly presents the consolidated financial statements included therein, in all material respects, in conformity with accounting principles generally accepted in the United States of America.

The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

***Changes in Internal Control over Financial Reporting***

Other than the December 2019 Control Deficiency, there were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that occurred during the three months ended March 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

A material weakness is a control deficiency or combination of control deficiencies that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

We are committed to maintaining a strong internal control environment, and we have implemented a remediation plan that is designed to address the December 2018 Control Deficiency relating to our adoption of ASC 606. The December 2018 Control Deficiency remediation plan includes formalizing and documenting the communication of information among our internal teams, the hiring or other engagement of additional accounting personnel, the creation of checklists for the review of supporting documentation relating to the application of ASC 606, and conducting additional training of the members of those internal teams regarding the requirements of ASC 606. While the December 2018 Control Deficiency remediation plan has been fully implemented, the material weakness will not be deemed remediated until the affected internal controls have been tested and determined to be operating effectively. Notwithstanding the foregoing, based on the results of that testing, we may need to implement additional remediation measures to address the material weakness.

As a result of the material weakness related to the December 2019 Control Deficiency, we have designed and are implementing remediation measures including, but not limited to, improving the internal communication procedures between executive management, accounting personnel, and related business owners, leveraging external accounting experts as appropriate, and strengthening policies and processes related to the ownership and responsibilities for non-recurring and significant transactions. We believe that our remediation plan will ensure that we timely identify terms in agreements that could have material accounting implications, assesses the accounting and disclosures implications of the terms, and accounts for such items in the financial statements appropriately.

We have substantially completed the transition to our new enterprise resource planning, or ERP, system for North America as of the beginning of the third quarter of fiscal 2020. This system is critical for accurately maintaining books and records and preparing our consolidated financial statements. For a discussion of risks related to the implementation of the ERP system, see the section entitled "Risk Factors" in Part II, Item 1A.

***Limitations on the Effectiveness of Controls***

Control systems, no matter how well conceived and operated, are designed to provide a reasonable, but not an absolute, level of assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Because of the inherent limitations in any control system, misstatements due to error or fraud may occur and not be detected.

***COVID-19***

We have not experienced any material impact to our internal controls over financial reporting despite the fact that most of our employees are working remotely due to the COVID-19 pandemic. We are continually monitoring and assessing the COVID-19 situation on our internal controls to minimize the impact on their design and operating effectiveness.

# PART II. OTHER INFORMATION

## Item 1. Legal Proceedings.

From time to time, we may be subject to legal proceedings and claims in the ordinary course of our business. For example, we have received, and may in the future continue to receive, claims from third parties asserting infringement of their intellectual property rights. In addition, litigation may be necessary to defend ourselves and our customers by determining the scope, enforceability and validity of third-party proprietary rights or to establish our proprietary rights. From time to time, we also may be subject to claims from our third-party content providers that we owe them additional royalties and interest, which claims may result in litigation if we and the third-party content provider are unable to resolve the matter. We cannot assure you with respect to the outcome of any current or future litigation brought against us or pursuant to which we have indemnification obligations and the outcome could have a material adverse impact on our business, operating results and financial condition.

In addition, we have received, and expect to continue to receive, demands for indemnification from our customers and OEM partners, which demands can be very expensive to settle or defend, and we have in the past offered to contribute to settlement amounts and incurred legal fees in connection with certain of these indemnity demands. In response to these demands we may be required to assume control of and bear all costs associated with the defense of our customers in compliance with our contractual commitments.

Large future indemnity payments and associated legal fees and expenses with respect to pending and future litigation, could materially harm our business, operating results and financial condition and create uncertainty regarding our business, any of which could also cause the price of our common stock to decline.

## Item 1A. Risk Factors.

*We operate in a rapidly changing environment that involves numerous uncertainties and risks. The following risks and uncertainties may have a material and adverse effect on our business, financial condition or results of operations. In addition, the impact of COVID-19 and any worsening of the economic environment may exacerbate the risks described below, any of which could have a material impact on us. This situation is changing rapidly and additional impacts may arise that we are not aware of currently. You should consider these risks and uncertainties carefully, together with all of the other information included or incorporated by reference in this Form 10-Q. If any of the risks or uncertainties we face were to occur, our business, financial condition, operating results, and prospects could be materially harmed. In that event, the price of our common stock could decline, and you may lose all or part of your investment.*

***Risks related to our business***

***We face significant risks related to the COVID-19 pandemic and related economic recession, which we expect to continue, and which could significantly disrupt our operations and have a material adverse effect on our results of operations and financial condition.***

Our business will be adversely impacted by the effects of the COVID-19 pandemic and related economic recession resulting from a cessation of business activities, which could continue for an extended period.

The COVID-19 pandemic and related adverse public health developments have caused and will continue to cause disruption to our business operations resulting from shelter-at-home orders, quarantines, self-isolations, or other movement restrictions on the ability of our employees to perform their jobs that may impact our ability to develop and design our products in a timely manner or meet required milestones or customer commitments. For example, our automotive manufacturer partners have closed manufacturing plants and ceased production in North America and Europe in response to the COVID-19 pandemic. As we receive revenue when new vehicles are manufactured, our revenue from these plant shutdowns will be negatively affected by the cessation of manufacturing operations. In addition, public health problems resulting from the COVID-19 pandemic and precautionary measures instituted by governments and businesses to mitigate its spread, including travel restrictions and quarantines, have contributed to a general, significant and continuing downturn in the global economy, which has had a direct impact on the demand for our products and on our operating results. The COVID-19 pandemic has also caused significant volatility in financial markets, including the market price of our stock and has raised the prospect of an extended global recession. We anticipate that the economic recession likely to result from the COVID-19 pandemic and related unemployment will substantially weaken demand for new vehicles and, as a result, our revenue may be substantially negatively affected.

Our revenue and prospects for continued business directly depend upon the volume of new vehicles being produced by our automobile manufacture partners and program development for new vehicles by prospective customers. The COVID-19 pandemic, related adverse public health developments and prospects for a global recession have directly impacted the businesses of our automobile manufacturer partners, such as GM, Ford and Toyota, including resulting from shelter-in-place orders and restrictions on employees' ability to work, office and factory closures, disruptions to ports and other shipping infrastructure, border closures and other travel or health-related restrictions. The recently announced shutdowns of manufacturing operations by Ford, GM and our other automobile manufacturer partners will decrease our revenue, operating results, financial condition and cash flows while such shutdowns continue and until the automobile manufacturers partners resume production. In addition, we cannot assure that any decrease in our revenue sales while these shutdowns continue will be offset by increased revenue in subsequent periods as our OEM partners resume vehicle production as high levels of unemployment and a likely economic recession are anticipated to weaken demand for new vehicles. Should these conditions continue, they would also negatively impact our ability to maintain cash balances to support our operations and future investments. We cannot predict when that may occur, and at what level our automobile manufacturer customers may resume production. Once production does resume, it is likely that for an extended period the production rate will be substantially below maximum production or levels which preceded the COVID-19 shutdown.

We rely on production forecasts from our automobile manufacturer partners to forecast our revenue for future periods and make decisions regarding the expenses we incur. We anticipate that our automobile manufacturer partner forecasts may be revised substantially and may be less reliable for longer periods. As a result, we may not be able to provide guidance for future periods with any level of certainty and we may be unable to adjust our spending in a timely manner if production forecasts upon which we base our revenue forecasts are not as reliable as they have been historically.

Changes in our operations in response to the COVID-19 pandemic or resulting employee illnesses may also result in inefficiencies or delays, including in sales and product development efforts and additional costs related to business continuity initiatives, that we may not be able fully to mitigate, whether through succession planning, improved management, employees working remotely or teleconferencing technologies. In addition, a substantial part of our workforce is outside of the United

States in jurisdictions where our ability to terminate or furlough employees without pay may be limited or subject to complex and costly processes. Therefore, if we determine that we need to reduce costs by terminating or furloughing personnel in these jurisdictions, our ability to do so in a timely and cost-effective manner may be limited.

Although the magnitude of the impact of the COVID-19 pandemic on our business and operations remains uncertain, the continued spread and/or a prolonged economic downturn will likely reduce demand for our products and services. While we cannot reasonably estimate the full extent and impact of the pandemic, we currently believe it will in the short-run and may over the longer term materially and adversely affect our consolidated business, results of operations and financial condition.

***We incurred losses in each period from fiscal 2015 through our first quarter of fiscal 2020. Although we were profitable for the nine months ended March 31, 2020, we may incur additional losses during the remainder of fiscal 2020 and in fiscal 2021, and we do not know when, or if, we will return to consistent profitability as we make further expenditures to enhance and expand our operations in order to support growth and diversification of our business.***

As a percentage of revenue, our net income was 4% and our net loss was 14% in the nine months ended March 31, 2020 and 2019, respectively. Our revenue from paid wireless carrier mobile navigation has substantially declined and we expect it to continue to do so, and we may be unable to generate sufficient revenue from our automobile navigation businesses to return us to profitability in the short-term, if at all.

We may incur additional net operating losses during fiscal 2020 and fiscal 2021. We face many uncertainties and we expect to see continued impact from the COVID-19 pandemic. Our revenue, like most, if not all, automotive-related businesses, depends upon the volume of new vehicles being produced. The recently announced shutdown of manufacturing operations by Ford, GM and other automobile manufacturer partners will negatively impact our revenue and operating results, perhaps significantly, while they continue and until they resume production. The high levels of unemployment and anticipated economic recession resulting from the COVID-19 pandemic are also likely to result in weak demand for new vehicles. If so, our revenue and operating results may be negatively affected for a sustained period.

We also expect that we may incur net operating losses due to the expected continued decline in our higher margin mobile navigation revenue and the costs we expect to incur prior to generating revenue in connection with new automotive navigation products and services that will not be integrated into production vehicles for several years, if at all. The time required to develop, test and deploy products between the time we secure the award of a new contract with any automobile manufacturer or tier one, and the timing of revenue thereunder, as well as a substantial required upfront investment in research and development resources prior to entering into contracts with automobile manufacturers and tier ones, and will continue to contribute to these losses. We also expect to continue to experience pressure on pricing in our negotiations with automobile manufacturers and tier ones as we enter into negotiations for contract renewals or new products where we are competing with larger suppliers that are competing on price, rather than features, or for vehicles where customers are price sensitive regarding navigation solutions or where the automobile manufacturer is offering or is considering brought-in solutions such as Apple’s CarPlay or Google’s Android Auto.

Our efforts to develop new services and products and attract new customers require investments in anticipation of longer-term revenue. For example, the design cycle for automotive navigation products and services is typically 18 to 24 months, and in order to win designs and achieve revenue from this growth area, we typically have to make investments two to four years before we anticipate receiving revenue, if any. This is the case for our current relationship with GM and Ford. In addition, the revenue we may receive at initial launch may not be significant depending on the automobile manufacturer’s or tier one’s launch timing schedule across vehicle models and regions. For example, although our hybrid product with GM launched in February 2017, it only launched in select vehicle models and we do not have any control over when and whether it launches in other GM models. In addition, GM announced in September 2019 that effective in 2021 (model year 2022), it will begin offering vehicles with Google Auto Services, or GAS. The relationship GM announced with GAS may reduce the number of new GM models and vehicles in which our products and services are provided. Our contract with Ford covers a broad range of products and services, including navigation solutions for Ford in North America. Garmin announced in January 2020 a relationship with Ford to integrate Garmin’s navigation technology into Ford’s next-generation SYNC communications and entertainment system. The relationship Garmin announced with Ford may reduce the number of new Ford models and vehicles in which our products and services are provided. Although we recently entered into a series of agreements with Grab with respect to the intellectual property underlying our OpenTerra Platform, we cannot provide any assurance that we will be able to enter into other arrangements for our OpenStreetMap, or OSM, mapping technologies in the future.

We are required to recognize certain automotive revenue over time if there are contractual service periods or other obligations to fulfill, such as specified contractual deliverables. Certain contractual service periods or other obligations currently extend up to eight years. We intend to make additional investments in systems and continue to expand our operations to support diversification of our business, but it is likely that these efforts at diversification will not replace our declining wireless carrier revenue in the short-term, if at all. As a result of these factors, we believe we may incur a net loss during fiscal 2020, and we cannot predict when, or if, we will return to consistent profitability. Our investments and expenditures may not result in the growth that we anticipate.

***Our quarterly revenue and operating results have fluctuated in the past and may fluctuate in the future due to a number of factors. As a result, we may fail to meet or exceed the expectations of securities analysts or investors, which could cause our stock price to decline.***

Our quarterly revenue and operating results may vary significantly in the future. Therefore, you should not rely on the results achieved in any one quarter as an indication of future performance and period-to-period comparisons of our revenue and operating results may not be meaningful. Our quarterly results of operations may fluctuate as a result of a variety of factors, including, but not limited to, those listed below, many of which are outside of our control:

- the recently announced decision by GM, Ford and other OEM manufacturers, to suspend vehicle production, uncertainty when they may re-start production, and the production levels they may return to in the foreseeable future resulting from weakened demand resulting from the economic recession associated with the COVID-19 pandemic;
- the ability of automobile manufacturers to sell automobiles equipped with our products;
- GM's decision, announced on September 5, 2019, to utilize the GAS offering and perhaps similar decisions of other automobile manufacturers and partners, to utilize third-party offerings, such as provided by GAS, Amazon, Apple and others, in future model years;
- competitive in-car platforms and products, such as Apple's CarPlay and Google's auto initiatives, which are currently offered in North America on Ford vehicles equipped with its SYNC 3 platform and most GM models;
- our ability to define and implement effective review controls over unusual or non-recurring and significant transactions, and timely identify and assess the accounting implications of terms in such unusual or non-recurring agreements;
- the decision by Toyota to expand Apple's CarPlay compatibility to certain of its 2019 model year and beyond Toyota and Lexus vehicles;
- Ford's announced intentions to modify its North America and European passenger car portfolio whereby it has begun phasing out certain car models;
- GM's announced intentions to end production of certain passenger vehicles in North America;
- work stoppages affecting our automobile manufacturer customers and their partners, such as the labor stoppage announced by GM workers in September 2019, which reduced our revenue during the stoppage period and for some time thereafter;
- the seasonality and unpredictability of new vehicle production, including tooling and assembly changes and plant shutdowns, such as the impact to production of certain Ford pickup truck models in U.S. factories due to a May 2018 fire at a supplier plant;
- the potential disruption as a result of the departure of the United Kingdom on January 31, 2020 from the European Union on automotive supply chains and potential plant closures in the United Kingdom;
- changes made to existing contractual obligations with a customer that may affect the nature and timing of revenue recognition, such as the adoption of our map update solution for Ford's customers in multiple geographies and its impact on the timing of our revenue recognition;
- competitive pressures on automotive navigation pricing from low cost suppliers and for vehicles where consumers are extremely price sensitive;
- the introduction and success of in-car integration, such as Google's in-car integration of Android Auto with Google Maps;
- investments by HERE North America, LLC, or HERE, and TomTom North America, Inc., or TomTom, in high definition maps that may be leveraged to displace our products and services in new vehicle models;

- the seasonality of new vehicle model introductions and consumer buying patterns, as well as the effects of economic uncertainty on vehicle purchases;
- an outbreak of a contagious disease, such as COVID-19, which may cause us or our customers to temporarily suspend our or their operations in the affected city or country, including China;
- the impact of tariffs and other trade negotiations on vehicle sales prices and supply chains;
- the impact on vehicle sales resulting from tariffs on imported vehicles and parts and disruption to automobile manufacturer supply chains resulting therefrom;
- the effectiveness of our entry into new business areas;
- the loss of our relationship, a change in our revenue model, a change in pricing, or a reduction in geographic scope with any particular customer;
- poor reviews of automotive service offerings into which our navigation solutions are integrated resulting in limited uptake of navigation options by car buyers;
- warranty claims based on the performance of our products and the potential impact on our reputation with navigation users and automobile manufacturers and tier ones;
- the sale of vehicle brands by automobile manufacturers to an automobile manufacturer with which we do not have an existing relationship;
- the timing and quality of information we receive from our customers and the impact of customer audits of their reporting to us;
- the inability of our automobile manufacturer customers to attract new vehicle buyers and new subscribers for connected services;
- the timing of customized software development and other deliverables such as map updates;
- the amount and timing of operating costs and capital expenditures related to the expansion of our operations and infrastructure through acquisitions or organic growth;
- the timing of expenses related to the development, acquisition or divestiture of technologies, products or businesses;
- the cost and potential outcomes of existing and future litigation;
- the timing and success of new product or service introductions by us or our competitors and customer reviews of those products or services;
- the timing and success of marketing expenditures for our products and services;
- the extent of any interruption in our services;
- potential foreign currency exchange gains and losses associated with expenses and sales denominated in currencies other than the U.S. dollar;
- general economic, industry and market conditions, including any change in U.S. interest rates, that impact expenditures for new vehicles, smartphones and mobile location services in the United States and other countries where we sell our services and products;
- changes in interest rates and our mix of investments, which would impact our return on our investments in cash and marketable securities;
- changes in our effective tax rates; and
- the impact of new accounting pronouncements such as ASC 842.

Fluctuations in our quarterly operating results might lead analysts and investors to change their models for valuing our common stock. As a result, our stock price could decline significantly and we could face costly securities class action lawsuits or other unanticipated issues.

***We are dependent on Ford and GM for a substantial portion of our billings and revenue, and our business, financial condition and results of operations will be harmed if our billings and revenue from Ford and GM do not continue to grow or if they decline.***

Ford represented approximately 46% and 64% of our revenue and approximately 44% and 60% of our billings in the nine months ended March 31, 2020 and 2019, respectively. GM represented approximately 31% and 19% of our revenue and approximately 31% and 21% of our billings in the nine months ended March 31, 2020 and 2019, respectively. During the third quarter of fiscal 2020, we experienced a decline in billings to Ford due to Ford's plant closures in response to the COVID-19 pandemic. Despite the decrease in Ford's billings, we expect that Ford, GM, other automobile manufacturers and tier ones will account, at least in the near-term, for an increasing percentage of our revenue and billings, as our revenue and billings from paid wireless carrier provided navigation continues to decline. Our total revenue and billings could also potentially decline if Ford or GM increases the cost to consumers of our navigation products, reduces the number of vehicles or the geographies in which vehicles with our products as an option are sold, if their sales of vehicles fall below forecast, or if they determine to offer on their vehicles third-party platforms or solutions in place of ours. For example, GM announced on September 5, 2019 that it intended to utilize GAS solutions on certain models beginning with GM's model year 2022. The relationship GM announced with GAS may reduce the number of new GM models and vehicles in which our products and services are provided. Garmin announced on January 7, 2020 a relationship with Ford to integrate Garmin's navigation technology into Ford's next-generation SYNC communications and entertainment system. The relationship Garmin announced with Ford may reduce the number of new Ford models and vehicles in which our products and services are provided. Work stoppages, such as GM announced in September 2019, global macro-economic conditions or other factors could also cause automobile manufacturer and tier ones to reduce their production of vehicles in which our products and services are incorporated and our revenues, as a result. Ford offers Apple's CarPlay and Google's Android Auto on its vehicles in North America equipped with its SYNC 3 platform and announced that Waze is available on its vehicles equipped with the SYNC 3 platform, which may reduce the number of vehicle purchasers who purchase built-in navigation services. GM also offers Apple's CarPlay and Google's Android Auto on most of its vehicles in North America and its announcement regarding GAS commencing in model year 2022 may result in a larger proportion of GM vehicles being sold without our products and services. We may not successfully increase our revenue and billings from Ford or GM if our products are replaced within vehicles with our competitors' products or we experience price competition for those products and services. Moreover, Ford and GM have announced their intention to modify their North American passenger car portfolio strategies and have begun phasing out certain car models, and they recently indicated that they are also considering changes in their respective European portfolio strategies. This could lead to a significant reduction in the sales of vehicles with our products as an option. We may not be able to mitigate the effect of any lost billings and revenue and our business, financial condition, results of operations and prospects could be materially adversely affected, our stock price could be volatile, and it may be difficult for us to achieve and maintain profitability.

We cannot predict the impact on our revenue, billings, and gross profit of any changes between the automobile manufacturers and the map or other content providers. For example, a substantial portion of our revenue and billings and, to a lesser extent, gross profit from Ford is impacted by the underlying licensed content cost negotiated through HERE and other content providers.

Our contract with GM includes the provision of our on-board, hybrid, and brought-in navigation solutions across a wide assortment of GM vehicles. Our mobile navigation SDK powers GM's branded mobile and web-based applications and is covered under a services agreement that was entered into June 13, 2014 and extends to December 31, 2019. In November 2019, the term of this agreement was extended to December 31, 2020. Our on-board and hybrid navigation solutions for GM are covered under a product and services agreement that became effective February 1, 2017. These solutions began shipping in a limited number of vehicles beginning with model year 2017 and are gradually expanding across additional regions and models. In May 2017, additional vehicles through model year 2025 were added to this products and services agreement, which terminates on December 31, 2026. However, our contract with GM does not assure us of minimum order quantities, overall or during any period. On September 5, 2019, GM announced that it intended to utilize GAS solutions on certain models beginning with model year 2022. The relationship GM announced with GAS may reduce the number of new GM models and vehicles in which our products and services are provided.

We have limited experience managing, supporting and retaining automobile manufacturers and tier ones as customers, and if we are not able to maintain Ford and GM as customers our revenue will decline, perhaps significantly.

***The success of our automotive navigation products may be affected by the number of vehicle models offered with our navigation solutions, as well as overall demand for new vehicles.***

Our ability to succeed long term in the automotive industry depends on our ability to expand the number of models offered with our navigation solutions by our current automobile manufacturer customers. We are also dependent upon our ability to attract new automobile manufacturers and tier ones. For automobile manufacturers with whom we have established relationships, such as Ford and GM, our success depends on continued production and sale of new vehicles offered with, and adoption by end users of, our products when our product is not a standard feature. Our on-board and hybrid solutions may not satisfy automobile manufacturers' or end customers' expectations for those solutions. If automobile manufacturers and tier ones do not believe that our services meet their customers' needs, our products and services may not be designed into future model year vehicles. As we move forward, our existing automobile manufacturers and tier ones may not include our solutions in future year vehicles or territories, which would negatively affect our revenue from these products. Production and sale of new vehicles are subject to delay due to forces outside of our control, such as natural disasters, pandemics, parts shortages and work stoppages, as well as general economic conditions. For example, in March 2020, Ford and GM ceased production in the United States and Europe due to the COVID-19 pandemic and related shelter-in-place orders.

***If we fail to comply with our automobile manufacturer and tier one contracts, our business, financial condition and results of operations could suffer.***

Our contracts with our automobile manufacturer and tier one customers include increasingly specialized, complex and strict performance requirements. We have experienced and may continue to experience increased challenges in achieving certain milestones under our contracts with our automobile manufacturer and tier one customers, such as Ford and GM, our largest OEM customers, as well as other tier one customers, and may not be able to demonstrate those milestones on a timely basis or otherwise as required under our agreements. This could cause our automobile manufacturers, such as Ford and GM, and other tier one customers to reduce their level of business with us or to utilize third-party platforms or solutions in place of ours in future model years. In addition, our automobile manufacturer and tier one customers regularly evaluate our capabilities against those of our competitors and may even engage one or more of our competitors as a dual source supplier. Any failure by us to timely perform under our automobile manufacturer and tier one contracts could at any time result in the termination of those contracts, the awarding of work to one or more of our competitors, or other adverse actions. Further, any negative publicity related to our automobile manufacturer or tier one contracts or any proceedings surrounding them, regardless of its accuracy, may damage our business by affecting our ability to compete for new contracts. If one of our automobile manufacturer or tier one contracts is terminated, or if our ability to compete for new contracts is adversely affected, our business, reputation, financial condition and results of operations could suffer.

***Our automotive revenue and earnings could fluctuate due to the complexities of revenue recognition and capitalization of expenses related to customized products.***

We adopted ASC 606, *Revenue from Contracts with Customers*, effective July 1, 2018, utilizing the full retrospective transition method. Under this accounting methodology: royalty amounts earned are bifurcated when there exist various underlying obligations; revenue is recognized upon fulfillment of the underlying obligation; and such obligations related to earned royalties generally can include an onboard navigation component recognized as revenue once delivered and accepted, a connected services component recognized to revenue over the applicable service period, and a map update component recognized as revenue upon periodic delivery. Due to the complexities of revenue recognition, we may be required to recognize certain revenue over extended periods. For example, because customers of our brought-in automotive navigation solutions simultaneously receive and consume the benefit from our performance, we recognize revenue ratably over the period the services obligation is expected to be fulfilled, which is generally 8 to 12 years, as we believe this provides a faithful depiction of the transfer of control.

Revenue recognition could also be impacted by future amendments to automobile manufacturer and tier one agreements, such as providing our map update solution in other regions, changes in procurement patterns, shipping terms and title transfer. As our solutions encompass greater value-added services, there is potential for changes in the timing of revenue recognition. Investors and securities analysts may not understand the subtleties of these revenue recognition requirements, and the trading prices of our common stock may be negatively affected.

In addition, our revenue recognition under our automobile manufacturer and tier one agreements is becoming increasingly more complex with the evolution of our value-added products and services, such as our hybrid navigation solutions. The agreements for these solutions can extend over several years and require multiple deliverables. Given the length of our contractual obligations, which often extend beyond the manufacture and sale of the vehicle when the royalty is determined and paid, we may have significant post-production obligations to provide brought-in navigation services or map updates over an extended period of time. These extended obligations can result in a delay in recognition of revenue, or the need to defer and recognize revenue over the period that we are required to provide these post-production obligations or other services.

In conjunction with the adoption of ASC 606, development costs subject to ASC 340-40 incurred to fulfill future obligations under certain actual or anticipated contracts for automotive solutions are capitalized, provided they are expected to be recovered, and then recognized as the related performance obligations are transferred. For on-board automotive solutions, such costs represent the customized portion of software development, which will continue to be recognized upon acceptance of the software under ASC 340-40 since acceptance is generally required for control of the software to transfer. As a result, our recognition of deferred costs may be lumpy and not tied to the production of the vehicles in which the software is installed. For brought-in automotive solutions, such costs will be amortized over the period the services obligation is expected to be fulfilled because software development does not represent a distinct performance obligation in the case of brought-in automotive solutions. Historically, we recognized such costs for brought-in automotive solutions upon acceptance of the software.

We may also incur significant expense to develop products for automobile manufacturers, such as under our worldwide connected navigation services agreement with GM, prior to receiving any significant revenue related to the sale of vehicles with our navigation services. As our offerings in automotive navigation expand, we may not correctly anticipate the financial accounting treatment for the various products.

***We may not be successful at adapting our business model for the Chinese automotive navigation market, which may reduce our revenue per vehicle.***

Demonstrating growth in the Chinese market is an important component of our global growth strategy. While we have significant research and development facilities in China, we have a limited business presence and, so far, have not been successful in expanding our initial automotive entry in the Chinese market. The COVID-19 pandemic also disrupted significantly our operations in China and delayed various initiatives with existing and potential OEM partners. Although business activities in China have started to resume, we may not be able to retain the interest of and further our relationships with existing and potential OEM partners due to the recessionary economic effects of the COVID-19 pandemic. The automotive software market in China is also highly competitive. This competition comes from large international automotive software providers as well as strong domestic providers. The Chinese navigation software market is seeing transition towards new business models by third-party navigation product vendors, such as substantially lower per-unit license fees that are intended to be offset by opportunities to monetize navigation usage in additional ways that may include, but not be limited to, advertising, usage-based insurance and utilizing data to create high-definition maps. Global platform navigation products tend to fare poorly in China. For example, our revenue from Ford China declined materially in fiscal 2018 and 2019 and the first nine months of fiscal 2020, and we expect it to continue to decline in the absence of a new, localized product. We may need to change or modify our license fee model in China in order to compete effectively. Our inability to do so may have a material impact on our ability to continue to participate in the Chinese market. Even if we adopt new license fee models for China based automobile manufacturers, we may not recognize revenue from those new models sufficient to compensate us for the costs of supporting those automobile manufacturers in the short-term, if at all. In addition, many of the same business model, pricing and licensing changes, could also impact us in additional markets including, but not limited to, North America and Europe.

***We may not be successful in generating material revenue from automobile manufacturers and tier ones other than Ford and GM. As a result, our business, financial condition and results of operations will be harmed if we are unable to diversify our automotive revenue.***

Although we have attempted to mitigate our dependence on Ford and GM by establishing relationships with other automobile manufacturers and tier ones, these relationships may not produce significant revenue if the products are launched in limited models or face competition from third parties. Even if we are able to diversify our automotive navigation business through new relationships, customers may not elect to purchase automobile manufacturer and tier one navigation offerings that include our software and/or services for reasons unrelated to performance of our software or services. Even if we win new awards, once those programs go into production, consumers may not widely adopt our navigation offerings or may criticize the performance or quality of the navigation software and our reputation may be harmed. If customer purchase rates are less than anticipated, or if our relationships with one or more of these other automobile manufacturers and tier ones are terminated or not renewed or extended, we may be unable to effectively diversify our automotive navigation revenue and our business, financial condition and results of operations may be harmed.

We may be unable to enter into agreements to provide automotive navigation products if we do not offer navigation products that serve geographies throughout the world or automobile manufacturers and tier ones are uncomfortable with our ability to support markets outside of the United States. Our automobile manufacturer and tier one customers may choose to partner with providers of location services with extensive international operations. We may be at a disadvantage in attracting such customers due to our business being concentrated in the United States, and we may not be successful in other geographies if customers are uncomfortable with the look and feel of our solutions. If we are unable to attract or retain such automobile manufacturer and tier one customers, our revenue and operating results will be negatively affected.

***We may incur substantial costs when engaging with a new automotive navigation customer and may not realize substantial revenue from that new customer in the short-term, if at all.***

The design and sales cycle for on-board or brought-in automotive navigation services and products is long and requires significant up-front and ongoing research, engineering and other development investments to secure and support those relationships. As a result, we may not be able to achieve significant revenue growth with new customers from the automotive navigation business in a short period of time, or at all. In addition, these lengthy cycles make it difficult to predict if and when we will generate revenue from new customers or when, if at all, we may recoup the up-front and ongoing investments we make in order to secure and support such business. For example, design wins for vehicles may be awarded 12 to 36 months prior to the anticipated commercial launch of the vehicle.

We also entered into a contract with GM in 2014 to provide worldwide hybrid navigation solutions beginning in model year 2017 and continuing through model year 2025, and our hybrid product launched in its first GM models, the Cadillac CTS and CTS-V, in February 2017. We cannot assure you that our products will be in a wide variety of geographic markets in which GM sells vehicles in or across a variety of models and brands. Our contract with GM does not assure us of minimum order quantities, overall or during any period. On September 5, 2019, GM announced that it intended to utilize GAS solutions on certain models beginning with model year 2022. The relationship GM announced with GAS may reduce the number of new GM models and vehicles in which our products and services are provided. GM has not provided us with any volume or revenue guarantees, and we cannot assure you that we will continue to receive material revenue from these products and services.

Our contract with Ford covers a broad range of products and services that we provide to Ford. On March 28, 2018, we entered an amendment to our contract with Ford that extends the term of the agreement to December 31, 2020 for each jurisdiction in which we currently provide our products to Ford. On December 14, 2017, Ford also selected us to provide its next-generation navigation solution in North America, subject to certain conditions. The terms of this next-generation navigation solution were embodied in an amendment executed in December 2018, and this amendment extended the term of the agreement to December 31, 2022 for North America production; provided that Ford may extend the term further subject to certain conditions. We were not awarded the contracts for Europe, South America and Australia and New Zealand and Garmin recently announced in 2020 a relationship with Ford to integrate Garmin's navigation technology into Ford's next-generation SYNC communications and entertainment system. The relationship Garmin announced with Ford may reduce the number of new Ford models and vehicles in which our products and services are provided. The loss of any contracts awarded, or our failure to be awarded contracts for certain geographies, may adversely impact our business, financial condition and results of operations.

We have a partnership with Toyota for Toyota and Lexus vehicles and a separate partnership with Xevo for another navigation solution for Toyota and Lexus vehicles. While we have seen expansion of our latest version of Scout GPS Link solution across more Toyota and Lexus models in fiscal 2019 and fiscal 2020, we expect Toyota to limit or reduce the number of models or vehicles on which Scout GPS Link is offered by Toyota and Lexus, beginning in model year 2021, due in part to the offering of alternative brought-in solutions such as Apple's CarPlay, which Toyota recently announced it is offering across certain Toyota models, and the expanded offering of Google's Android Auto solution across more automobile manufacturers. In addition, during the fourth quarter of 2019, we entered into an amended agreement with Xevo, under which we received a one-time $17.0 million cash pre-payment in exchange for removing a contractual minimum unit commitment that otherwise would have resulted in a payment to us in 2027. We recorded the receivable as deferred revenue in the fourth quarter of fiscal 2019 and we are recognizing it as revenue over future periods. We currently expect that our contract with Xevo relating to the implementation of our solutions in Toyota and Lexus vehicles will remain in place through 2026. We cannot assure you that we will receive significant revenue from the solutions for Toyota in the long-term. While we continue to invest in our existing and new relationships with automobile manufacturers, if our products do not meet the consumer's expectations, automobile manufacturer customers may not continue to offer our solutions.

We also may not price our solutions in such a way that is profitable for us and enables us to recoup the development expenses we incurred to provide such solutions in the time we expect or at all. Development schedules for automotive navigation products are difficult to predict, and there can be no assurance that we will achieve timely delivery of these products to our customers. To the extent that we charge service fees beyond an initial fee at the time the vehicle is purchased, we may not be successful in gaining traction with customers to provide services and charge ongoing monthly or annual fees outside of the traditional on-board navigation service model.

Our ability to build demand for our automotive navigation products and services is also dependent upon our ability to provide the products and services in a cost-effective manner, which may require us to renegotiate map and POI content relationships to address the specific demands of our automotive navigation products and services. If we are unable to improve our margins, we may not be able to operate our automotive navigation business profitably. If we fail to achieve revenue growth in any of our automotive navigation solutions (whether on-board, brought-in or other), we may be unable to achieve the benefits of revenue diversification. In addition, our map and content suppliers, HERE and TomTom, are also becoming competitors through the offering of their own automotive navigation services.

***We rely on our customers for timely and accurate vehicle and subscriber sales information. A failure or disruption in the provisioning of this data to us would materially and adversely affect our ability to manage our business effectively.***

We rely on our automobile manufacturers and tier one customers to provide us with reports on the number of vehicles they sell with our on-board, brought-in and hybrid navigation products and services included, depending on the nature of our contractual relationship, and to remit royalties for those sales to us. We also rely on our wireless carrier customers to bill subscribers and collect monthly fees for our mobile navigation services, either directly or through third-party service providers. The risk of inaccurate reports may increase as our customers expand internationally and increase the number of manufacturing locations. For example, in the three months ended March 31, 2017 and September 30, 2017, Ford determined that it had misreported the production of vehicles to us in certain factories. If our customers or their third-party service providers provide us with inaccurate data or experience errors or outages in their own billing and provisioning systems when performing these services, our revenue may be less than anticipated or may be subject to adjustment with the customer. In the past, we have experienced errors in reporting from automobile manufacturers and wireless carriers. If we are unable to identify and resolve discrepancies in a timely manner, our revenue may vary more than anticipated from period to period, which could harm our business, operating results and financial condition.

***We have implemented a new enterprise resource planning system. If this new system proves ineffective, we may be unable to timely or accurately prepare financial reports, or invoice and collect from our customers.***

We substantially completed the transition to our new ERP system for North America as of the beginning of the third quarter of fiscal 2020. This system is critical for accurately maintaining books and records and preparing our consolidated financial statements. While we have invested significant amounts, including for additional personnel and third-party consultants, to implement this system, we cannot be assured that we will not experience difficulties following the transition. Any errors in our new ERP system could adversely affect our operations, including our ability to accurately report our financial results in a timely manner, file our quarterly or annual reports with the SEC and invoice and collect from our customers, each of which may harm our operations and reduce investor confidence. Data integrity problems or other issues may be discovered even though the transition is complete which, if not corrected, could impact our business, reputation, reporting, disclosures or results of operations. If we encounter unforeseen difficulties with our new ERP system, there will be additional demands on our management team and our business, operations, and results of operations could be adversely affected.

***Our business practices with respect to data could give rise to liabilities or reputational harm as a result of governmental regulation, legal requirements or industry standards relating to consumer privacy and data protection.***

Our automotive navigation services depend on our ability to collect, store and use such information as we deliver personalized navigation. Federal, state and international laws and regulations govern the collection, use, retention, sharing and security of data that we collect across our navigation platform. We strive to comply with all applicable laws, regulations, policies and legal obligations relating to privacy and data protection. However, it is possible that these requirements may be interpreted and applied in a manner that is inconsistent with our business practices or service offerings. Any failure, or perceived failure, by us to comply with such laws could result in proceedings or actions against us by governmental entities, consumers or others. Such proceedings or actions could hurt our reputation, force us to spend significant amounts to defend ourselves, distract our management, increase our costs of doing business, adversely affect the demand for our services and ultimately result in the imposition of monetary liability or changes to our business practices or service offerings. We may also be contractually liable to indemnify and hold harmless our users from the costs or consequences of inadvertent or unauthorized disclosure of data that we store or handle as part of providing our services.

***Changes to United States tax, tariff and import/export regulations may have a negative effect on global economic conditions, financial markets and our business.***

The current administration, along with Congress, has created significant uncertainty about the future relationship between the United States and other countries with respect to the trade policies, treaties, taxes, government regulations and tariffs that would be applicable. It is unclear what changes might be considered or implemented and what response to any such changes may be by the governments of other countries. These changes have created significant uncertainty about the future relationship between the United States and China, as well as other countries, including with respect to the trade policies, treaties, government regulations and tariffs that could apply to trade between the United States and other nations. For example, in 2018, the Office of the U.S. Trade Representative, or the USTR, enacted new tariffs on imports into the United States from China. Since then, additional tariffs have been imposed by the USTR on imports into the United States from China and China has also imposed tariffs on imports into China from the United States. The countries entered into the first portion of a trade deal but continue to negotiate other provisions. If additional tariffs or other restrictions are placed on Chinese imports or any additional counter-measures are taken by China, our revenue and results of operations may be materially harmed. Furthermore, the United States continues to threaten placing tariffs and other restrictions on automobile manufactures and tier ones located in the European Union, or EU, and current or future such tariffs or restrictions imposed by the United States may negatively impact the automobile manufacturers to which we provide our automotive navigation products and services, thereby causing an indirect negative impact on our own sales. Any reduction in the sales of our customers and business partners, and/or any apprehension among our customers and business partners of a possible reduction in such sales, would likely cause an indirect negative impact on our own sales. Even in the absence of further tariffs, the related uncertainty and the market's fear of an escalating trade war might create forecasting difficulties for us and could cause our customers and business partners to place fewer orders for our products and services, which could have a material adverse effect on our business, liquidity, financial condition, and/or results of operations. These developments, or the perception that any of them could occur, may have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global trade and, in particular, trade between these nations and the United States. Any of these factors could depress economic activity and restrict our access to suppliers or customers and have a material adverse effect on our business, financial condition and results of operations and affect our strategy in China, the EU and elsewhere around the world. Given the relatively fluid regulatory environment in China and the United States and uncertainty how the U.S. administration or foreign governments will act with respect to tariffs, international trade agreements and policies, a trade war, further governmental action related to tariffs or international trade policies, or additional tax or other regulatory changes in the future could directly and adversely impact our financial results and results of operations.

***Our operations in certain emerging markets expose us to political, economic and regulatory risks.***

Our growth strategy depends in part on our ability to expand our operations in emerging markets, including Asia Pacific, the Middle East and Africa, and Latin America. However, some emerging markets have greater political, economic and currency volatility, and greater vulnerability to infrastructure and labor disruptions than more-established markets. In many countries outside of the United States, particularly those with emerging economies, it may be common for others to engage in business practices prohibited by laws and regulations with extraterritorial reach, such as the U.S. Foreign Corrupt Practices Act, or the FCPA, the United Kingdom’s, or U.K.’s, Bribery Act, or other local anti-bribery laws. These laws generally prohibit companies and their employees, contractors or agents from making improper payments to government officials, including in connection with obtaining permits or engaging in other actions necessary to do business. Failure to comply with these laws could subject us to civil and criminal penalties that could materially and adversely affect our reputation, financial condition and results of operations.

For example, under the FCPA, U.S. companies may be held liable for the corrupt actions taken outside the United States by employees, strategic or local partners, or other representatives. Under the FCPA, we and our partners are required to maintain accurate books and records and a system of internal accounting controls. As such, if we or our intermediaries fail to comply with the requirements of the FCPA or similar legislation outside the United States, governmental authorities in the United States and elsewhere could seek to impose civil or criminal fines and penalties, which could have a material adverse effect on our business, operating results and financial conditions. While our employee handbook and other policies prohibit our employees from engaging in corrupt conduct, we do not yet have in place compliance measures and training to require both our employees and our third-party intermediaries to comply with the FCPA and similar anticorruption laws.

Establishing operations and partners in these emerging markets may also require complex legal arrangements and operations to deliver services on global contracts for our end customers. Because of our limited experience with international operations and developing and managing sales in international markets, our international expansion efforts may not be successful. Additionally, we have established operations in locations remote from our more developed business centers. As a result, we are subject to heightened risks inherent in conducting business internationally, including the following:

- failure to comply with local regulations or restrictions;
- enactment of legislation, regulation or restriction, whether by the United States or in the foreign countries, including unfavorable labor regulations, tax policies or economic sanctions (such as potential economic sanctions arising from political disputes), and currency controls or restrictions on the transfer of funds;
- enforcement of legal rights or recognition of commercial procedures by regulatory or judicial authorities in a manner in which we are not accustomed, would not reasonably expect or with which we could not reasonably comply;
- differing technical and environmental standards, data protection and telecommunications regulations and certification requirements, which could prevent the import, sale or use of our products or SaaS offerings in such countries;
- difficulties and costs associated with staffing and managing foreign operations;
- potentially longer payment cycles and greater difficulty collecting accounts receivable;
- the need to adapt and localize our services for specific countries, including conducting business and providing services in local languages;
- reliance on third parties over which we have limited control, such as our partners or their resellers or agents, for marketing and reselling our products and solutions;
- difficulties in understanding and complying with local laws, regulations, and customs in foreign jurisdictions or unanticipated changes in such laws;
- application of or changes in anti-bribery laws, such as the FCPA and U.K. Bribery Act, which may disrupt our staffing or ability to manage our foreign operations;
- changes in political and economic conditions leading to changes in the business environment in which we operate, as well as changes in foreign currency exchange rates;
- sanctions restricting local commercial activity, including retaliatory actions by local governments; and
- natural disasters, pandemics (including COVID-19) or international conflict, including terrorist acts or labor or political disputes, which could interrupt our operations or endanger our personnel.

In addition, our competitors may also expand their operations in these markets or others we may also target, and low-cost local manufacturers may also expand and improve products and their production capacities, thus increasing competition in these emerging markets. Our success in emerging markets is important to our growth strategy. If we cannot successfully increase our business in emerging markets and manage associated political, economic, regulatory and currency volatility, our product sales, financial condition and results of operations could be materially and adversely affected.

***We conduct substantial research and development operations in China; risks associated with a business presence in China could negatively affect our business and results of operations.***

We currently operate a research and development center in China, which subjects us to a number of risks relating to China’s political and legal systems, including;

- uncertainty regarding the validity, enforceability, scope and ability to protect and secure our intellectual property rights and the practical difficulties or enforcing such rights;
- ability to secure our business' proprietary information when residing in or is accessible from China from illegal or unauthorized access or use;
- extensive government regulation; and
- an uncertain legal system.

Any actions and policies taken or adopted by the government of China, particularly with regard to our intellectual property, products and legal rights, could have an adverse effect on our business, results of operations and financial condition. For example, development in China or by entities supported by the China government of competing products or technologies using our intellectual property could significantly erode the market or pricing for our products. In addition, actions or policies to incorporate technical capabilities into our products, without our knowledge or permission or the appearance or threat of the same, could undermine product or data security features of our products. Whether any such actions or policies actually exist, or have been effected, the fact of a significant research and development presence in China could expose our products and data and security offerings to government or market scrutiny regarding the integrity of our product or data security features. Any of the foregoing could similarly discourage the purchase or use of our products and cause significant harm to our reputation in the market.

The COVID-19 pandemic disrupted our operations in China significantly and delayed various initiatives with existing and potential OEM partners. Our customers and potential customers in China have also significantly reduced their operations and delayed engagements with us. This disruption, including limitation of flights in and out of China, quarantines, supply chain disruptions and further governmental responses, could continue to have a significant negative impact on our ability to meet schedules for delivery of our products and services to customers, which would have a negative impact on our financial condition, results of operations and customer relationships.

***We could be subject to additional income tax liabilities.***

We are subject to income taxes in the United States and numerous foreign jurisdictions. We use significant judgment in evaluating our worldwide provision for income taxes, which could be adversely affected by several factors, many of which are outside our control. During the ordinary course of business, there are many transactions for which the ultimate tax determination is uncertain. For example, our effective tax rates could be adversely affected by earnings being lower than we anticipate in countries that have lower statutory rates and higher than we anticipate in countries that have higher statutory rates, by changes in foreign currency exchange rates, by changes in the valuation of our deferred tax assets and liabilities, or by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations, including possible changes to the U.S. taxation of earnings of our foreign subsidiaries or to the deductibility of expenses attributable to foreign income or the foreign tax credit rules. We are subject to audit in various jurisdictions, and such jurisdictions may assess additional income tax against us as well as penalties and fines. As we operate in multiple taxing jurisdictions, the application of tax laws can be subject to diverging and sometimes conflicting interpretations by tax authorities of these jurisdictions. The time and expense necessary to defend and resolve a tax audit may be significant. Although we believe our tax estimates are reasonable, the final outcome of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals and may have a material effect on our operating results or cash flows in the period or periods for which we make such determination.

***Our international operations and corporate structure subject us to potential adverse tax consequences.***

We generally conduct our international operations through wholly owned subsidiaries and report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. Our intercompany relationships are subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. The relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position not sustained, we could be required to pay additional taxes, interest and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows and lower overall profitability of our operations. We may not have adequate reserves to cover such a contingency.

In the future, we may reorganize our corporate structure or intercompany relationships, which would likely require us to incur expenses in the near term for which we may not realize related benefits, at all or within a reasonable period, to justify the expense. Changes in domestic and international tax laws, including enacted legislation to reform U.S. taxation of international business activities, may negatively impact our ability to effectively restructure, or reduce the benefits we expected from such corporate restructuring. Any such restructuring would likely involve sophisticated analysis, including analysis of U.S. and international tax regimes. Compliance with such laws and regulations may be difficult and expensive and subject our business to additional risks, costs and uncertainties.

***Our customer requirements and content management obligations are complex. If we inadvertently include content for which we have liability to the vendor but may not be entitled to payment from our customer, our financial condition and results of operation could be harmed.***

The nature and extent of content that is delivered as part of our navigation solutions is complex to manage. Matching the requirements of our customers with the content offered by our vendors may result in our inclusion of content which we believe is necessary to meet our customers' requirements for which the customer may not have agreed to make payment to us. In addition, our customers speak directly to our vendors and often those conversations influence the expected content for our end products; however, customers may not be fully informed as to the license costs associated with the various components. Therefore, there is some risk that we may include content for which we have liability to the vendor but may not be entitled to payment from our customer. If these situations were to occur, our business, financial condition and results of operations could be adversely affected.

***We face intense competition in our market, especially from competitors that offer their location services for free, which could make it difficult for us to acquire and retain customers and end users.***

The market for development, distribution and sale of location services is highly competitive. Many of our competitors have greater name recognition, larger customer bases and significantly greater financial, technical, marketing, public relations, sales, distribution and other resources than we do. Competitors may offer location services that have at least equivalent functionality to ours for free. For example, Google offers free voice-guided turn by turn navigation as part of its Google Maps and Waze products for mobile devices, including those based on the Android and iOS operating system platforms, and Apple offers proprietary maps and voice-guided turn by turn directions. Microsoft also provides a free voice-guided turn-by-turn navigation solution on its Windows Mobile and Windows Phone operating systems. Competition from these free offerings may reduce our revenue, result in our incurring additional costs to compete and harm our business. If our wireless carrier customers can offer these mobile location services to their subscribers for free, they may elect to cease their relationships with us, alter or reduce the manner or extent to which they market or offer our services or require us to substantially reduce our fees or pursue other business strategies that may not prove successful. In addition, new car buyers may not value navigation solutions built in to their vehicles if they believe that free (brought-in) offerings, such as Apple's CarPlay or Google's auto initiatives, are adequate and may not purchase our solutions with their new cars. Ford offers Apple's CarPlay and Google's Android Auto on its vehicles in North America equipped with its SYNC 3 platform and announced that Waze will be available on its vehicles equipped with the SYNC 3 platform, which may reduce the number of vehicle purchasers who purchase on-board navigation solutions. GM also offers Apple's CarPlay and Google's Android Auto on most of its vehicles in North America. GM announced on September 5, 2019 that it intends to utilize GAS solutions on certain models beginning with GM's model year 2022. The relationship GM announced with GAS may reduce the number of new GM models and vehicles in which our products and services are provided. Garmin announced on January 7, 2020 a relationship with Ford to integrates Garmin's navigation technology into Ford's next-generation SYNC communications and entertainment system. The relationship Garmin announced with Ford may reduce the number of new Ford models and vehicles in which our products and services are provided. In addition, while we have seen expansion of our latest version of Scout GPS Link solution across more Toyota and Lexus models in fiscal 2019 and fiscal 2020, we expect that Toyota may limit the number of future models or vehicles on which Scout GPS Link is offered by Toyota and Lexus due in part to the offering of alternative brought-in solutions such as Apple's CarPlay, which Toyota announced it is offering across certain Toyota models, and the expanded offering of Google's Android Auto solution across more automobile manufacturers. We may not successfully increase our revenue from Ford, GM or Toyota, and our revenue could decrease, if our products are replaced within vehicles by Ford, GM or Toyota with our competitors' products or due to price competition from third parties.

We compete in the automotive navigation market with established automobile manufacturers and tier ones and providers of on-board navigation services such as AISIN AW CO., Ltd, AutoNavi Software Co., Ltd., Robert Bosch GmbH, Elektrobit Corporation, Garmin, Ltd., HERE, Navinfo Co., Ltd., NNG LLC, Shenyang MXNavi Co., Ltd., and TomTom, as well as other competitors such as Apple and Google. Lear announced in April 2019 that it had agreed to acquire Xevo, with which we provide an offering to Toyota, which could result in Xevo moving into the on-board navigation services space. Some of our competitors' and our potential competitors' advantages over us, either globally or in particular geographic markets, include the following:

- significantly greater revenue and financial resources;
- ownership of mapping and other content allowing them to offer a more vertically integrated solution;
- stronger brand and consumer recognition in a particular market segment, geographic region or worldwide;
- the capacity to leverage their marketing expenditures across a broader portfolio of products;
- access to core technology and intellectual property, including more extensive patent portfolios;
- access to custom or proprietary content;
- quicker pace of innovation;
- stronger automobile manufacturer and tier one relationships;
- more financial flexibility and experience to make acquisitions;
- ability or demonstrated ability to partner with others to create stronger or new competitors;
- stronger international presence, which could make our larger competitors more attractive partners to automobile manufacturers and tier ones;
- lower labor and development costs; and
- broader global distribution and presence.

Our competitors' and potential competitors' advantages over us could make it more difficult for us to sell our navigation services, and could result in increased pricing pressures, reduced profit margins, increased sales and marketing expenses and failure to increase, or the loss of, market share or expected market share, any of which would likely cause harm to our business, operating results and financial condition.

***If we are unable to integrate future investments or acquisitions successfully, our operating results and prospects could be harmed.***

In the future, we may make acquisitions to improve our navigation and services offerings or expand into new markets. Our future acquisition strategy will depend on our ability to identify, negotiate, complete and integrate acquisitions and, if necessary, to obtain satisfactory debt or equity financing to fund those acquisitions. Investments and mergers and acquisitions are inherently risky. We do not have experience identifying, executing or integrating such investments or acquisitions and any investments we make or mergers and acquisitions we complete may not be successful, may fail to demonstrate a return or fail to advance our product offerings or overall strategy. Future investments or mergers and acquisitions we may pursue would involve, numerous risks, including the following:

- our ability to realize synergies expected to result from an acquisition or strategic investment;
- difficulties in integrating and managing the operations, technologies and products of the companies we acquire, that are geographically remote from our existing operations;
- the potential disruption to our ongoing business;
- diversion of our management's attention from normal daily operation of our business;
- our inability to maintain the key business relationships and the reputations of the companies we acquire;
- uncertainty of entry into markets in which we have limited or no prior experience and in which competitors have stronger market positions;
- our dependence on unfamiliar affiliates and customers of the companies we acquire;
- insufficient revenue to offset our increased expenses associated with acquisitions;
- our responsibility for the liabilities of the businesses we acquire, including unknown liabilities those which we may not anticipate; and
- our inability to maintain internal standards, controls, procedures and policies.

Completion of acquisitions is typically subject to the satisfaction of various closing conditions, including but not limited to regulatory approvals. There can be no assurance that any of such conditions will be satisfied and the acquisition will be completed. In addition, we may be unable to secure the equity or debt funding necessary to finance future acquisitions on terms that are acceptable to us. If we finance acquisitions by issuing equity or convertible debt securities, our existing stockholders will likely experience dilution, and if we finance future acquisitions with debt funding, we will incur interest expense and may have to comply with financial covenants and secure that debt obligation with our assets.

If we are not successful in completing acquisitions that we may pursue in the future, we may be required to reevaluate our business strategy, and we may incur substantial expenses and devote significant management time and resources without a productive result. We could also in the future record impairment losses in connection with acquisitions.

***We may be required to recognize a significant charge to earnings if our goodwill or other intangible assets become impaired.***

We have recorded goodwill related to our prior acquisitions and may do so in connection with any potential future acquisitions. We do not amortize goodwill and other intangible assets with indefinite lives, but we review such assets for impairment annually or on an interim basis whenever events or changes in circumstances indicate that we may not recover the carrying value of these assets. Factors that may indicate that the carrying value of our goodwill or other intangible assets may not be recoverable include a persistent decline in our stock price and market capitalization, reduced future cash flow estimates and slower growth rates in our industry. We may be required to record a significant charge in our financial statements during the period in which any impairment of our goodwill or other intangible assets is determined, which would adversely impact our results of operations.

We performed that annual goodwill impairment test as of April 1, 2019, and we determined that no impairment was indicated. Subsequent to the completion of our annual assessment, in May 2019 we entered into substantive discussions with inMarket regarding the sale of certain assets and the assumption of certain liabilities associated with the Ads Business in exchange for an equity interest in inMarket. In June 2019, we considered it more likely than not that a sale would occur, and we concluded that this represented a triggering event that required an interim goodwill impairment assessment. Accordingly, in June 2019, we performed an interim goodwill impairment test for our advertising business segment. In assessing its fair value, we made assumptions regarding our estimated future cash flows, weighted average cost of capital and timing over which the cash flows will occur, among other factors. Based on the results of this interim goodwill impairment test, the carrying value of our advertising business segment exceeded its estimated fair value and, accordingly, in fiscal 2019 we recognized a $2.6 million impairment of the goodwill associated with our advertising business segment.

We may make similar determinations regarding the impairment of goodwill in the future, which could have a material and adverse effect on our profitability.

***Our investment portfolio and cash balances may become impaired by deterioration of the financial markets or the economic effects of COVID-19.***

Our cash equivalent and short-term investment portfolio as of March 31, 2020 consisted of corporate bonds, asset-backed securities, municipal securities, U.S. agency securities, commercial paper, U.S. treasury securities and money market mutual funds. We follow an established investment policy and set of guidelines to monitor and help mitigate our exposure to interest rate and credit risk. The policy sets forth credit quality standards and limits our exposure to any one issuer, as well as our maximum exposure to various asset classes.

During late February and March 2020, significant market volatility, in large part due to the economic uncertainty arising from the COVID19 pandemic, affected the prices of the securities we hold, as well as the financial markets in general. Should financial market conditions worsen in the future, investments in some financial instruments may pose risks arising from market liquidity and credit concerns. In addition, any deterioration of the capital markets could cause our other income and expense to vary from expectations. For example, our automobile manufacturer partners, such as GM, Ford, Toyota and others, recently announced shutdowns of manufacturing operations, which will decrease our revenue, operating results, financial condition and cash flows while they continue and until our automobile manufacturer partners resume full production. Should these conditions continue, they would also negatively impact our ability to maintain cash balances to support our operations and future investments. We cannot predict when that resumption of production may occur, and at what level our partners may resume production. Once production does resume, it is likely that for an extended period the production rate will be substantially below maximum production or levels which preceded the COVID-19 shutdown. As of March 31, 2020, we had no material impairment charges associated with our short-term investment portfolio. Although we believe our current investment portfolio has little risk of material impairment, we cannot predict future market conditions or market liquidity, or credit availability, and can provide no assurance that our investment portfolio will remain materially unimpaired.

***Warranty claims, product liability claims, product recalls and regulatory liability claims could subject us to significant costs and adversely affect our financial results.***

We warrant our automotive navigation products to be free from defects in materials, workmanship and design for periods ranging from three months to seven years. If our navigation services or products contain defects, there are errors in the maps supplied by third-party map providers or if our end users do not heed our warnings about the proper use of these products, collisions or accidents could occur resulting in property damage, personal injury or death. If any of these events occurs, we could be subject to significant liability for personal injury and property damage and under certain circumstances could be subject to a judgment for punitive damages. In addition, if any of our designed products are defective or are alleged to be defective, we may be required to participate in a recall campaign. These recall and warranty costs could be exacerbated to the extent they relate to global platforms or we are unable to deliver software updates over the air. Furthermore, recall actions could adversely affect our reputation or market acceptance of our products, particularly if those recall actions cause consumers to question the safety or reliability of our products. Warranty claims, a successful product liability claim or a requirement that we participate in a product recall campaign may adversely affect our results of operations and financial condition.

We accrue costs related to warranty claims when they are probable of being incurred and reasonably estimable. Our warranty costs have historically not been material. From time to time, we experience incidents where it may be necessary for us to expend resources to investigate and remedy a potential warranty claim.

We maintain limited insurance against accident-related risks involving our products. However, we cannot assure you that this insurance would be sufficient to cover the cost of damages to others or will continue to be available at commercially reasonable rates. In addition, our errors and omissions insurance policy excludes coverage for certain consumer protection regulatory claims, including any future claims brought under the Telephone Consumer Protection Act. We may also be named as a defendant in litigation by consumers individually or on behalf of a class if their handsets or automobiles suffer problems from software downloads from our customers. If we are unable to obtain indemnification from our customers for any damages or legal fees we may incur in connection with such complaints, our financial position may be adversely impacted. In addition, insurance coverage generally will not cover awards of punitive damages and may not cover the cost of associated legal fees and defense costs. If we are unable to maintain sufficient insurance to cover product liability or regulatory liability costs, or if we experience losses not covered by our insurance, our business, financial condition and results of operations could be adversely affected.

***Indemnity provisions in various agreements potentially expose us to substantial liability for intellectual property infringement, damages caused by defective software and other losses.***

Our agreements with our customers include indemnification provisions. We agree to indemnify them for losses suffered or incurred in connection with our navigation services or products, including as a result of intellectual property infringement and damages caused by defects, viruses, worms and other malicious software in our services or products. The term of these indemnity provisions is generally perpetual, and the maximum potential amount of future payments we could be required to make under these indemnification provisions is generally substantial and may be unlimited. In addition, some of these agreements permit our indemnitees to terminate their agreements with us if they determine that the use of our navigation services or products infringes third-party intellectual property rights.

We have received, and expect to receive in the future, demands for indemnification under these agreements. These demands can be very expensive to settle or defend, and we have in the past incurred substantial legal fees and settlement costs in connection with certain of these indemnity demands. Furthermore, we have been notified by several customers that they have been named as defendants in certain patent infringement cases for which they may seek indemnification from us. Large future indemnity payments and associated legal fees and expenses, including potential indemnity payments and legal fees and expenses relating to the current or future notifications, could materially harm our business, operating results and financial condition.

We may in the future agree to defend and indemnify our customers in connection with the pending notifications or future demands, irrespective of whether we believe that we have an obligation to indemnify them or whether we believe that our services and products infringe the asserted intellectual property rights. Alternatively, we may reject certain of our customers’ indemnity demands, which may lead to disputes with our customers and may negatively impact our relationships with them or result in litigation against us. Our customers may also claim that our rejection of their indemnity demands constitutes a material breach of our agreements with them, allowing them to terminate such agreements. Certain customers may terminate their agreements with us in the event an infringement claim is made against us and they reasonably determine that there is a possibility our technology or services infringed upon a third party’s rights. If, as a result of indemnity demands, we make substantial payments, our relationships with our customers are negatively impacted or if any of our customer agreements is terminated, our business, operating results and financial condition could be materially adversely affected.

***Our effective tax rate may fluctuate, which could increase our anticipated income tax expense or reduce our anticipated income tax benefit in the future.***

Our effective tax rate could be adversely affected by several factors, many of which are outside of our control. Our effective tax rate may be affected by the proportion of our revenues and income (loss) before taxes in the various domestic and international jurisdictions in which we operate. Our revenue and operating results are difficult to predict and may fluctuate substantially from quarter to quarter. We are also subject to changing tax laws, regulations and interpretations in multiple jurisdictions in which we operate, as well as the requirements of certain tax and other accounting body rulings. Since we must estimate our annual effective tax rate each quarter based on a combination of actual results and forecasted results of subsequent quarters, any significant change in our actual quarterly or forecasted annual results may adversely impact the effective tax rate for the period. Our estimated annual effective tax rate may fluctuate for a variety of reasons, including:

- changes in forecasted annual operating income or loss by jurisdiction and forecasted withholding taxes;
- changes in relative proportions of revenue and income or loss before taxes in the various jurisdictions in which we operate;
- requests by customers to bill their foreign subsidiaries and related entities, which may subject us to income tax withholding requirements on sales made in such jurisdictions;
- changes to the valuation allowance on net deferred tax assets;
- changes to actual or forecasted permanent differences between book and tax reporting, including the tax effects of purchase accounting for acquisitions and non-recurring charges which may cause fluctuations between reporting periods;
- impact from any future tax settlements with state, federal or foreign tax authorities;
- impact from increases or decreases in tax reserves due to new assessments of risk, the expiration of the statute of limitations or the completion of government audits;
- impact from changes in tax laws, regulations and interpretations in the jurisdictions in which we operate, as well as the expiration and retroactive reinstatement of tax holidays;
- impact from withholding tax requirements in various non-U.S. jurisdictions and our ability to recoup those withholdings, which may depend on how much revenue we have in a particular jurisdiction to offset the related expenses;
- changes in customer arrangements where the customer’s domicile may impose withholding tax on our revenue that we previously were not subject to;
- impact from acquisitions and related integration activities or divestitures; or
- impact from new FASB requirements.

Although we believe our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in our financial statements and may materially affect our financial results in future periods. In fiscal 2014, we recorded a valuation allowance on the majority of our deferred tax assets, net of liabilities since the assets are not more likely than not to be realized based upon our assessment of all positive and negative evidence. Realization of deferred tax assets is dependent upon future taxable earnings, the timing of which is uncertain. Due to operating losses in previous years, we continue to maintain a full valuation allowance on deferred tax assets in the United States. Due to operating losses in previous years and expected losses in future years in the United Kingdom, we continue to maintain a full valuation allowance for our foreign deferred tax assets in the United Kingdom. In the event we cannot realize the value of our deferred tax assets in Germany based upon our ability to generate future income in Germany, our effective tax rate will be negatively impacted.

***Our transaction with Grab involved application of complex accounting principles and our assessment and recognition of associated revenue could be revised before we complete our annual audit for fiscal 2020 and we are required to revalue the Grab shares every quarter, which could impact our financial statements.***

Our transaction with Grab involved the application of complex accounting principles and our assessment and recognition of associated revenue will be subject to review until we complete our annual audit for fiscal 2020.

In determining revenue the Company would recognize in connection with the Grab Transaction, we allocated consideration, which included cash and equity, between products and services, as well as the identified assets, which allocation we determined subject to ASC 606. Subsequent to the issuance of our press release, investor letter and commentary on February 6, 2020, we reassessed whether the methodology we used to determine and allocate consideration in order to determine revenue associated with the Grab Transaction faithfully depicted the portion of the consideration we would be entitled to when satisfying each obligation and, specifically, the revenue we would recognize in exchange for the rights transferred under the perpetual license as compared to the incremental rights transferred upon the asset purchase. As a result of this reassessment, we determined the stand-alone selling price for the rights transferred to Grab upon purchase should reflect what we would sell such incremental rights for separately in similar circumstances and to similar customers. This resulted in a correction of the revenue we recognized under the Grab Transaction for the three months ended September 30, 2019 and revision of the revenue we would recognize for the three and six months ended December 31, 2019, as well as an adjustment to the net income we provided on February 6, 2020 in our outlook for the three months ending March 31, 2020. Accordingly, we determined to restate the revenue we recognized under the Grab Transaction and certain other financial information for the three months ended September 30, 2019 in an amendment to our Quarterly Report on Form 10-Q. We also revised the information we provided on February 6, 2020 in our press release and related investor presentation regarding the results of our operations for the three months ended December 31, 2019 and the outlook we provided for the three months ending March 31, 2020.

In the Grab Transaction, we received consideration which included nonmarketable ordinary shares of Grab Holdings, Inc. Because there is no public trading market for Grab ordinary shares and because Grab does not prepare its financial statements in accordance with GAAP or file its financial statements with the SEC or another securities regulatory body, we relied on the most current information available to assess the fair market value of Grab's ordinary shares. To determine the fair market value of the Grab ordinary shares we received, we used all reasonably available information we received from Grab regarding the assessment of its board of directors of the fair market value of those ordinary shares, which includes, among other things, a limited number of arms' length transactions for the ordinary shares and a review of recent financial statements provided by Grab. In addition, for the Grab shares we received, we are required quarterly to adjust to fair value for observable transactions for identical or similar shares of Grab and review for impairment, which may impact our financial statements.Until the completion of our annual audit for fiscal 2020, we may be required to further consider and, where necessary, restate certain of our interim financial statements for prior periods, as well as reflect revised values for the Grab ordinary shares on our balance sheets in prior periods to reflect a change in the estimated value of the equity consideration received. This could cause our investors to lose confidence in our company and management. This could cause our stock price to drop, perhaps considerably, and expose us to costly and time-consuming securities litigation.

***Changes in accounting principles, or interpretations thereof, could have a significant impact on our financial position and results of operations.***

We prepare our consolidated financial statements in accordance with GAAP. These principles are subject to interpretation by the SEC and various bodies formed to interpret and create appropriate accounting principles. A change in these principles can have a significant effect on our reported results and may even retroactively affect previously reported transactions. Additionally, the adoption of new or revised accounting principles, such as ASC 842, *Leases*, may require that we make significant changes to our systems, processes and controls.

It is not clear if or when other potential changes in accounting principles may become effective, whether we have the proper systems and controls in place to accommodate such changes and the impact that any such changes may have on our financial position and results of operations.

***We rely on a proprietary provisioning and reporting system for our navigation products and services to track end user activation, deactivation and usage data, and any material failures in this system could harm our revenue, affect our costs and impair our ability to manage our business effectively.***

Our provisioning and reporting system that authenticates end users and tracks the number of end users and their use of our services is a proprietary and customized system that we developed internally. Although we believe that the flexibility of this service to integrate tightly with automobile manufacturers' reporting and provisioning systems gives us a competitive advantage, we might lose revenue and the ability to manage our business effectively if the system were to experience material failures or be unable to scale as our business grows. In addition, we may not be able to report our financial results on a timely basis if our customers question the accuracy of our records or we experience significant discrepancies between the data generated by our provisioning and reporting systems and data generated by their systems, or if our systems fail or we are unable to report timely and accurate information to our third-party data providers. The inability to timely report our financial results would impair the quality of our financial reporting and could result in a significant decline in and the delisting of our common stock.

***We rely on third-party data and content to provide our services, and if we were unable to obtain content at reasonable prices, or at all, our gross margins and our ability to provide our services would be harmed.***

We rely on third-party data and content to provide our services, including map data, POI, traffic information, gas prices and weather information. If our suppliers of this data or content were to enter into exclusive relationships with other providers of location services or were to discontinue providing such information and we were unable to replace them cost effectively, or at all, our ability to provide our services would be harmed. Our gross margins may also be affected if the cost of third-party data and content increases substantially. Although we have integrated OSM data into our products, we may experience difficulty with customer acceptance if the quality of the consumer generated data within OSM is lower than that of paid maps. We introduced mobile phone-based navigation with OSM and launched our first brought-in automotive navigation service with OSM in 2015. In addition, our entry into the Grab Transaction, which includes, among other things, the transition of certain OSM-related assets and our performance of certain OSM development services for Grab during fiscal 2020 and Grab's hiring of certain of our employees focused on OSM development activities, may limit the amount of OSM development work that we complete for internal purposes. As a result, we may not have sufficient data for automobile manufacturers and tier ones to feel comfortable electing to use OSM in the products and services we provide them.

We obtain map data from TomTom and HERE, which are companies owned by our current and potential competitors. Accordingly, these third-party data and content providers may act in a manner that is not in our best interest. For example, they may cease to offer their map and POI data to us. The termination dates of our licenses to data from TomTom utilized in our mobile and automotive products generally approximate the respective termination dates of our obligations to provide map data to the applicable wireless carriers and automobile manufacturers. Our master data license agreement with HERE was automatically renewed under its existing terms through January 31, 2020, and automatically renews for successive one-year periods unless either party provides notice of non-renewal at least 180 days prior to the expiration of the applicable term. However, individual territory licenses with distinct term, termination and renewal provisions further govern the license of map data to fully support individual programs and products for our automobile manufacturers and tier ones.

We may identify other requisite content and content-related technologies, including certain geocoding data necessary for our OSM products, that we may be unable to license or develop internally. If we are unsuccessful in these endeavors, we may be unable to successfully launch our OSM-based products globally and across all desired product offerings.

We may not be able to upgrade our navigation services platform to support certain advanced features and functionality without obtaining technology licenses from third parties. Obtaining these licenses may be costly and may delay the introduction of such features and functionality, and these licenses may not be available on commercially favorable terms, or at all. The inability to offer advanced features or functionality, or a delay in our ability to upgrade our navigation services platform, may adversely affect consumer demand for our navigation services and, consequently, harm our business.

We may be subject to our automobile manufacturer or tier one's selection of map and other content providers, and our ability to negotiate and enter into a license with such provider(s) may be dependent on the timing of such automobile manufacturer or tier one's official nomination for such content providers. Accordingly, we may have contractual obligations to provide certain products and services for certain model years or periods to our automobile manufacturer or tier one partners, prior to our ability to enter into agreements with our map and other content providers to support such products and services. We may be unable to obtain data licenses with the necessary content providers to support these products and services, or we may not be able to secure such data licenses without additional, unplanned costs or delays.

We also use our proprietary provisioning and reporting system to record and report royalties we owe to third-party providers of content used by end users in connection with our services. Certain of the third-party content providers have the right to audit our use of their services and, if we are found to have under or incorrectly reported usage, we may be required to pay the third-party content providers for the actual usage, as well as interest and the cost of the audit. Any significant error in our recording and payment of royalties to our third-party content providers could have a material and adverse effect on our financial results. We may also incur losses as a result of any significant error.

***Network failures, disruptions or capacity constraints in our third-party hosted data center facilities could affect the performance of our navigation services and harm our reputation and our revenue.***

We use hosted services provided by Amazon Web Services, or AWS, and wireless carrier networks to deliver our navigation and advertising platform services. Our operations rely to a significant degree on the efficient and uninterrupted operation of these third-party data centers. In the event that AWS or wireless carrier networks experience a disruption in services or a natural disaster, our ability to continue providing our services would be compromised. Depending on the growth rate in the number of our end users and their usage of our services, if we do not timely complete the negotiation for and scale of additional hosting services, we may experience capacity issues, which could lead to service failures and disruptions. In addition, if we are unable to secure third-party hosting services with appropriate power, cooling and bandwidth capacity, we may be unable to efficiently and effectively scale our business to manage the addition of new automobile manufacturers and tier ones, increases in the number of our end users or increases in data traffic.

AWS hosting services are potentially vulnerable to damage or interruption from a variety of sources, including fire, flood, earthquake, power loss, telecommunications or computer systems failure, human error, terrorist acts or other events. We do not have a comprehensive business continuity plan, and there can be no assurance that the measures implemented by us to date, or measures implemented by us in the future, to manage risks related to network failures or disruptions in our data centers will be adequate, or that the redundancies built into our servers will work as planned in the event of network failures or other disruptions. In particular, if we were to experience damage or interruptions to AWS hosting services our ability to provide efficient and uninterrupted operation of our services would be significantly impaired.

We could also experience failures of our data centers or interruptions of our services, or other problems in connection with our operations, as a result of:

- damage to or failure of our computer software or hardware or our connections and outsourced service arrangements with third parties;
- errors in the processing of data;
- computer viruses or software defects;
- physical or electronic break-ins, sabotage, intentional acts of vandalism and similar events; or
- errors by our employees or third-party service providers.

Poor performance in or disruptions of our services could harm our reputation, delay market acceptance of our services and subject us to liabilities. Our automobile manufacturer and tier one agreements for on-board and hybrid solutions require us to meet at least 99.9% operational uptime requirements, excluding scheduled maintenance periods, or be subjected to penalties. Any outage in a network or system, or other unanticipated problem that leads to an interruption or disruption of our navigation services, could have a material adverse effect on our operating results and financial condition.

***We may not be able to enhance our location services to keep pace with technological and market developments, or develop new location services in a timely manner or at competitive prices.***

The market for location services is characterized by rapid technological change, evolving industry standards, frequent new product introductions and short product life cycles. To keep pace with technological developments, satisfy increasing customer requirements and achieve product acceptance, our future success depends upon our ability to enhance our current navigation services platform and to continue to develop and introduce new navigation services and other location-based product offerings and enhanced performance features and functionality on a timely basis and at competitive prices. Our inability, for technological or other reasons, to enhance, develop, introduce or deliver compelling services and products in a timely manner, or at all, in response to changing market conditions, technologies or consumer expectations could have a material adverse effect on our operating results or could result in our services becoming obsolete. Our ability to compete successfully will depend in large measure on our ability to maintain a technically skilled development and engineering team and to adapt to technological changes and advances in the industry, including providing for the continued compatibility of our services platform with evolving industry standards and protocols and competitive network operating environments.

***The U.K.'s decision to leave the EU will have uncertain effects and could adversely affect us.***

On January 31, 2020, the U.K. left the EU, which is commonly referred to as the "Brexit."

The effects of Brexit will depend on agreements the UK makes to retain access to EU markets either during a transitional period or more permanently. Brexit creates an uncertain political and economic environment in the UK and potentially across other EU member states for the foreseeable future, including during any period while the terms of post-Brexit trade agreements between the UK and the EU and UK and the United States are being negotiated and such uncertainties could impair or limit our ability to transact business in the UK. The COVID-19 pandemic may delay the negotiation of post-Brexit trade agreements for a substantial period of time.

Further, post-Brexit trade uncertainty could adversely affect European and worldwide economic or market conditions and could contribute to instability in global financial markets, and the value of the Pound Sterling currency or other currencies, including the Euro. We are exposed to the economic, market and fiscal conditions in the U.K. and the EU and to changes in any of these conditions. Depending on the terms reached regarding Brexit, it is possible that there may be adverse practical and/or operational implications on our business and that of our automobile manufacturer customers, whose supply chains and manufacturing and sales operations may be disrupted.

A significant amount of the regulatory regime that currently applies to us in the U.K. is derived from EU directives and regulations. For so long as the U.K. remains a member of the EU, those sources of legislation will (unless otherwise repealed or amended) remain in effect. However, Brexit may change the legal and regulatory framework within the U.K. where we operate and is likely to lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which EU laws to replace or replicate. Consequently, no assurance can be given as to the impact of Brexit and, in particular, no assurance can be given that our operating results, financial condition and prospects would not be adversely impacted by the result.

***We rely on our management team and need specialized personnel to grow our business, and the loss of one or more key employees or our inability to attract and retain qualified personnel could harm our business.***

Our success and future growth depend on the skills, working relationships and continued services of our management team. We have experienced significant turnover in our management team since the beginning of fiscal 2019, including the departure of our Chief Financial Officer in January 2019 and our General Counsel in October 2018. In addition, our Senior Vice President, Engineering resigned in October 2019. Although we recently hired a new Chief Financial Officer and a new General Counsel, our future performance will depend on our ability to retain these and other members of our senior management, particularly in the growth areas of our business, such as hybrid or brought-in automotive navigation.

Our future success also depends on our ability to attract, retain and motivate highly skilled personnel in the United States and internationally. All of our U.S. employees work for us on an at will basis. Competition for highly skilled personnel is intense, particularly in the software industry and for persons with experience with GPS, auto navigation, data analytics and location services. The high degree of competition for personnel we experience has resulted in and may also continue to result in the incurrence of significantly higher compensation costs to attract, hire and retain employees. We have from time to time experienced, and we expect to continue to experience, difficulty in attracting, hiring and retaining highly skilled employees with appropriate qualifications. Many of the companies with which we compete for experienced personnel have greater resources than we have. If we hire employees from competitors, their former employers may attempt to assert that these employees or we have breached the former employees' legal obligations to the former employer, resulting in a diversion of our time and resources. In addition, existing employees often consider the value of the stock awards they receive in connection with their employment. If our stock price performs poorly, it may adversely affect our ability to retain highly skilled employees. Our inability to attract and retain the necessary personnel could adversely affect our business and future growth prospects.

***We rely on network infrastructures provided by our wireless carriers, mobile phones and in-car wireless connections for the delivery of our navigation services to end users.***

We generally provide our navigation services from third-party hosted servers, which require close integration with the wireless carriers' networks. We may be unable to provide high quality services if the wireless carriers' networks perform poorly or experience delayed response times. Our future success will depend on the availability and quality of our wireless carrier customers' networks in the United States and abroad to run our mobile navigation services. This includes deployment and maintenance of reliable networks with the speed, data capacity and security necessary to provide reliable wireless communications services. We do not establish or maintain these wireless networks and have no control over interruptions or failures in the deployment and maintenance by wireless carrier customers of their network infrastructure. In addition, these wireless network infrastructures may be unable to support the demands placed on them if the number of subscribers increases, or if existing or future subscribers increase their use of limited bandwidth. Market acceptance of our mobile navigation services will depend in part on the quality of these wireless networks and the ability of our customers to effectively manage their subscribers' expectations.

In addition, certain automotive navigation applications rely on wireless connections between the vehicle and our network. We have no influence or control over the vehicle's wireless equipment and if it does not operate in a satisfactory manner, our ability to provide those services would be impaired and our reputation would be harmed.

Wireless communications have experienced a variety of outages and other delays as a result of infrastructure and equipment failures and could face outages and delays in the future. These outages and delays could affect our ability to provide our navigation services successfully. In addition, changes by a wireless carrier to its network infrastructure may interfere with the integration of our servers with their network and delivery of our navigation services and may cause end users to lose functionality for services they have already purchased. Any of the foregoing could harm our business, operating results and financial condition.

We cannot control the quality standards of our wireless carriers, their mobile phone providers, automobile manufacturers and other technology infrastructure providers. We cannot guarantee that the mobile phones or in-car wireless equipment are free from errors or defects. If errors or defects occur in mobile phones or services offered by our wireless carrier customers, it could result in consumers terminating our services, damage to our reputation, increased customer service and support costs, warranty claims, lost revenue and diverted development resources, any of which could adversely affect our business, results of operations and financial condition.

***Mergers, consolidations or other strategic transactions in the mapping data industry could weaken our competitive position, reduce the number of our map providers and adversely affect our business.***

The mapping data industry continues to experience consolidation. Should one of our map providers consolidate or enter into an alliance with another navigation provider, this could have a material adverse impact on our business. Currently, two of our map suppliers are owned by competitors in the navigation space. Such a consolidation may cause us to lose a map supplier or require us to increase the royalties we pay to map vendors as a result of enhanced supplier leverage, which would have a negative effect on our business. In the event that we lose a map supplier, we may be unable to replace our map suppliers, and the remaining map suppliers may increase license fees. In addition, if we continue to use more OSM-based maps and no longer purchase maps from those suppliers, we may be unable to purchase other data that is integral to our navigation products from our existing map suppliers.

***Changes in business direction and market conditions could lead to charges related to structural reorganization and discontinuation of certain products or services, which may adversely affect our financial results.***

In response to changing market conditions and the desire to focus on new and more potentially attractive opportunities, we may be required to strategically realign our resources and consider restructuring, eliminating, or otherwise exiting certain business activities. Any decision to reduce investment in, dispose of, or otherwise exit business activities may result in the recording of special charges, such as workforce reduction and excessive facility space costs.

***Risks related to our intellectual property and regulation***

***We operate in an industry with extensive intellectual property litigation. Claims of infringement against us, our customers, or other business partners may cause our business, operating results and financial condition to suffer.***

Our commercial success depends in part upon us, our partners and our customers not infringing intellectual property rights owned by others and being able to resolve claims of intellectual property infringement without major financial expenditures and/or need to alter our technologies or cease certain activities. We operate in an industry with extensive intellectual property litigation and it is not uncommon for our automobile manufacturers and tier ones and competitors to be involved in infringement lawsuits by or against third parties. Many industry participants that own, or claim to own, intellectual property aggressively assert their rights, and our customers and other business partners, who we agree in certain circumstances to indemnify for intellectual property infringement claims related to our services, are often targets of such assertions. We cannot determine with certainty whether any existing or future third-party intellectual property rights would require us to alter our technologies, obtain licenses or cease certain activities.

We have received, and may in the future receive, claims from third parties alleging infringement and other related claims. Current and future litigation may make it necessary to defend ourselves and our customers and other business partners by determining the scope, enforceability and validity of third-party proprietary rights or to establish our proprietary rights. Some of our competitors may have substantially greater resources than we do and may be able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than we could. In addition, non-practicing patent holding companies that focus solely on extracting royalties and settlements by enforcing patent rights may target us, our wireless carrier customers or our other business partners. These companies typically have little or no product revenue and, therefore, our patents may provide little or no deterrence against such companies filing patent infringement lawsuits against us. Regardless of whether claims that we are infringing patents or other intellectual property rights have any merit, these claims are time consuming and costly to evaluate and defend and could:

- adversely affect our relationships with our current or future customers and other business partners;
- cause delays or stoppages in the shipment of Telenav-enabled or preloaded mobile phones or vehicles, or cause us to modify or suspend the provision of our navigation services;
- cause us to incur significant expenses in defending claims brought against our customers, other business partners or us;
- divert management’s attention and resources;
- subject us to significant damages or settlements;
- require us to enter into settlements, royalty or licensing agreements on unfavorable terms; or
- require us or our business partners to cease certain activities and/or modify our products or services.

In addition to liability for monetary damages against us or, in certain circumstances, our customers, we may be prohibited from developing, commercializing or continuing to provide certain of our navigation services unless we obtain licenses from the holders of the patents or other intellectual property rights. We cannot assure you that we will be able to obtain any such licenses on commercially reasonable terms, or at all. If we do not obtain such licenses, our business, operating results and financial condition could be materially adversely affected, and we could, for example, be required to cease offering our navigation services or be required to materially alter our navigation services, which could involve substantial costs and time to develop.

***Unauthorized control or manipulation of our systems in vehicles may cause them to operate improperly or not at all, or compromise their safety and data security, which could result in loss of confidence in us and our products, cancellation of contracts with certain of our automobile manufacturer or tier one customers and harm our business.***

There have been reports of vehicles of certain automobile manufacturers being “hacked” to grant access to and operation of the vehicles to unauthorized persons and would-be thieves. Modern vehicles are technologically advanced machines requiring the interoperation of numerous complex and evolving hardware and software systems, including the navigation system, and with respect to vehicles with autonomous driving features, control of the vehicle. We have agreed with some of our automobile manufacturer and tier one customers to adopt certain security procedures and we may be subject to claims or our contracts with those automobile manufacturers and tier ones may be terminated if we do not comply with our covenants or if our products are the source of access to the systems in their vehicles by intruders.

Although we have designed, implemented and tested security measures to prevent unauthorized access to our products when installed in vehicles, our information technology networks and communications with vehicles in which our products are installed may be vulnerable to interception, manipulation, damage, disruptions or shutdowns due to attacks by hackers or breaches due to errors by personnel who have access to our networks and systems. Any such security incidents could result in unexpected control of or changes to the vehicles' functionality and safe operation and our products' user interface and performance characteristics. Hackers may also use similar means to gain access to data stored in or generated by the vehicle, such as its current geographical position, previous and stored destination address history and web browser "favorites." Any such unauthorized control of vehicles or access to or loss of information could result in legal claims or proceedings and negative publicity, which would negatively affect our brand and harm our business, prospects, financial condition and operating results.

***Our business is subject to online security risks, including potential security and privacy incidents.***

Our business involves the collection, storage, processing and transmission of information about our users, including users' locations and routes. Additionally, our apps transmit information to users' personal devices, which creates opportunities for hackers to exploit vulnerabilities in our apps. An increasing number of organizations, including large online and offline merchants and businesses, other large Internet companies, financial institutions, and government institutions, have disclosed breaches of their security, some of which have involved sophisticated and highly targeted attacks, including on portions of their websites or infrastructure. While we invest significant resources to evaluate and improve our security, we have been subject to such attacks in the past, although they have not, to our knowledge, resulted in a breach of security involving unauthorized acquisition of users' personal information. A breach of security or privacy could have negative consequences for our reputation, which could result in users discontinuing or reducing their use of our products and our automotive customers terminating their agreements with us, and could have significant out-of-pocket financial impact, which could harm our business. Similarly, a breach of security or privacy in vehicles in which our navigation products are installed could result in a reduction in adoption of our navigation products.

The techniques used to obtain unauthorized, improper or illegal access, disable or degrade service, or sabotage systems or access our data change frequently, may be difficult to detect quickly, and often are not recognized until launched against a target. Certain efforts may be state-sponsored and supported by significant financial and technological resources and may therefore be even more difficult to detect. As a result, we may be unable to anticipate these techniques or to implement adequate preventative measures. Unauthorized parties also may attempt to gain access to our systems or facilities through various means, including hacking into our systems or facilities, fraud, trickery or other means of deceiving our employees, contractors and temporary staff. A party that is able to circumvent our security measures could misappropriate our, our customers' or our employees' personal or proprietary information, cause interruption in our operations and damage our computers and systems or those of our customers. In addition, our customers have been and likely will continue to be targeted by parties using fraudulent "spoof" and "phishing" emails to misappropriate user names, passwords, payment card numbers, GPS data or other personal information or to introduce viruses or other malware, including through "trojan horse" programs, to our users' phones and vehicles. Also, our information technology and infrastructure may be vulnerable to cyberattacks or security incidents, and third parties may be able to access our customers' personal or proprietary information and payment card data that are stored on or accessible through our systems. Any security or privacy incident at a company providing services to us or our tier one customers, or integrated with our products and services, could have similar effects. We may also need to expend significant additional resources to protect against security or privacy incidents or to redress problems caused by such incidents. Our ability to anticipate and respond to these issues is likely to become more difficult and costly as we expand the number of markets where we operate. Additionally, our insurance policies carry low coverage limits, which may not be adequate to reimburse us for losses caused by security incidents, and we may not be able to collect fully, if at all, under these insurance policies.

***Vulnerabilities in our products and services have been publicly disclosed before, and if we are unable to adequately detect and address vulnerabilities in our products and services, it may result in harm to our business.***

As with any application, our products may contain known and unknown vulnerabilities, coding errors, design flaws, or other issues that could allow an attacker to maliciously exploit our software. Vulnerabilities in our software and applications have been publicly exposed in the past, although they have not, to our knowledge, resulted in the disclosure of user information or been maliciously exploited. While we are investing significantly to evaluate and improve our security on the vulnerabilities we have identified, addressing vulnerabilities in our software is an ongoing process. Malicious exploitation of our products could result in the introduction of malicious software onto our users' devices, the theft of confidential or private information, damage to users' devices, and harm to our reputation, among other issues. Successful exploitation of a vulnerability in our software may subject us to numerous lawsuits or regulatory inquiries. Additionally, the disclosure of any vulnerability may result in a loss of confidence in us or our products, the cancellation of contracts with certain of our automotive tier one customers, discontinued use of our products, and harm to our business and reputation. These events could have significant out-of-pocket financial impact for us.

***Changes in government regulation of the wireless communications, automobile and in-car commerce industries may adversely affect our business.***

It is possible that a number of laws and regulations may be adopted in the United States and elsewhere that could restrict the wireless communications industry, further regulate the automobile industry or impair the ability to conduct in-car commerce, including laws and regulations regarding lawful interception of personal data, hands free use of mobile phones or navigation services within vehicles, autonomous driving or the control of such use, privacy, export control, taxation, content suitability, copyright and antitrust. Furthermore, the growth and development of electronic storage of personal information may prompt calls for more stringent consumer protection laws that may impose additional burdens on companies such as ours that store personal information. We anticipate that regulation of the industries in which our products and services are used will increase and that we will be required to devote legal and other resources to address this regulation. In addition, governments have recently begun to consider and adopt laws regarding vehicles using advanced driver assistance systems, or ADAS, and autonomous and semi-autonomous driving capabilities and those laws may curtail or preclude using the services our products provide. Changes in current laws or regulations or the imposition of new laws and regulations in the United States or elsewhere regarding the wireless communications or automobile industries may make operation more costly, and may materially reduce our ability to increase or maintain sales of our products and services.

***We are subject to complex and evolving U.S. and foreign laws and regulations regarding privacy, data protection and other matters and violations of these complex and dynamic laws, rules and regulations may result in claims, changes to our business practices, monetary penalties, increased costs of operations, and/or other harms to our business.***

Numerous provincial, state, national and international laws and regulations apply to our collection, use, retention, protection, disclosure, transfer and other processing of data, including personal data. These laws and regulations are evolving rapidly and imposing increasingly varied requirements across the jurisdictions in which we do business. For example, the European Union's, or EU, General Data Protection Regulation, or GDPR, took effect in May 2018. The GDPR replaced Directive 95/46/EC of 1995 and is directly applicable in EU member states. Among other things, the GDPR regulates data controllers and processors outside of the EU whose processing activities relate to the offering of goods or services to, or monitoring the behavior within the EU of, EU data subjects. Efforts to comply with the GDPR has caused us to incur substantial operational costs and required us to change our business practices or service offerings, and we believe will continue to do so. Despite our efforts to bring practices into compliance with the GDPR, we cannot guarantee that we are fully compliant or will be able to demonstrate compliance as of a future date if required to do so. In addition, because the GDPR is new, it may be subject to new or changing interpretations by courts, and our interpretation of the law and efforts to comply with the rules and regulations of the law may be ruled invalid. The GDPR imposes significant penalties of up to the greater of 4% of worldwide turnover and €20 million for violations of the GDPR. Similarly, in June 2018, California enacted the California Consumer Privacy Act of 2018, or the CCPA, which became effective in January 2020. The CCPA, among other things, requires covered companies to provide new disclosures to California consumers and afford such consumers new rights to opt-out of our collection, retention and certain sales of personal information. The CCPA creates a private right of action for statutory damages for certain breaches of information. In addition, from time to time the Office of the California Attorney General will promulgate proposed regulations and, following a public comment period, will issue final regulations to establish procedures to facilitate these new rights and as necessary to further the purposes of the CCPA. The proposed regulations were published in October 2019 and the deadline for the California Attorney General to release final regulations is July 1, 2020. As such, and as additional amendments to the CCPA could be introduced during California's next legislative session, it remains unclear what procedures will be required to comply with the CCPA or how the CCPA and final regulations will be interpreted and enforced. In addition, other states have enacted or proposed legislation that regulates the collection, use, and sale of personal information, and such laws and regulations might not be compatible with either the GDPR or the CCPA. We cannot yet predict the impact of the CCPA or impending legislation on our business or operations, but it may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. If we fail to implement practices and procedures deemed necessary by regulators or consumers or to comply with the GDPR, CCPA or other applicable laws and regulations, we may be subject to fines, penalties, litigation, and reputational harm and our business may be seriously harmed. In addition, various government and consumer agencies and public advocacy groups have called for new regulation and changes in industry practices, including some directed at the mobile and advertising industries in particular. It is possible that new laws, regulations, standards, recommendations, best practices or requirements will be adopted that would affect our business, particularly with regard to location-based services and communication with consumers via mobile devices. To the extent that we or our clients are subject to new laws or recommendations or choose to adopt new standards, recommendations, or other requirements, we may have greater compliance burdens. If we are perceived as not operating in accordance with industry best practices or any such guidelines or codes with regard to privacy or data protection, our reputation may suffer, and we could lose relationships with developer partners as well as our automobile manufacturers and tier ones.

The application and interpretation of these laws and regulations may be uncertain, particularly in the new and rapidly evolving industry in which we operate. At the same time that these data protection requirements are increasing in number, variation, and complexity, the consequences of noncompliance are also increasing. As a result, we anticipate (i) heightened privacy and data protection compliance costs; (ii) an increased risk of legal, financial, or reputational harm in case of actual or perceived noncompliance, whether by us, our business partners, customers or end users; and (iii) an increased risk of a reduced return on investments in some strategic partnerships and product and service development efforts. These risks include:

- *Heightened Privacy and Data Protection Compliance Costs.* Privacy and data protection laws and regulations affecting our business are evolving rapidly and may result in heightened long-term compliance costs for our business. In some cases, this may result in longer customer contract cycles and delayed onboarding. Additionally, as part of our own compliance efforts, we anticipate increasing our scrutiny of the vendors that support data-related aspects of our services. Further, as data subject access rights become more widespread and frequently exercised under these evolving requirements, we anticipate heightened compliance costs in implementing policies, procedures and technologies to respond to our business partners and others regarding requests to exercise data subject or consumer rights related to “personal data” or “personal information,” as defined under the laws of various jurisdictions.

- *Increased Risk of Legal, Financial, or Reputational Harm in Cases of Actual or Perceived Noncompliance (whether by us, our business partners, customers, or end users)*. In cases of our potential noncompliance with any of these privacy and data protection laws and regulations, regulatory trends suggest the risk of heightened enforcement and more significant fines, including monetary penalties, for example, under the GDPR, which went into effect May 25, 2018 and, among other things, authorizes fines up to 4% of global annual revenue or €20 million, whichever is greater, for some types of violations. In other cases, new laws may authorize a private right of action and/or a statutory framework for damages that are likely to increase the risk and costs of litigation, in particular, in the case of certain security incidents involving personal information, such as under the recently enacted CCPA. Additional litigation risks may arise due to contractual obligations with our customers and business partners.

  In most cases, our processing of personal data is a service we provide at the direction of a partner or end customer, including in conjunction with a service the customer provides for its end-users. Our role in delivering services for customers to end-users may increase the risk of a perceived violation, even when the fault is not attributable to our action or inaction (e.g., in the case of a data breach resulting from a customer’s or end-user’s failure to secure systems or passwords within their control). We might be included in others’ perceptions of inadequate data protection measures, regardless of whether such perceptions are invalid, and this could harm our reputation and inhibit adoption of our products, applications and services by current and prospective customers. Even where it is clear that we are not responsible, privacy or data protection violations caused by one of our business partners could negatively affect us by association. We may incur costs to investigate and disprove perceptions. We may also experience challenges recovering trust from customers whose information may have been affected (e.g., disclosed more broadly than intended due to a data breach, regulatory inquiry, or litigation). Such reputational harms could result in potentially decreased demand for our products and services.

- *Reduced Return on Investments in Some Strategic Partnerships and Product and Service Development Efforts*. As legal requirements and interpretations change, are called into question, or increase in variability across jurisdictions, some of our assumptions leading to investments in strategic partnerships and product and service development may be challenged. This may reduce the return on some of our investments in products, services, and partnerships in key markets. Our ability to operate or expand our business may be inhibited if we must implement increased or higher-cost security measures, establish alternate business processes or infrastructure, or are prohibited from capitalizing on cost-saving efficiencies related to the automated processing of data previously not anticipated to be subject to such requirements. For example, evolving and increasingly varied legal definitions of personal information and personal data in the United States, EU and elsewhere may affect our legal treatment of IP addresses, MAC addresses, machine identification, location, tracking and routing data, data analytics, ability to conduct in-car commerce and other information as well as the extent to which we can lawfully apply machine learning and artificial intelligence to those data sets for certain purposes and in certain jurisdictions. Some countries’ data localization laws may require us to establish additional infrastructure or engage service providers in those jurisdictions, increasing the cost and complexity of our business operations and potentially limiting sales of our products in those jurisdictions. While we do not anticipate the same rapid evolution and proliferation of data localization laws as with privacy and data protection laws and regulations, we continue to monitor overall legal developments in this area for impact on our current products and services, as well as those in development. We also note that our introduction of new data platforms, applications and services or expansion of our activities in certain jurisdictions may subject us to additional laws and regulations. For instance, participation in certain funding programs may subject us to additional privacy and data use restrictions under U.S. federal, state, and local laws and regulations relating to the processing of data relating to students or children. Risks remain that new or expanded products and services may be commercially infeasible in some markets in light of actual or potential compliance costs under current or developing legal requirements in this area.

***Certain of our products are subject to U.S. export controls; where we fail to comply with these laws, we could suffer monetary or other penalties.***

Certain of our products are subject to U.S. export controls, specifically the Export Administration Regulations, and economic sanctions enforced by the Office of Foreign Assets Control. We incorporate standard encryption algorithms into our products, which, along with the underlying technology, we may export outside of the United States only with the required export authorizations, including by license, license exception or other appropriate government authorizations. Each of these authorizations may require us to file an encryption registration and classification request. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments and persons targeted by U.S. sanctions. We also are restricted from exporting products to certain government and state-owned enterprises. We take precautions to prevent our products and services from being exported in violation of these laws and, in many instances, we rely on our partners to assure compliance when selling, distributing and/or using our products outside the United States. In certain instances, we may have shipped encryption products prior to obtaining the required export authorizations and/or submitting the required requests, including a classification request and request for an encryption registration number. Additionally, even though we take precautions to ensure that our partners comply with all relevant regulations, any failure by our partners to comply with such regulations could have negative consequences for us, including reputational harm, government investigations and penalties and interruptions in our ability to distribute and sell our products. In addition, in connection with the recent changes resulting from 2018 U.S. legislation expanding the scope and authority of the Committee on Foreign Investment in the United States, or CFIUS, the U.S. Commerce Department’s Bureau of Industry and Security recently released for comment new export control classifications for artificial intelligence driven geospatial imagery analysis, which may be used in navigation software. Software meeting this new classification is likely to be classified as a critical technology and export of it from the United States may be limited. Because rulemaking under the new CFIUS law is not completed, there is a risk that the types of navigation software and technologies that we provide to our customers may be affected.

Various countries also regulate the import of certain encryption technology and operation of our products, including through import permitting, certification and licensing requirements, and have enacted laws that could limit our ability to distribute our products or our end customers’ ability to operate our products in those countries, or could impose additional expense on us to meet these requirements as a condition to distribute our products. Encryption products and the underlying technology may also be subject to export-control restrictions. Governmental regulation of encryption technology and regulation of imports or exports of encryption products, or our failure to obtain required import or export approval for our products, when applicable, could harm our international sales and adversely affect our revenue. Compliance with applicable regulatory laws and regulations regarding the export or import of our products, including with respect to new releases of our products, may create delays in our introduction of products in international markets, prevent our end customers with international operations from deploying our products throughout their globally distributed systems or, in some cases, prevent the export or import of our products to some countries altogether.

In addition, because our sales are made through partners, if these partners fail to obtain appropriate import, export or re-export licenses or authorizations, we may also be adversely affected, including potentially being liable for penalties under government restrictions and regulations, even where the partner failed to obtain the appropriate licenses or authorizations. Obtaining the necessary authorizations, including any required license, for a particular sale may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. Changes in our products or changes in applicable export or import laws and regulations may also create delays in the introduction and sale of our products in international markets, prevent our end customers with international operations from deploying our products or, in some cases, prevent the export or import of our products to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our products, or in our decreased ability to export or sell our products to existing or potential end customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products could adversely affect our business, financial condition and results of our operations.

U.S. export control laws and economic sanctions programs also prohibit the shipment of certain products and services to targeted countries, governments and persons that are subject to U.S. economic embargoes and trade sanctions. If we or our partners ship products to those targets, or third parties provide our products to these targets, we could be subject to government investigations, penalties and reputational harm. Furthermore, any new embargo or sanctions program, or any change in the countries, governments, persons or activities targeted by such existing programs, could result in decreased use of our products, or in our decreased ability to export or sell our products to existing or potential end customers, which could adversely affect our business and our financial condition.

***Government regulation designed to protect end user privacy may make it difficult for us to provide our services or provide in-car commerce services.***

We collect, store and transmit a large volume of information from or about end users or their devices in the course of providing our products and services. This information is increasingly subject to legislation and regulations, such as the GDPR and CCPA, in numerous jurisdictions around the world. This government regulation is typically intended to protect the privacy and security of personal or sensitive information about its residents or that is collected, stored and transmitted in or from the relevant jurisdiction.

Domestic or international legislation or regulations, such as GDPR and CCPA, may expand to require changes in our business practices or if governing authorities interpret or implement their legislation or regulations in ways that negatively affect our business. For example, the USA PATRIOT Act provides certain rights to U.S. law enforcement authorities to obtain personal information in the control of U.S. persons and entities without notifying the affected individuals. If we are required to allocate significant resources to modify the delivery of our services to enable enhanced legal interception of the personal information that we transmit and store, our results of operations and financial condition may be adversely affected.

In addition, because various foreign jurisdictions have different laws and regulations concerning the collection, storage and transmission of personal information, we may face unknown requirements that pose compliance challenges in new international markets that we seek to enter. Such variation could subject us to costs, delayed service launches, liabilities or negative publicity that could impair our ability to expand our operations into some countries and therefore limit our future growth.

As privacy and data protection have become more topical issues, we may also be subject to increased scrutiny or potential liabilities as a result of developing views on the relevance of privacy or sensitivity of personal information. These and other privacy concerns could adversely impact our business, results of operations and financial condition.

***If we are unable to obtain the required government licenses or approvals to comply with government regulation relating to map data and location-based services, we may not be able to provide our products and services and our business could be adversely impacted.***

A number of countries and local jurisdictions require certain licenses and/or government approvals in order to comply with regulations governing the creation or distribution of map data and/or the provision of location-based services, including the collection of location information. If we are unable to obtain the necessary licenses or approvals or fail to comply with the regulations in each jurisdiction where we or our partners offer location-based products and services, we may be unable to offer to our partners or customers the full scope of planned products and services. In addition, should any map data or location-based services related regulations change, we may incur additional expense in modifying our existing products and product roadmaps to comply with the requirements of individual jurisdictions. Such laws or regulations or the imposition of new laws and regulations regarding the provision of map data or location-based services may make operation more costly, and may materially reduce our ability to increase or maintain sales of our products and services.

***If we are unable to protect our intellectual property and proprietary rights, or if claims are asserted against us, our competitive position and our business could be harmed.***

Our success depends in part upon our ability to protect our core technology and intellectual property. We rely on patents, trademarks, copyrights and trade secret laws, confidentiality procedures, and employee disclosure and invention assignment agreements to protect our intellectual property rights. As of March 31, 2020, we had 175 patents issued in the United States and 43 patent applications pending in the United States relating to our current and next-generation products, operating platform and solutions applications, and the ability to claim priority to many of the patent applications worldwide. These patents issued in the U.S. expire between April 11, 2020 and May 1, 2038. However, these patents or any patents that may issue to us in the future may be subject to re-examination, contest, circumvention, or found unenforceable or invalidated, and we may or may not be able to prevent third parties from infringing them. We also license software from third parties for integration into our products, including open-source software.

We utilize internal and external controls to restrict access to and use of our proprietary software and other confidential information, including contractual protections with employees, contractors, end customers and partners. Our software is also protected by U.S. and international copyright laws. However, despite our efforts to protect our trade secrets and proprietary rights through intellectual property rights, licenses and confidentiality agreements, and reasonable security measures, third parties may still copy our products or otherwise gain access to or obtain and use our proprietary software and technology without our knowledge or authority or in ways we do not intend.

Monitoring unauthorized use of our intellectual property is difficult and costly. The steps we have taken to protect our proprietary rights may not be adequate to prevent misappropriation of our intellectual property. We may not be able to detect unauthorized use of, or take appropriate steps to enforce, our intellectual property rights. Our competitors may also independently develop similar technology. In addition, the laws of many countries do not protect our proprietary rights to as great an extent as do the laws of the United States. Any failure by us to meaningfully protect our intellectual property could result in competitors offering products that incorporate our most technologically advanced features, which could seriously reduce demand for our navigation services. In addition, we may in the future need to initiate infringement claims or litigation. Litigation, whether we are a plaintiff or a defendant, can be expensive, time consuming and may divert the efforts of our technical staff and managerial personnel, which could harm our business, whether or not such litigation results in a determination favorable to us.

Our industry is characterized by the existence of a large number of patents, and competitors increasingly may utilize litigation regarding patent and other intellectual property rights to protect or expand their market position. In particular, leading and more mature companies have extensive patent portfolios and are regularly involved in both offensive and defensive litigation. As end customers increasingly use our products and services, we face a higher risk of being the subject of intellectual property infringement claims from third parties, not only from our competitors but also increasingly from non-operating entities, who will be more likely to claim that our platform infringes their proprietary rights. From time-to-time, such third parties, including certain of these leading companies and, increasingly, non-operating entities, may assert patent, copyright, trademark, and other intellectual property rights against us, our partners or our end customers. In these instances, our standard license and other agreements may obligate us to indemnify our partners and end customers against such claims. Successful claims of infringement by a third party could prevent us from distributing certain products or performing certain services, require us to expend significant management attention and money to develop non-infringing solutions or force us to pay substantial damages, royalties or other fees. This could include treble damages, if we are found to have willfully infringed patents or copyrights. We currently do not maintain insurance coverage against any such claims.

In addition, our products utilize software under third-party open-source licenses, including as incorporated into software we receive from third-party commercial software vendors. Some open-source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open-source software that we use. If we combine our proprietary software with open-source software in a certain manner, we could, under certain open-source licenses, be required to release portions of the source code of our proprietary software to the public. This could allow our competitors to create similar products with lower development effort and time, and ultimately could result in a loss of product sales for us.

We cannot assure that we do not currently infringe, or that we will not in the future infringe, or that we can resolve through litigation or on reasonable settlement terms, any such claims against us relating to, any third-party patents or other proprietary rights, including relating to use of third-party open source software. See “Part II, Item 1 - Legal Proceedings” for additional information.

***Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information.***

We have devoted substantial resources to the development of our proprietary technology, including the proprietary software components of our navigation services and related processes. In order to protect our proprietary technology and processes, we rely in part on confidentiality agreements with our employees, licensees, independent contractors and other advisors. These agreements may not effectively prevent disclosure of our confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of our confidential information. In addition, others may independently discover trade secrets and proprietary information, and in such cases, we could not assert any trade secret rights against such parties. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

***Our use of open source software could negatively affect our ability to sell our products and services and subject us to possible litigation.***

We use open source software in our navigation services platform and client applications and may use more open source software in the future. Use of open source software may subject our navigation services platform and client applications to general release or require us to re-engineer our navigation services platform and client applications, which may cause harm to our business. From time to time, there have been claims challenging the ownership of open source software against companies that incorporate open source software into their products. As a result, we could be subject to suits by parties claiming ownership of what we believe to be open source software. Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the open source software and that we license such modifications or derivative works under the terms of a particular open source license or other license granting third parties certain rights of further use. If we combine our proprietary software products with open source software in a certain manner, we could, under certain of the open source licenses, be required to release our proprietary source code. In addition to risks related to license requirements, usage of open source software can lead to greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or controls on origin of the software. Open source license terms may be ambiguous and we may not be able to anticipate or eliminate many of the risks associated with our usage of open source, which could negatively affect our business. If we were found to have inappropriately used open source software, we may be required to release our proprietary source code, re-engineer our navigation services platform and client applications, discontinue the sale of our service in the event re-engineering cannot be accomplished on a timely basis or take other remedial action that may divert resources away from our development efforts, any of which could adversely affect our business, operating results and financial condition.

***Risks related to being a publicly traded company and holding our common stock***

***As a public company, we are obligated to develop and maintain effective internal control over financial reporting. We may not always complete our assessment of the effectiveness of our internal control over financial reporting in a timely manner, or such internal control may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.***

The Sarbanes-Oxley Act requires that we test our internal control over financial reporting and disclosure controls and procedures annually. For example, as of June 30, 2019, we performed system and process evaluation and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our compliance with Section 404 requires that we incur substantial expense and expend significant management time on compliance-related issues.

During the three months ended December 31, 2018, we identified certain errors related to our implementation of ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606) due to our internal control over financial reporting relating to supervision and review of the financial models supporting our revenue recognition accounting and disclosures not operating effectively. We concluded that, because the December 2018 Control Deficiency created a more than remote likelihood of a material misstatement not being prevented or detected on a timely basis, this deficiency constituted a material weakness in internal control over financial reporting. While the original remediation plan adopted shortly after the discovery of the errors relating to our adoption of ASC 606 was fully implemented during the third quarter of fiscal 2019, during the fourth quarter of fiscal 2019, we decided to implement additional remediation measures to further address the December 2018 Control Deficiency. The material weakness will not be deemed remediated until the affected internal controls have been tested and determined to be operating effectively.

In connection with the preparation of our quarterly financial statements for the three months ended December 31, 2019, we identified certain errors related to our revenue recognition for the Grab Transaction due to the complexity of evaluating the relationship of the various elements of the transaction that we had not identified timely and accounted for appropriately in our financial statements for the three months ended September 30, 2019.  Based on these findings, our management identified a material weakness in our review controls over unusual or non-recurring and significant transactions. Specifically, we had not designed our controls properly to provide reasonable assurance that we timely identify and assess the accounting implications of terms in unusual or non-recurring agreements, such as arising from the Grab Transaction. Accordingly, our Audit Committee of our Board of Directors concluded that, at September 30, 2019 and December 31, 2019, our internal control over financial reporting was not effective.

As further described in Part I, Item 4 of this Quarterly Report on Form 10-Q, we have taken specific steps to remediate these material weaknesses by implementing and enhancing our internal controls. These material weaknesses will not be deemed remediated until all of those steps have been implemented and the affected internal controls have been tested and determined to be operating effectively. In addition, we may need to modify these steps or implement additional remediation measures to address the material weaknesses, and we cannot be certain that the measures we have taken, and expect to take, will be sufficient to address the issues identified, to ensure that our internal controls are effective, or to ensure that the identified material weaknesses will not result in a future material misstatement of our annual or interim consolidated financial statements.

If we are unable to remediate these material weaknesses in a timely manner and otherwise comply with the requirements of Section 404 in the future, or if we or our independent registered public accounting firm identify additional deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price and trading liquidity of our stock may decline, investors may lose confidence in our reported financial information, we could be subject to civil and criminal investigations and penalties by the NASDAQ Global Market, the SEC or other regulatory authorities, and our business and financial condition could otherwise be materially and adversely impacted.

***We will continue to incur high costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which could harm our operating results.***

As a public company, we incur significant legal, accounting, investor relations and other expenses, including costs associated with public company reporting requirements. We also have incurred and will continue to incur costs associated with current corporate governance requirements, including requirements under Section 404 and other provisions of the Sarbanes-Oxley Act, as well as rules implemented by the SEC and the stock exchange on which our common stock is traded. We are generally not eligible to report under reduced disclosure requirements or benefit from longer phase in periods for “emerging growth companies” as such term is defined in the Jumpstart Our Business Act of 2012. The expenses incurred by public companies for reporting and corporate governance purposes have increased dramatically over the past several years. We expect these rules and regulations to continue to impact our legal and financial compliance costs substantially and to make some activities more time consuming and costly. We are unable currently to estimate these costs with any degree of certainty. We also expect that, over time, it may be more expensive for us to obtain director and officer liability insurance. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as our executive officers if we cannot provide a level of insurance coverage that they believe is adequate.

In September 2018, California enacted a law that requires publicly held companies headquartered in California to have at least one female director by the end of 2019 and at least three by the end of 2021, with the exact number required dependent upon the size of the board. The law would impose financial penalties for failure to comply. While we believe we were in compliance with the requirements of the law during 2019, we do not currently have any female directors and we may incur costs associated with complying with the law now and in future years, including costs associated with expanding our board of directors or identifying qualified female candidates for appointment to our board of directors, or financial penalties or harm to our brand and reputation if we are unable to do so.

***Regulations relating to investments in offshore companies by Chinese residents may subject our Chinese-resident beneficial owners or our Chinese subsidiaries to liability or penalties, limit our ability to inject capital into our Chinese subsidiaries, limit our Chinese subsidiaries’ ability to increase their registered capital or limit their ability to distribute profits to us.***

On July 4, 2014, the State Administration of Foreign Exchange of the People’s Republic of China, or SAFE, promulgated the *Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents’ Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles*, or Circular 37, which replaced the former *Circular on Issues Relating to the Administration of Foreign Exchange in Fund-Raising and Round Trip Investment Activities of Domestic Residents Conducted via Offshore Special Purpose Vehicles* (commonly known as “SAFE Circular 75”) promulgated by SAFE on October 21, 2005. Circular 37 requires Chinese residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such Chinese residents’ legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in Circular 37 as a “special purpose vehicle.” Circular 37 further requires amendment to the registration in the event of any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by Chinese individuals, share transfer or exchange, merger, division or other material event. In the event that a Chinese shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the Chinese subsidiaries of that special purpose vehicle may be prohibited from making profit distributions to the offshore parent and from carrying out all subsequent cross-border foreign exchange activities in worst scenario, and the special purpose vehicle may be restricted in its ability to contribute additional capital into its Chinese subsidiary. Furthermore, failure to comply with the various SAFE registration requirements described above could result in liability under Chinese law for evasion of foreign exchange controls. On February 13, 2015, SAFE promulgated a *Notice on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment*, or Circular 13, which became effective on June 1, 2015. Pursuant to Circular 13, entities and individuals are required to apply for foreign exchange registration of overseas direct investment, including those required under Circular 37, with qualified banks, instead of SAFE. The qualified banks, under the supervision of SAFE, will directly review the applications and conduct the registration.

We attempt to comply, and attempt to ensure that our stockholders who are subject to Circular 37 and other related rules, comply with the relevant requirements under Circular 37. However, we cannot provide any assurances that all of our stockholders who are Chinese residents have complied or will comply with our request to make or obtain any applicable registrations or comply with other requirements required by Circular 37 or other related rules. Any failure or inability of any of our stockholders who is a Chinese resident to comply with relevant requirements under Circular 37 could subject such stockholders or our Chinese subsidiaries to fines and legal sanctions imposed by the Chinese government and may also limit our ability to contribute additional capital into our Chinese subsidiaries or receive dividends or other distributions from our Chinese subsidiaries. As a result, these risks may have a material adverse effect on our business, financial condition and results of operations.

***If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.***

We expect that the trading price for our common stock will be affected by any research or reports that industry or financial analysts publish about us or our business. As of March 31, 2020, only two research analysts publish reports regarding our company. If one or more of these analysts cease coverage of our company, our stock may lose visibility in the market, which in turn could cause our stock price to decline. In addition, if any analysts who may elect to cover us downgrade their evaluations of us or issues an adverse or misleading opinion regarding our stock, the price of our stock could decline. For example, following the GM announcement on September 5, 2019 that it intended to utilize GAS solutions on certain models beginning with GM's model year 2022, several financial analysts published research reports lowering their price targets of our stock. After this announcement and publication of these reports, our stock price fell significantly. Garmin announced in January 2020 a relationship with Ford to integrate Garmin's navigation technology into Ford's next-generation SYNC communications and entertainment system, which also caused our stock price to decline. If one or more of these analysts cease coverage of our company, our stock may lose visibility in the market, which in turn could cause its price to decline. During portions of fiscal 2019 and fiscal 2020, our stock has traded at prices below $5.00 per share. If our stock continues to trade at prices below $5.00 per share for an extended period of time, financial analysts might terminate coverage of our company due to internal policies within their investment banks, which could result in further stock price declines.

***Our stock price has fluctuated significantly and may continue to fluctuate in the future.***

We sold our common stock in an initial public offering at $8.00 per share. Although our common stock has traded at prices as high as $22.07 per share, it has also traded at prices as low as $3.35 per share and has tended to have significant downward and upward price movements in short time periods. For example, GM announced on September 5, 2019 that it intended to utilize GAS solutions on certain models beginning with GM's model year 2022. Garmin announced in January 2020 a relationship with Ford to integrate Garmin's navigation technology into Ford's next-generation SYNC communications and entertainment system. The price per share of our common stock fell significantly following these announcements. Future fluctuations or declines in the trading price of our common stock may result from a number of events or factors, including those discussed in the preceding risk factors relating to our operations, as well as:

- actual or anticipated fluctuations in our operating results;
- changes in the financial projections we may provide to the public or our failure to meet these projections;
- announcements by us or our competitors of significant technical innovations, relationship changes with key customers, acquisitions, strategic partnerships, joint ventures, capital raising activities or capital commitments;
- announcements by automobile manufacturers regarding use of free, third-party navigation platforms in their vehicles;
- the public's response to our press releases or other public announcements, including our filings with the SEC;
- lawsuits threatened or filed against us; and
- large distributions of our common stock by significant stockholders to limited partners or others who immediately resell the shares.

General market conditions and domestic or international macroeconomic factors unrelated to our performance, such as the continuing unprecedented volatility in the financial markets including as a result of COVID-19, may also affect our stock price. For these reasons, investors should not rely on recent trends to predict future stock prices or financial results. Investors in our common stock may not be able to dispose of the shares they purchased at prices above the initial public offering price, or, depending on market conditions, at all.

In the past, the market price for our common stock has traded only slightly above the cash value of our common stock. As of 43921, the cash value (including short-term investments) of our common stock was approximately $2.62 per share. If investors do not value our company as an ongoing business and only value it for the cash on our balance sheet, our stock pri ce may decline if we continue to incur net losses and use our cash to fund operations. We may also attract investors who are looking for short-term gains in our shares rather than being interested in our long-term outlook. As a result, the price of our common stock may be volatile.

***The concentration of ownership of our capital stock limits your ability to influence corporate matters.***

Our executive officers and directors and entities affiliated with them beneficially owned (as determined in accordance with the rules of the SEC) approximately 32.9% of our common stock outstanding as of March 31, 2020, which includes approximately 15.5% of our common stock held by Digital Mobile Venture Ltd., 10.1% of our common stock held by Nokomis Capital, each of which is an entity represented by a member of our board of directors, and 5.1% held by our chief executive officer. These stockholders, acting together, may be able to control our management and affairs and matters requiring stockholder approval, including the election of directors and the approval of significant corporate transactions, such as mergers, consolidations or the sale of substantially all of our assets. Consequently, this concentration of ownership may have the effect of delaying or preventing a change of control, including a merger, consolidation or other business combination involving us, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control, even if that change of control would benefit our other stockholders.

The average daily trading volume in our stock is limited and any sales of our common stock by any of these stockholders (or, in the case where such stockholders are investment funds, distribution of our stock to their investors and their subsequent sale), could significantly increase trading volatility in and significantly lower the market price of our common stock, regardless of our actual operating performance.

***Anti-takeover provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could impair a takeover attempt.***

Our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law contain provisions which could have the effect of rendering more difficult, delaying or preventing an acquisition deemed undesirable by our board of directors. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws include provisions:

- providing for a classified board of directors whose members serve staggered three-year terms;
- authorizing “blank check” preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to the rights of our common stock;
- limiting the liability of, and providing indemnification to, our directors and officers;
- limiting the ability of our stockholders to call and bring business before special meetings;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our board of directors;
- prohibiting stockholder action by written consent; and
- providing that certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws can be amended only by supermajority vote (a 66 2/3 % majority) of the outstanding shares. In addition, our board of directors can amend our amended and restated bylaws by majority vote of the members of our board of directors.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying, preventing or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock, and could also affect the price that some investors are willing to pay for our common stock.

***Certain provisions in our charter documents and under Delaware law could limit attempts by our stockholders to replace or remove members of our board of directors or current management and may adversely affect the market price of our common stock.***

Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our board of directors or management. These provisions include the following:

- our board of directors has the right to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- our stockholders may not act by written consent or call special stockholders' meetings; as a result, a holder or holders controlling a majority of our common stock would not be able to take certain actions other than at annual stockholders' meetings or special stockholders' meetings called by the board of directors, the chair of the board of directors, the chief executive officer or the president;
- our directors may only be removed for cause, which would delay the replacement of a majority of our board of directors;
- our board of directors is staggered in three tiers, with directors in each tier separately serving staggered three-year terms, which could impede an acquiror from rapidly replacing our existing directors with its own slate of directors;
- our certificate of incorporation prohibits cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- our stockholders must provide advance notice and additional disclosures in order to nominate individuals for election to our board of directors or to propose matters that can be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of our company; and
- our board of directors may issue, without stockholder approval, shares of undesignated preferred stock; the ability to issue undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

As a Delaware corporation, we are also subject to certain Delaware anti-takeover provisions. For example, under Delaware law, a corporation may not engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Our board of directors could rely on Delaware law to prevent or delay an acquisition of us.

Our directors are entitled upon a change of control of our company to accelerated vesting of their equity awards pursuant to the terms of their service arrangements, and our executive officers and certain employees may also receive certain benefits, including vesting acceleration, in the event their employment is actually or constructively terminated in the context of a change of control. In addition to the arrangements currently in place with some of our executive officers, we may enter into similar arrangements in the future.

***Our ability to use our net operating losses and credits to offset future taxable income may be subject to certain limitations.***

As of June 30, 2019, we had federal and state net operating loss carryforwards, or NOLs, of $250.2 million and $14.3 million, respectively, due to current and prior period losses, and we had federal and state research and development tax credit carryforwards of $7.0 million and $11.5 million, respectively. In general, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" (generally defined as a greater than 50-percentage-point cumulative change (by value) is subject to limitations on its ability to utilize its pre-change NOLs and credits to offset post-change taxable income. Future changes in our stock ownership, some of which may be outside of our control, could result in an ownership change under Section 382 of the Code. Our existing NOLs and credits may be subject to limitations arising from previous ownership changes, and if we undergo an ownership change in the future, our ability or that of the acquiror to utilize NOLs and credits could be further limited by Section 382 of the Code.

In addition, on December 22, 2017, the U.S. government enacted new tax legislation commonly referred to as The Tax Cuts and Jobs Act (TCJA). The TCJA makes broad and complex changes to the U.S. tax code including changes to the uses and limitations of net operating losses. Specifically, the TCJA imposes an 80% limitation on the use of net operating losses that were generated in tax years beginning after December 31, 2017. As such, we may not be able to utilize a material portion of the NOLs.

On March 27, 2020, the U.S. government enacted new tax legislation commonly referred to as the Coronavirus Aid, Relief, and Economic Security Act (CARES Act). The CARES Act includes several significant business tax provisions to provide liquidity to businesses affected by the economic impact of COVID-19. Specifically, the CARES Act repeals the 80% limitation on the use of net operating losses for tax years beginning after December 31, 2017 and for tax years beginning before January 1, 2021.

The inability to utilize in the future our NOLs, in part or at all, could lower the value of our company to a potential acquiror.

***We have a share repurchase program, but we cannot guarantee that in fact that our repurchase of shares will enhance long-term stockholder value. Our share repurchases could also increase the volatility of the price of our common stock and could diminish our cash reserves.***

In February 2019, our board of directors authorized a stock repurchase program. The program currently extends through August 4, 2020 and we are currently authorized to repurchase shares of our common stock for an aggregate purchase price of up to $20.0 million. . Under the program, we may purchase shares of our stock from time to time, in the open market or through private transactions, subject to market conditions and in compliance with applicable state and federal securities laws. However, the timing and number of our share repurchases, if any, will depend upon several factors, including market and business conditions, the trading price of our common stock and the nature of other investment opportunities available to us. We may also choose to defer or limit repurchases given other uses of our cash or our desire to preserve cash balances. As of March 31, 2020, we had repurchased under this program a total of 1,913,540 shares of our common stock at a total price of $10.7 million and average purchase price of $5.57 per share of our common stock.

Although our board of directors authorized the program, we are not obligated to repurchase any minimum or specific number or dollar amount of shares. In addition, we may suspend or terminate the program at any time before its expiration. Our repurchases of common stock could affect the market price of our common stock or increase its volatility. For example, the existence of a share repurchase program could cause our share price to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our stock. Additionally, our repurchase program could diminish our cash reserves, which may impact our ability to finance future growth and to pursue possible future strategic opportunities and acquisitions. We also may repurchase shares at prices above the current or future market prices for our common stock. We also cannot assure that any share repurchases will enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchase our stock, and short-term stock price fluctuations could reduce the program's effectiveness.

## Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

***Unregistered Sales of Equity Securities***

None.

***Issuer Purchases of Equity Securities***

On February 7, 2019, we announced that our board of directors had approved a stock repurchase program to facilitate our repurchase up to $20.0 million worth of our issued and outstanding common stock in the open market. The timing and amount of repurchase transactions under this program will depend on market conditions, cash flow and other considerations. Absent extension by our board of directors, the repurchase authorization will expire on August 4, 2020.

The following table summarizes stock repurchase activity during the three months ended March 31, 2020:

| | Total Number of Shares Purchased | Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | Approximate Dollar Value that May Yet be Purchased Under the Plans or Programs |
|---|---|---|---|---|
| January 1 – January 31, 2020 | — | $ — | — | $ 14,677,827 |
| February 1 – February 29, 2020 | 385,873 | 6.04 | 385,873 | 12,346,810 |
| March 1 – March 31, 2020 | 539,751 | 5.56 | 539,751 | 9,343,767 |
| **Total** | 925,624 | | 925,624 | $ 9,343,767 |

## Item 6. Exhibits.

| Exhibit Number | Description | Incorporated by Reference From Form | Incorporated by Reference From Exhibit Number | Date Filed |
|---|---|---|---|---|
| 10.1.1 | Form of Indemnification Agreement between Registrant and its directors and officers | Filed herewith | | |
| 10.16.66 | License Supplement between Telenav, Inc. and HERE North America, LLC | Filed herewith | | |
| 10.16.67 | Support License Supplement between Telenav, Inc. and HERE North America, LLC | Filed herewith | | |
| 10.16.68 | SOW between Telenav, Inc. and HERE North America, LLC | Filed herewith | | |
| 10.26.33 | Amendment No. 33 effective September 30, 2019, to the SYNC Generation 2 on-Board Navigation Agreement dated October 12, 2009, by and between Telenav, Inc. and Ford Motor Company. | Filed herewith | | |
| 10.27.8 | Amendment No. 2 dated August 8, 2019 to the Services Agreement by and between Telenav, Inc. ("Supplier") and General Motors Holdings, LLC ("Customer") | Filed herewith | | |
| 10.50.1 | Telenav, Inc. Employee Stock Purchase Plan, as amended December 2, 2019 | Filed herewith | | |
| 10.51 | Form of Change in Control and Severance Agreement | 8-K | 10.1 | 2/3/2020 |
| 31.1 | Certification Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer | Filed herewith | | |
| 31.2 | Certification Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer | Filed herewith | | |
| 32.1~ | Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer | Furnished herewith | | |
| 32.2~ | Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer | Furnished herewith | | |
| 101.INS | Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document. | | | |
| 101.SCH | Inline XBRL Taxonomy Extension Schema Document | Filed herewith | | |
| 101.CAL | Inline XBRL Taxonomy Extension Calculation Linkbase Document | Filed herewith | | |
| 101.DEF | Inline XBRL Taxonomy Extension Definition Linkbase Document | Filed herewith | | |
| 101.LAB | Inline XBRL Taxonomy Extension Label Linkbase Document | Filed herewith | | |
| 101.PRE | Inline XBRL Taxonomy Extension Presentation Linkbase Document | Filed herewith | | |
| 104 | Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101) | | | |

\+ Portions of the exhibit have been omitted by means of marking such portions with an asterisk because the identified portions are not material and would likely cause competitive harm to the Company if publicly disclosed.

++ Portions of the exhibit have been omitted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission.

~ In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 33-8238 and 34-47986, Final Rule: Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Exchange Act. Such certifications will not be deemed to be incorporated by reference into any filings under the Securities Act or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference.

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

| | | |
|---|---|---|
| | | TELENAV, INC. |
| Dated: May 8, 2020 | By: | /s/ Dr. HP JIN |
| | | **Dr. HP Jin** |
| | | **President and Chief Executive Officer** |
| Dated: May 8, 2020 | By: | /s/ ADEEL MANZOOR |
| | | **Adeel Manzoor** |
| | | **Chief Financial Officer** |
| | | **(Principal Financial and Accounting Officer)** |

# TELENAV, INC.

## INDEMNIFICATION AGREEMENT

This Indemnification Agreement (this "***Agreement***") is dated as of [*insert date*], and is between Telenav, Inc., a Delaware corporation (the "***Company***"), and [*insert name of indemnitee*] ("***Indemnitee***").

## RECITALS

A. Indemnitee's service to the Company substantially benefits the Company.

B. Individuals are reluctant to serve as directors or officers of corporations or in certain other capacities unless they are provided with adequate protection through insurance or indemnification against the risks of claims and actions against them arising out of such service.

C. Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and any insurance as adequate under the present circumstances, and Indemnitee may not be willing to serve as a director or officer without additional protection.

D. In order to induce Indemnitee to continue to provide services to the Company, it is reasonable, prudent and necessary for the Company to contractually obligate itself to indemnify, and to advance expenses on behalf of, Indemnitee as permitted by applicable law.

E. This Agreement is a supplement to and in furtherance of the indemnification provided in the Company's certificate of incorporation and bylaws, and any resolutions adopted pursuant thereto, and this Agreement shall not be deemed a substitute therefor, nor shall this Agreement be deemed to limit, diminish or abrogate any rights of Indemnitee thereunder.

The parties therefore agree as follows:

1. **Definitions.**

(a) A ***"Change in Control"*** shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) *Acquisition of Stock by Third Party.* Any Person (as defined below) becomes the Beneficial Owner (as defined below), directly or indirectly, of securities of the Company representing fifteen percent (15%) or more of the combined voting power of the Company's then outstanding securities;

(ii) *Change in Board Composition.* During any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Company's board of directors, and any new directors (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 1(a)(i), 1(a)(iii) or 1(a)(iv)) whose election by the board of directors or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute at least a majority of the members of the Company's board of directors;

(iii) *Corporate Transactions.* The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the board of directors or other governing body of such surviving entity;

(iv) *Liquidation.* The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; and

(v) *Other Events.* Any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or in response to any similar item on any similar schedule or form) promulgated under the Securities Exchange Act of 1934, as amended, whether or not the Company is then subject to such reporting requirement.

For purposes of this Section 1(a), the following terms shall have the following meanings:

(1) ***"Person"*** shall have the meaning as set forth in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended; *provided, however,* that "***Person***" shall exclude (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(2) ***"Beneficial Owner"*** shall have the meaning given to such term in Rule 13d-3 under the Securities Exchange Act of 1934, as amended; *provided, however,* that "***Beneficial Owner***" shall exclude any Person otherwise becoming a Beneficial Owner by reason of (i) the stockholders of the Company approving a merger of the Company with another entity or (ii) the Company's board of directors approving a sale of securities by the Company to such Person.

(b) ***"Corporate Status"*** describes the status of a person who is or was a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise.

(c) ***"DGCL"*** means the General Corporation Law of the State of Delaware.

(d) ***"Disinterested Director"*** means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(e) ***"Enterprise"*** means the Company and any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary.

(f) ***"Expenses"*** include all reasonable and actually incurred attorneys' fees, retainers, court costs, transcript costs, fees and costs of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding. Expenses also include (i) Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedeas bond or other appeal bond or their equivalent, and (ii) for purposes of Section 12(d), Expenses incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(g) ***"Independent Counsel"*** means a law firm, or a partner or member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent (i) the Company or Indemnitee in any matter material to either such party (other than as Independent Counsel with respect to matters concerning Indemnitee under this Agreement, or other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

(h) ***"Proceeding"*** means any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, including any appeal therefrom and including without limitation any such Proceeding pending as of the date of this Agreement, in which Indemnitee was, is or will be involved as a party, a potential party, a non-party witness or otherwise by reason of (i) the fact that Indemnitee is or was a director or officer of the Company, (ii) any action taken by Indemnitee or any action or inaction on Indemnitee's part while acting as a director or officer of the Company, or (iii) the fact that he or she is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, in each case whether or not serving in such capacity at the time any liability or Expense is incurred for which indemnification or advancement of expenses can be provided under this Agreement.

(i) Reference to ***"other enterprises"*** shall include employee benefit plans; references to ***"fines"*** shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to ***"serving at the request of the Company"*** shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he or she reasonably believed to be in the best interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Company" as referred to in this Agreement.

2. **Indemnity in Third-Party Proceedings.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 2 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 2, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

3. **Indemnity in Proceedings by or in the Right of the Company.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 3 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged by a court of competent jurisdiction to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery or any court in which the Proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court of Chancery or such other court shall deem proper.

4. **Indemnification for Expenses of a Party Who is Wholly or Partly Successful.** To the extent that Indemnitee is a party to or a participant in, and is successful (on the merits or otherwise) in defense of any Proceeding or any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. For purposes of this section, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

5. **Indemnification for Expenses of a Witness.** To the extent that Indemnitee is, by reason of his or her Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified to the extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

6. **Additional Indemnification.**

(a) Notwithstanding any limitation in Sections 2, 3 or 4, the Company shall indemnify Indemnitee to the fullest extent permitted by applicable law if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding (including a Proceeding by or in the right of the Company to procure a judgment in its favor) against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with the Proceeding or any claim, issue or matter therein.

(b) For purposes of Section 6(a), the meaning of the phrase ***"to the fullest extent permitted by applicable law"*** shall include, but not be limited to:

(i) the fullest extent permitted by the provision of the DGCL that authorizes or contemplates additional indemnification by agreement, or the corresponding provision of any amendment to or replacement of the DGCL; and

(ii) the fullest extent authorized or permitted by any amendments to or replacements of the DGCL adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its officers and directors.

7. **Exclusions.** Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any Proceeding (or any part of any Proceeding):

(a) for which payment has actually been made to or on behalf of Indemnitee under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b) for an accounting or disgorgement of profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of federal, state or local statutory law or common law, if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(c) for any reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Securities Exchange Act of 1934, as amended (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act), if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(d) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees, agents or other indemnitees, unless (i) the Company's board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, (iii) otherwise authorized in Section 12(d) or (iv) otherwise required by applicable law; or

(e) if prohibited by applicable law.

8. **Advances of Expenses.** The Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding prior to its final disposition, and such advancement shall be made as soon as reasonably practicable, but in any event no later than 90 days, after the receipt by the Company of a written statement or statements requesting such advances from time to time (which shall include invoices received by Indemnitee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditure made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice). Advances shall be unsecured and interest free and made without regard to Indemnitee's ability to repay such advances. Indemnitee hereby undertakes to repay any advance to the extent that it is ultimately determined that Indemnitee is not entitled to be indemnified by the Company. This Section 8 shall not apply to the extent advancement is prohibited by law and shall not apply to any Proceeding (or any part of any Proceeding) for which indemnity is not permitted under this Agreement, but shall apply to any Proceeding (or any part of any Proceeding) referenced in Section 7(b) or 7(c) prior to a determination that Indemnitee is not entitled to be indemnified by the Company.

9. **Procedures for Notification and Defense of Claim.**

(a) Indemnitee shall notify the Company in writing of any matter with respect to which Indemnitee intends to seek indemnification or advancement of Expenses as soon as reasonably practicable following the receipt by Indemnitee of notice thereof. The written notification to the Company shall include, in reasonable detail, a description of the nature of the Proceeding and the facts underlying the Proceeding. The failure by Indemnitee to notify the Company will not relieve the Company from any liability which it may have to Indemnitee hereunder or otherwise than under this Agreement, and any delay in so notifying the Company shall not constitute a waiver by Indemnitee of any rights, except to the extent that such failure or delay materially prejudices the Company.

(b) If, at the time of the receipt of a notice of a Proceeding pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect that may be applicable to the Proceeding, the Company shall give prompt notice of the commencement of the Proceeding to the insurers in accordance with the procedures set forth in the applicable policies. The Company shall thereafter take all commercially reasonable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.

(c) In the event the Company may be obligated to make any indemnity in connection with a Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, which approval shall not be unreasonably withheld, conditioned or delayed, upon the delivery to Indemnitee of written notice of its election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee for any fees or expenses of counsel subsequently incurred by Indemnitee with respect to the same Proceeding. Notwithstanding the Company's assumption of the defense of any such Proceeding, the Company shall be obligated to pay the fees and expenses of Indemnitee's separate counsel to the extent (i) the employment of separate counsel by Indemnitee is authorized by the Company, (ii) counsel for the Company or Indemnitee shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense such that Indemnitee needs to be separately represented, (iii) the Company is not financially or legally able to perform its indemnification obligations or (iv) the Company shall not have retained, or shall not continue to retain, counsel to defend such Proceeding. The Company shall have the right to conduct such defense as it sees fit in its sole discretion. Regardless of any provision in this Agreement, Indemnitee shall have the right to employ counsel in any Proceeding at Indemnitee's personal expense. The Company shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Company.

(d) Indemnitee shall give the Company such information and cooperation in connection with the Proceeding as may be reasonably appropriate.

(e) The Company shall not be liable to indemnify Indemnitee for any settlement of any Proceeding (or any part thereof) without the Company's prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

(f) The Company shall not settle any Proceeding (or any part thereof) in a manner that imposes any penalty or liability on Indemnitee without Indemnitee's prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

10. **Procedures upon Application for Indemnification.**

(a) To obtain indemnification, Indemnitee shall submit to the Company a written request, including such documentation and information as is reasonably available to Indemnitee and as is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of the Proceeding. Any delay in providing the request will not relieve the Company from its obligations under this Agreement, except to the extent such delay is prejudicial.

(b) Upon written request by Indemnitee for indemnification pursuant to Section 10(a), a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case (i) if a Change in Control shall have occurred, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (ii) if a Change in Control shall not have occurred, (A) by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (B) by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (C) if there are no such Disinterested Directors or, if such Disinterested Directors so direct, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (D) if so directed by the Company's board of directors, by the stockholders of the Company. If it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within ten days after such determination. Indemnitee shall cooperate with the person, persons or entity making the determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. He Company hall bear any costs or expenses (including attorneys' fees and disbursements) actually and reasonably incurred by Indemnitee in so cooperating with the person, persons or entity making such determination, to the extent permitted by applicable law.

(c) In the event the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(b), the Independent Counsel shall be selected as provided in this Section 10(c). If a Change in Control shall not have occurred, the Independent Counsel shall be selected by the Company's board of directors, and the Company shall give written notice to Indemnitee advising him or her of the identity of the Independent Counsel so selected. If a Change in Control shall have occurred, the Independent Counsel shall be selected by Indemnitee (unless Indemnitee shall request that such selection be made by the Company's board of directors, in which event the preceding sentence shall apply), and Indemnitee shall give written notice to the Company advising it of the identity of the Independent Counsel so selected. In either event, Indemnitee or the Company, as the case may be, may, within ten days after such written notice of selection shall have been given, deliver to the Company or to Indemnitee, as the case may be, a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 1 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 10(a) hereof and (ii) the final disposition of the Proceeding, the parties have not agreed upon an Independent Counsel, either the Company or Indemnitee may petition a court of competent jurisdiction for resolution of any objection which shall have been made by the Company or Indemnitee to the other's selection of Independent Counsel and for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 10(b) hereof. The Company agrees to pay the reasonable fees and expenses actually incurred of any Independent Counsel. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 12(a) of this Agreement, the Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

11. **Presumptions and Effect of Certain Proceedings.**

(a) In making a determination with respect to entitlement to indemnification hereunder, the person, persons or entity making such determination shall, to the fullest extent not prohibited by law, presume that Indemnitee is entitled to indemnification under this Agreement, and the Company shall, to the fullest extent not prohibited by law, have the burden of proof to overcome that presumption.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith to the extent Indemnitee relied in good faith on (i) the records or books of account of the Enterprise, including financial statements, (ii) information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, (iii) the advice of legal counsel for the Enterprise or its board of directors or counsel selected by any committee of the board of directors or (iv) information or records given or reports made to the Enterprise by an independent certified public accountant, an appraiser, investment banker or other expert selected with reasonable care by the Enterprise or its board of directors or any committee of the board of directors. The provisions of this Section 11(b) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement.

(d) Neither the knowledge, actions nor failure to act of any other director, officer, agent or employee of the Enterprise shall be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

12. **Remedies of Indemnitee.**

(a) Subject to Section 1212(e), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 or 1212(d) of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10 of this Agreement within 90 days after the later of the receipt by the Company of the request for indemnification or the final disposition of the Proceeding, (iv) payment of indemnification pursuant to this Agreement is not made (A) within ten days after a determination has been made that Indemnitee is entitled to indemnification or (B) with respect to indemnification pursuant to Sections 4, 5 and 1212(d) of this Agreement, within 30 days after receipt by the Company of a written request therefor, or (v) the Company or any other person or entity takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended to be provided to Indemnitee hereunder, Indemnitee shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of Expenses. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration with respect to his or her entitlement to such indemnification or advancement of Expenses, to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 12(a); provided, however, that the foregoing clause shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 4 of this Agreement. The Company shall not oppose Indemnitee’s right to seek any such adjudication or award in arbitration in accordance with this Agreement.

(b) Neither (i) the failure of the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders that Indemnitee has not met the applicable standard of conduct, shall create a presumption that Indemnitee has or has not met the applicable standard of conduct. In the event that a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 12 shall be conducted in all respects as a de novo trial, or arbitration, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 12, the Company shall, to the fullest extent not prohibited by law, have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be.

(c) To the fullest extent not prohibited by law, the Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement. If a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee’s statements not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) To the extent not prohibited by law, the Company shall indemnify Indemnitee against all Expenses that are incurred by Indemnitee in connection with any action for indemnification or advancement of Expenses from the Company under this Agreement or under any directors’ and officers’ liability insurance policies maintained by the Company to the extent Indemnitee is successful in such action, and, if requested by Indemnitee, shall (as soon as reasonably practicable, but in any event no later than 90 days, after receipt by the Company of a written request therefor) advance such Expenses to Indemnitee, subject to the provisions of Section 8.

(e) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification shall be required to be made prior to the final disposition of the Proceeding.

13. **Contribution.** To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amounts incurred by Indemnitee, whether for Expenses, judgments, fines or amounts paid or to be paid in settlement, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the events and transactions giving rise to such Proceeding; and (ii) the relative fault of Indemnitee and the Company (and its other directors, officers, employees and agents) in connection with such events and transactions.

14. **Non-exclusivity.** The rights of indemnification and to receive advancement of Expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Company’s certificate of incorporation or bylaws, any

agreement, a vote of stockholders or a resolution of directors, or otherwise. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than would be afforded currently under the Company's certificate of incorporation and bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change, subject to the restrictions expressly set forth herein or therein. Except as expressly set forth herein, no right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. Except as expressly set forth herein, the assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

15. **No Duplication of Payments.** The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received payment for such amounts under any insurance policy, contract, agreement or otherwise.

16. **Insurance.** To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, trustees, general partners, managing members, officers, employees, agents or fiduciaries of the Company or any other Enterprise, Indemnitee shall be covered by such policy or policies to the same extent as the most favorably-insured persons under such policy or policies in a comparable position.

17. **Subrogation.** In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

18. **Services to the Company.** Indemnitee agrees to serve as a director or officer of the Company or, at the request of the Company, as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of another Enterprise, for so long as Indemnitee is duly elected or appointed or until Indemnitee tenders his or her resignation or is removed from such position. Indemnitee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee. Indemnitee specifically acknowledges that any employment with the Company (or any of its subsidiaries or any Enterprise) is at will, and Indemnitee may be discharged at any time for any reason, with or without cause, with or without notice, except as may be otherwise expressly provided in any executed, written employment contract between Indemnitee and the Company (or any of its subsidiaries or any Enterprise), any existing formal severance policies adopted by the Company's board of directors or, with respect to service as a director or officer of the Company, the Company's certificate of incorporation or bylaws or the DGCL. No such document shall be subject to any oral modification thereof.

19. **Duration.** This Agreement shall continue until and terminate upon the later of (a) ten years after the date that Indemnitee shall have ceased to serve as a director or officer of the Company or as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of any other Enterprise, as applicable; or (b) one year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses

hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto.

20. **Successors.** This Agreement shall be binding upon the Company and its successors and assigns, including any direct or indirect successor, by purchase, merger, consolidation or otherwise, to all or substantially all of the business or assets of the Company, and shall inure to the benefit of Indemnitee and Indemnitee's heirs, executors and administrators.

21. **Severability.** Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order or other applicable law, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (ii) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (iii) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

22. **Enforcement.** The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director or officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director or officer of the Company.

23. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; *provided, however*, that this Agreement is a supplement to and in furtherance of the Company's certificate of incorporation and bylaws and applicable law.

24. **Modification and Waiver.** No supplement, modification or amendment to this Agreement shall be binding unless executed in writing by the parties hereto. No amendment, alteration or repeal of this Agreement shall adversely affect any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. No waiver of any of the provisions of this Agreement shall constitute or be deemed a waiver of any other provision of this Agreement nor shall any waiver constitute a continuing waiver.

25. **Notices.** All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by registered or certified mail, postage prepaid, sent by facsimile or electronic mail or otherwise delivered by hand, messenger or courier service addressed:

(a) if to Indemnitee, to Indemnitee's address, facsimile number or electronic mail address as shown on the signature page of this Agreement or in the Company's records, as may be updated in accordance with the provisions hereof; or

(b) if to the Company, to the attention of the Chief Executive Officer or General Counsel of the Company at 4655 Great America Parkway, Suite 300, Santa Clara, California 95054, or at such other current address as the Company shall have furnished to Indemnitee, with a copy (which shall not constitute notice) to Wilson Sonsini Goodrich & Rosati, P.C., 650 Page Mill Road, Palo Alto, California 94304.

Each such notice or other communication shall for all purposes of this Agreement be treated as effective or having been given (i) if delivered by hand, messenger or courier service, when delivered (or if sent *via* a nationally-recognized overnight courier service, freight prepaid, specifying next-business-day delivery, one business day after deposit with the courier), (ii) if sent *via* mail, at the earlier of its receipt or five days after the same has been deposited in a regularly-maintained receptacle for the deposit of the United States mail, addressed and mailed as aforesaid, or (iii) if sent *via* facsimile, upon confirmation of facsimile transfer or, if sent *via* electronic mail, upon confirmation of delivery when directed to the relevant electronic mail address, if sent during normal business hours of the recipient, or if not sent during normal business hours of the recipient, then on the recipient's next business day.

26. **Applicable Law and Consent to Jurisdiction.** This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court of Chancery, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court of Chancery for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, The Corporation Trust Company, Wilmington, Delaware as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court of Chancery, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court of Chancery has been brought in an improper or inconvenient forum.

27. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

28. **Captions.** The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

(*signature page follows*)

The parties are signing this Indemnification Agreement as of the date stated in the introductory sentence.

**TELENAV, INC.**

__________
(*Signature*)

__________
(*Print name*)

__________
(*Title*)

**[*INSERT INDEMNITEE NAME*]**

__________
(*Signature*)

__________
(*Print name*)

__________
(*Street address*)
(*City, State and ZIP*)

E-mail: _________

The parties are signing this Indemnification Agreement as of the date stated in the introductory sentence.

**TELENAV, INC.**

(*Signature*)

(*Print name*)

(*Title*)

**[*INSERT INDEMNITEE NAME*]**

(*Signature*)

(*Print name*)

(*Street address*)
(*City, State and ZIP*)

E-mail: __

**CERTAIN IDENTIFIED INFORMATION HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. [*****] INDICATES THAT INFORMATION HAS BEEN OMITTED.**

| [*****] **LICENSE SUPPLEMENT** | |
|---|---|
| **1. Parties** | Customer Name: Telenav, Inc.<br>Registered Address: 4655 Great America Parkway, Suite 300, Santa Clara, CA 95054 ("**Customer**")<br>Customer business contact: [*****]<br>Customer technical contact: [*****] |
| | HERE North America, LLC, 425 W. Randolph Street, Chicago, IL 60606-1530, U.S.A. Attention: Legal Department. Phone: +1-312-894-7000 ("**HERE**") |
| **2. HERE Reference** | Quote-[*****] |
| **3. Introduction** | This Supplement (the "**Supplement**") is governed by and incorporates the General Terms and Conditions executed contemporaneously herewith between the parties (collectively herein the "**GLA**"). The Parties enter into this License Supplement to agree on: 1) territory for which HERE licenses the Licensed Materials to Customer; 2) the identification of such Licensed Materials; 3) applications for use of which such Licensed Materials are authorized; and 4) fees payable by Customer to HERE. In case and to the extent of a conflict between the Supplement and the GLA, this Supplement prevails. |
| **4. Effective Date** | |
| **5. Term** | This Supplement shall be perpetual in nature provided however, that it shall terminate in the event that Customer fails to cure a breach within [*****] days of written notice thereof. |
| **6. Addition/Replacement** | |
| **7. Licensed Materials** | The following shall additionally be considered Licensed Materials under the GLA:<br>• [*****];<br>as well as (a) all materials provided by HERE to Licensee in connection therewith; (b) [*****].<br>all provided as further described at https://developer.here.com/documentation or in additional documentation that HERE may provide from time to time. |
| **8. Permitted Use Cases, Applications and Restrictions ("Business Purpose")** | Customer may use the Licensed Materials solely to [*****].<br>Customer may use the Licensed Materials for [*****].<br>Commercial use of any other HERE Map Data is not included. Any commercial use of HERE Map Data with any software that Customer develops will be quoted and contracted separately. |
| **9. Fees.** | For access to and use of the Licensed Materials as set forth herein, Customer shall pay to HERE:<br>• [*****].<br>• [*****]<br>Fees shall be payable as set forth in the Payment section. |

[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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| | |
|---|---|
| **10. Reporting** | Without limiting any reporting or records obligation under the GLA, Customer's [*****]reporting shall [*****] the Licensed Materials [*****] as well as any information sufficient to demonstrate the scope of use and distribution of the Licensed Materials. |
| **11. Additional Terms** | In view of[*****], the following terms shall apply notwithstanding any language to the contrary:<br><br>The [*****] shall be treated as [*****] confidential information and made available on an 'as is' basis without any representations or warranties of any kind and are not subject to any Service Level Agreements or support obligations of the GLA.<br><br>Under this Supplement, HERE shall offer only nominal ancillary support for the [*****] itself and shall not provide support of any kind for Customer's permitted uses of the [*****]. In the event that as of [*****] completion of the [*****] is no longer technically feasible, Customer shall be entitled, at its sole option, to terminate this Supplement and obtain a full refund of the [*****].<br><br>License, access and use of [*****] shall: a) be restricted to Customer's employees and subcontractors that "need to know" in connection with the Business Purpose; b) be limited to the named Customer and Affiliates only; and c) not be sublicensed, assigned or transferred except as set forth in the GLA..<br><br>Notwithstanding any language to the contrary, Customer shall be permitted to create derivative works from the [*****] solely in connection with the Business Purpose, which derivative works shall, solely to the extent of such differences or modifications from the [*****]: (i) be considered Customer Confidential Information that Customer shall be under no obligation to disclose or return to HERE, and (ii) be solely owned by Customer, subject to HERE's underlying ownership of the [*****]. Customer shall be entitled to (i) inform its partners and customers that its infotainment and navigation software product(s) have been created using the HERE [*****]; and (ii) license derivative works on terms of its own choosing (subject to the [*****] and reporting obligations hereunder).<br><br>Upon termination of this Supplement, upon HERE's written request, Customer shall provide written certification that all copies of the [*****] have been returned or destroyed subject to retention of normal backup files and other reasonable record retention obligations. Any [*****] so retained shall remain subject to the GLA confidentiality obligations.<br><br>Customer acknowledges: a) the value of the [*****], b) that a breach or threatened breach of its obligations hereunder would result in irreparable harm to Here, and c) that in seeking enforcement of its rights, HERE is entitled to remedies at law as well as to injunctive or other equitable relief without the need to post a bond.<br><br>The parties agree to work diligently towards the execution of a commercial agreement for HERE Map Data as referenced in Section 8. |

[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

**CERTAIN IDENTIFIED INFORMATION HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. [*****] INDICATES THAT INFORMATION HAS BEEN OMITTED.**

| | |
|---|---|
| **12. Payment** | Following the Effective Date, HERE will invoice Customer as follows:<br><br>The initial payment of [*****] shall be invoiced on [*****] ("Initial Payment"); and a second payment of [*****] shall be invoiced 5 business days after HERE, based on an objective and reasonable belief, certifies completion of the work defined in the separate [*****], which is scheduled for [*****] ("Second Payment").<br><br>All payments are due [*****] days from the invoice date in USD. |

Agreed and accepted as of the Effective Date by each Party's authorized representatives:

| **Customer** |
|---|
| Signature: /s/ Adeel Manzoor |
| Names: Adeel Manzoor |
| Titles: CFO |
| Date: March 13, 2020 |

| **HERE** |
|---|
| Signature: /s/ Adil Musabji /s/ Simon Anolick |
| Name: Adil Musabji Simon Anolick |
| Title: Senior Patent Attorney Director Legal Counsel |
| Date: March 16, 2020 \| 8:21 AN PDT March 16, 2020 \| 8:54 AM PDT |

* * *

[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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| [*****] **SUPPORT LICENSE SUPPLEMENT** | |
|---|---|
| **1. Parties** | Customer Name: Telenav, Inc.<br>Registered Address: 4655 Great America Parkway, Suite 300, Santa Clara, CA 95054 (“**Customer**”)<br>Customer business contact: [*****]<br>Customer technical contact: [*****] |
| | HERE North America, LLC, 425 W. Randolph Street, Chicago, IL 60606-1530, U.S.A. Attention: Legal Department. Phone: +1-312-894-7000 (“**HERE**”) |
| **2. HERE Reference** | Quote-[*****] |
| **3. Introduction** | This Supplement (the “**Supplement**”) is governed by and incorporates the General Terms and Conditions executed contemporaneously herewith between the parties (collectively herein the “**GLA**”). In case and to the extent of a conflict between the Supplement and the GLA, this Supplement prevails. |
| **4. Effective Date** | |
| **5. Term** | This Supplement shall continue for [*****] after the Effective Date, unless earlier terminated in the event that Customer fails to cure a breach within [*****]days of written notice thereof. |
| **6. Addition/Replacement** | |
| **7. Support** | Support is provided on an annual basis. Each year of Support shall include:<br>• Access to HERE online support portal/ticketing system to create and manage tickets. Up to [*****]hours of technical support each month.<br>• HERE will generate and provide up to 4 copies annually of HERE Map Data compiled in [*****] format for internal, non-commercial use. Coverage includes [*****] territories. Any other support or services of any kind not expressly included herein (e.g. above the hourly cap or for production-use compiles) will be quoted and contracted separately. Unused Support services are void.<br>Technical Support shall be subject to the following restrictions:<br>• Excludes weekends and bank holidays.<br>• Limited to European Business hours 8:00 AM to 5:00 PM Central European Standard Time).<br>• Requests for support to be provided “in-person” must be made at least 4 weeks in advance of the desired date. All travel related expenses for in-person support are not included in the Fees and will be billed to Customer separately. |

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| | |
|---|---|
| **8. Licensed Materials** | The following shall additionally be considered Licensed Materials under the GLA:<br><br>• Any and all HERE Map Data provided by HERE to Customer in connection with the Support.<br>Any support, documentation or training materials accessed by Customer in connection with the Support as well as (a) all results derived therefrom, (b) all materials or documentation provided to Customer hereunder; and (c) all derivative works of any of the foregoing.<br><br>all provided as further described at https://developer.here.com/documentation or in additional documentation that HERE may provide from time to time. |
| **9. Permitted Use Cases, Applications and Restrictions ("Business Purpose")** | Customer may use the Licensed Materials for any internal non-commercial testing, development, evaluation purposes and for drivable demonstrations. |
| **10. Fees.** | Customer shall pay HERE a fee of [*****] for the [*****] Support as set forth in section 7. Fees shall be payable as set forth in the Payment section below. |
| **11. Payment** | Following the Effective Date, HERE will invoice Customer as follows:<br><br>The initial payment of [*****] shall be invoiced 5 business days after HERE certifies, based on its reasonable and objective belief, the completion of the work defined in the separate [*****], which is scheduled for [*****].<br><br>Payment of [*****] for the [*****] of support shall be invoiced on the first anniversary of the Effective Date unless the Supplement has been terminated in accordance with an express termination right.<br><br>All payments are due [*****] from the invoice date in USD. |

[SIGNATURE PAGE FOLLOWS]

Agreed and accepted as of the Effective Date by each Party's authorized representatives:

| **Customer** |
|---|
| Signature: /s/ Adeel Manzoor |
| Names: Adeel Manzoor |
| Titles: CFO |
| Date: 3/13/2020 |

| **HERE** |
|---|
| Signature: /s/ Adil Musabji /s/ Simon Anolick |
| Name: Adil Musabji Simon Anolick |
| Title: Senior Patent Attorney Director Legal Counsel |
| Date: March 16, 2020 \| 8:24 AM PDT March 16, 2020 \| 8:53 AM PDT |

* *

[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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# SOW
# Telenav - HERE
# [*****]Project

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Version 1.00

March 03, 2020

[*****]

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[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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| Date | Editor | Affected sections or areas | Version |
|---|---|---|---|
| 03/04/2020 | Chip Reibel | Final draft for external review | 1.00 |
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## Table of Contents



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# 1 Introduction

This Statement of Work ("SOW") Project Specification is made subject to (and considered a Supplement under) the terms of the General Terms and Conditions executed contemporaneously herewith between Telenav, Inc ("Customer or "Telenav") and HERE North America, LLC ("HERE"), (the "Agreement"), having the effective date set forth herein. This project specification is made effective as of the date of the last signature below ("Effective Date"). Any changes or revisions to the Agreement shall require a written change order to the Agreement, including but not limited to, changes in the training schedule and/or fees as specified herein.

This document will describe the individual commitments required for the successful execution of this SOW between Telenav and HERE, as well as the roles and responsibilities of each entity, the project deliverables, and the project schedule.

HERE and Telenav agree that no joint development has occurred or will occur with respect to any work performed under this SOW. Any documentation or training materials provided by HERE to Telenav under this Agreement (collectively, the "Deliverables") shall be for internal use only and shall be considered Licensed Materials under the [*****] License Supplement executed contemporaneously herewith.

Any services provided under this SOW by HERE that result in or contribute to the creation of a derivative work of [*****] (as expressly authorized by the [*****] License Supplement) shall, solely to the extent of such differences or modifications from[*****]: (i) be on a work-for-hire basis, vesting in and inuring to the benefit of Telenav, and (ii) be owned by Telenav.

## 1.1 Project Name: **[*****]**

## 1.2 Objectives

- HERE Technologies to provide training to Telenav personnel on the architecture and implementation of[*****].
- To support Customer's effort with[*****].

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[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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## 2 Project Organization

Below is a list of key team members of each party (including contact information and locations) that will be working on the Telenav in-vehicle navigation SDK training project. HERE will use commercially reasonable efforts to ensure the continuity of the assignment of the HERE personnel identified below. In the event any team member is or becomes subject to removal or re-assignment (at HERE's discretion), HERE will use commercially reasonable efforts to notify Telenav in advance of any such changes with the goal of minimizing any disruption to the Telenav in-vehicle navigation SDK training project resulting from such changes.

| | HERE | Telenav |
|---|---|---|
| Business Contact | **[*****]**[*****][*****] | [*****][*****]<br>[*****] |
| Project Manager | **[*****]**<br>[*****]<br>[*****]<br>[*****] | [*****][*****][*****][*****] |
| System Architect | **[*****]**<br>[*****]<br>[*****]<br>[*****] | [*****] [*****]<br>[*****]<br>[*****] |

## 3 Project Deliverables

Below is a summary of the resources that will be assigned by HERE for the execution of the [*****], in addition to the description of services that shall be provided by each resource.

| Deliverables | | |
|---|---|---|
| **HERE Resource** | **Description of services** | **Qty** |
| [*****] Architect | [*****]. | 1 |
| [*****] Specialist | [*****] | 2 |
| [*****] Engineer | [*****] | 6 |
| [*****] Engineer | [*****] | 1 |
| QA Engineer | [*****] | **1** |

[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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| Resource Category | Resource Level | Hours Committed |
|---|---|---|
| Senior C++ Engineer | Senior | [*****] |
| Senior C++ Engineer | Lead | [*****] |
| Senior AQA Engineer | Senior | [*****] |
| Lead Engineer | Lead | [*****] |
| Project Manager | Management | [*****] |
| | Total Person-Hours: | [*****] |

# 4 Project Timing

The agreed proposed project timeline is described below. It should be noted that the dates listed below are subject to change based upon a mutual agreement among Telenav and HERE.

| Activity Milestone | Owner | Target Timeline | Duration |
|---|---|---|---|
| Contract ratified | Telenav, HERE | [*****] | N/A |
| Pre-training exercise | HERE | Upon contract ratification | [*****] |
| Training completion | Telenav, HERE | [*****] | [*****] |

# 5 Project Scope

## 5.1 HERE [*****] Deliverables

- Provide qualified training resources for duration set forth in the Agreement (as detailed in section 1.2 objective)
- Preparation of the handover with supporting documentation and material.
- There is no software development, or co-development services deliverable from HERE.
- There is no warranty implied or guaranteed from HERE.

# 6 Project Assumptions & Dependencies

In addition to any other responsibilities or assumptions described herein, set forth below is a table of the obligation for which Telenav will be responsible, conditions on HERE's performance, and assumptions upon which HERE is relying on to perform the Services and produce deliverables under this SOW ("Assumptions"). Should any of these Assumptions not be performed or prove to be incorrect, it may cause changes to the Project Specification, fees and expenses, Deliverables, time, require additional work, or otherwise impact HERE's performance under this Project Specification, and HERE shall have no

[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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liability with respect to its inability to perform the Services or produce the Deliverables therefrom. In such case, the parties shall mutually agree upon any changes to this Project Specification.

| Ref. | Assumptions |
|---|---|
| A.1 | HERE will consider this project to be “complete” when the training resources quantified in the Agreement (quantity and duration) have been provided. |
| A.2 | All in-person training will be conducted at HERE’s office in Berlin, Germany. HERE will invoice Telenav directly for travel expenses as incurred for required resource travel. Any travel expenses invoiced by HERE to Telenav shall be at the actual cost and shall not include an additional fee markup. Any air travel required shall be booked as economy class travel, unless otherwise approved in advance and in writing by Telenav. |
| A.3 | Telenav shall be responsible for all software deliverables to their end client. |
| A.4 | Telenav shall reasonably cooperate and dedicate sufficient resources to attend the small-group trainings in a timely fashion. |
| A.5 | For in-person training, resource consumption will be allocated in blocks of [*****] (minimum) and must be scheduled at least [*****] in advance. |
| A.6 | For remote training, resource consumption will be allocated in blocks of [*****] (minimum). |

[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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# 7 Cost and Schedule

## 7.1 Project Fees

| Line | Description | Cost | Comments |
|---|---|---|---|
| 1 | General Project activities | [*****] | Refer to section 3 within this document for additional details/information. |
| 2 | Additional Work | TBD | Should Telenav require additional training and/or support beyond the period of time outlined within this Statement of Work, Telenav and HERE will mutually agree on the additional training and/or support required and this SOW will be revised accordingly. |
| 3 | Resource Travel | TBD | All in-person training will be conducted at HERE's office in Berlin, Germany. HERE will invoice Telenav directly for travel expenses as incurred for required resource travel. |

Total training cost due to HERE under this SOW are [*****]. Telenav shall pay the training cost in accordance with the following payment schedule, following receipt of an invoice from HERE for the milestone payment amounts. Payment terms are net [*****] from date of invoice from HERE.

## 7.2 Payment Schedule

HERE will invoice the following fees upon completion of the below milestones:

| Milestone | Payment | Date/Timing |
|---|---|---|
| SOW Signature | [*****] | [*****] |
| Payment #2 | [*****] | [*****] |
| Payment #3 | [*****] | [*****] |
| Training completion | [*****] | [*****] |

# 8 Signatures

**HERE:**

By: /s/ Adil Musabji

Name: Adil Musabji

Title: Senior Patent Attorney

Date: March 16, 2020 | 8:21 AM PDT

**Telenav:**

By: /s/ Adeel Manzoor

Name: Adeel Manzoor

Title: CFO

Date: March 13, 2020

By: /s/ Simon Anolick

Name: Simon Anolick

Title: Director, Legal Counsel

Date: March 16, 2020 | 8:55 AM PDT

[*****] Certain identified information denoted with an asterisk have been omitted from this exhibit because it is not material and would likely cause competitive harm to the Registrant if publicly disclosed.

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**AMENDMENT NO. 33**
**TO THE**
**SYNC GENERATION 2 ON-BOARD NAVIGATION AGREEMENT**
**BETWEEN**
**FORD MOTOR COMPANY AND TELENAV, INC.**

THIS AMENDMENT NO. 33 (“Amendment”), effective as of September 30, 2019 (“Amendment Effective Date”) supplements and amends the terms of the SYNC Generation 2 On-Board Navigation Agreement, dated October 12, 2009 (“Agreement”), by and between **Ford Motor Company** (“Buyer” or “Ford”), a Delaware corporation with its principal office at One American Road, Dearborn, Michigan 48126, on behalf of itself and the Ford Related Companies, and **Telenav, Inc.** (“Supplier” or “Telenav”), a Delaware corporation with its principal office at 4655 Great America Parkway, Suite 300, Santa Clara, CA 95054, on behalf of itself and the Telenav Related Companies. Capitalized terms not otherwise defined shall have the meanings ascribed to them in the Agreement.

WHEREAS, the parties wish to amend the Agreement;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained in this Amendment, the parties agree as follows:

1. As of [*****], in Attachment V, Section 3, under the heading [*****] , delete the following table:

“[*****]

| | |
|---|---|
| | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| Subtotal | [*****] |
| [*****] | [*****] |
| **Total** | [*****] |

“

and replace it with the following:

“[*****]

| | |
|---|---|
| | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| Subtotal | [*****] |
| [*****] | [*****] |
| **Total** | [*****] |

“

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**CERTAIN IDENTIFIED INFORMATION HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. [*****] INDICATES THAT INFORMATION HAS BEEN OMITTED.**

2. As of [*****], in Attachment V, Section 3, under the heading [*****] , delete the following table:

"[*****]

| | | |
|---|---|---|
| | [*****] | [*****] |
| [*****] | [*****] | [*****] |
| [*****] | [*****] | [*****] |
| [*****] | | [*****] |
| [*****] | | [*****] |
| Subtotal | [*****] | [*****] |
| [*****] | [*****] | [*****] |
| **Total** | [*****] | [*****] |

"

and replace it with the following:

"[*****]

| | | |
|---|---|---|
| | [*****] | [*****] |
| [*****] | [*****] | [*****] |
| [*****] | [*****] | [*****] |
| [*****] | | n/a |
| [*****] | | n/a |
| Subtotal | [*****] | [*****] |
| [*****] | [*****] | [*****] |
| **Total** | [*****] | [*****] |

"

3. As of [*****], in Attachment V, Section 3, under the heading [*****] , delete the following table:

"[*****]

| | |
|---|---|
| | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| Subtotal | [*****] |
| [*****] | [*****] |
| **Total** | [*****] |

"

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**CERTAIN IDENTIFIED INFORMATION HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. [*****] INDICATES THAT INFORMATION HAS BEEN OMITTED.**

and replace it with the following:

“[*****]

| | |
|---|---|
| | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| Subtotal | [*****] |
| [*****] | [*****] |
| **Total** | [*****] |

“

4. As of [*****], in Attachment V, Section 3, under the heading [*****] , delete the following table:

“[*****]

| | |
|---|---|
| | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| Subtotal | [*****] |
| [*****] | [*****] |
| **Total** | [*****] |

“

and replace it with the following:

“[*****]

| | |
|---|---|
| | [*****] |
| [*****] | [*****] |
| [*****] | [*****] |
| Subtotal | [*****] |
| [*****] | [*****] |
| **Total** | [*****] |

“

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**CERTAIN IDENTIFIED INFORMATION HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. [*****] INDICATES THAT INFORMATION HAS BEEN OMITTED.**

5. In Attachment V, after Section 20, add the following new section:

"21. For purposes of Amendment No. 33, the parties approve and agree to implement the requirements of the [*****] listed below and the fees associated with these [*****]s shall be [*****].

| **MY** | [*****] | **PO #** | **Description** | **PO price** |
|---|---|---|---|---|
| [*****] | | [*****] | [*****] | $[*****] |
| [*****] | [*****] | | [*****] | $n/a |
| [*****] | | [*****] | [*****] | [*****] |
| | | | **Subtotal** | [*****] |

"

Except as modified and amended by this Amendment, the terms of the Agreement are ratified and confirmed by the parties hereto. This Amendment is incorporated into and made a part of the Agreement by the parties.

**IN WITNESS WHEREOF**, the parties have executed this Amendment by their authorized representatives as of the Amendment Effective Date.

**FORD MOTOR COMPANY**

By: /s/ Melissa Sheahan__
(Signature)

Name: Melissa Sheahan__
(Printed Name)

Title: Software Buyer__

Date: 1/14/2020__

**TELENAV, INC.**

By: /s/ Adeel Manzoor__
(Signature)

Name: Adeel Manzoor__
(Printed Name)

Title: CFO__

Date: 1/23/2020__

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**CERTAIN IDENTIFIED INFORMATION HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. [*****] INDICATES THAT INFORMATION HAS BEEN OMITTED.**

# AMENDMENT NO. 2 TO SERVICES AGREEMENT

This amendment ("Amendment 2") is made on August 8, 2019 ("Amendment 2 Effective Date") to the Services Agreement by and between Telenav, Inc. ("Supplier") and General Motors Holdings, LLC ("Customer") effective February 1, 2017 as amended (the "Agreement"). Supplier and Customer are each referred to herein as a "Party" and, collectively, as the "Parties."

Supplier and Customer wish to amend the Agreement to [*****] and to update certain exhibits to the Agreement.

Capitalized terms not defined in this Amendment 2 shall have the meanings ascribed to them in the Agreement. In the event of a conflict between any term of this Amendment 2 and the Agreement, the terms of this Amendment 2 shall control.

In consideration of the covenants and agreements set forth herein and for other good and valuable consideration received and acknowledged, the Parties agree as follows.

## AGREEMENT

**Item 1.** Delete text of Section 15. [*****] in its entirety and replace with the following:
[*****]**15. Term**

**Item 2. Exhibit C,** [*****] is amended by the addition of [*****], attached hereto as Appendix A.

**Item 3.** The **Third Party Data Privacy and Processing Exhibit** together with the **Subprocessor Signature Page to Data Importer's Amended and Restated Standard Contractual Clauses** (Appendix 1 thereto), attached hereto as Appendix B are added to the Agreement in place of Custody or Processing of Personal Information Exhibit – Exhibit I and the Appendix 5 thereto, Standard Contractual Clauses.

**Item 4**. The **Third Party Information Security Requirements (2018),** attached hereto as Appendix C, is appended to the Agreement in place of the Third Party Information Security Requirements Exhibit G to the Agreement.

**Item 5.** Any provision of the Agreement not specifically modified by this Amendment 2 shall remain in full force and effect.

**In Witness Whereof,** the parties have caused this Amendment 2 to be signed below by their duly authorized representatives as of the Amendment 2 Effective Date set forth above.

*Signatures appear on next page*

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**CERTAIN IDENTIFIED INFORMATION HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. [*****] INDICATES THAT INFORMATION HAS BEEN OMITTED.**

| **Telenav, Inc.** | **General Motors Holdings, LLC** |
|---|---|
| By: /s/ Adeel Manzoor | By: /s/SantiagoChamorrow |
| Name: Adeel Manzoor | Name: Santiago Chamorro |
| Title: CFO | Title: Vice Pres. |
| Date: 12/18/2019 | Date: 1/13/20 |

**Appendix A.** [*****]
**Appendix B. Third Party Data Privacy and Processing Exhibit** together with **Subprocessor's Signature Page to Data Importer's Amended and Restated Standard Contractual Clauses**
**Appendix C. Third Party Information Security Requirements Exhibit**

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**CERTAIN IDENTIFIED INFORMATION HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT IF PUBLICLY DISCLOSED. [*****] INDICATES THAT INFORMATION HAS BEEN OMITTED.**

**Appendix A**

| [*****] | | | | | |
|---|---|---|---|---|---|
| | | [*****] | [*****] | [*****] | [*****] |
| [*****] | [*****] | | [*****] | [*****] | [*****] |
| [*****] | [*****] | | [*****] | [*****] | [*****] |
| [*****] | [*****] | | [*****] | [*****] | [*****] |
| [*****] | [redacted] | | | | |
| [*****] | [*****] | | [*****] | [*****] | [*****] |
| [*****] | [redacted] | | | | |
| [*****] | | | | | |
| [*****] | [*****] | [*****] | | | [*****] |

For purposes of the [*****], the production term will run from [*****] through [*****], and the post-production term [*****] will run from [*****] through [*****].

| | **Assumptions** |
|---|---|
| 1 | [*****] |
| 2 | [*****] |
| 3 | [*****] |
| 4 | [*****] |
| 5 | [*****] |
| 6 | Full legal review of Amendment 2 is required to confirm impacts |
| 7 | [*****] |
| 8 | [*****] |
| 9 | [*****] |
| 10 | [*****] |
| 11 | [*****] |
| 12 | [*****] |
| 13 | [*****] |

[*****] Certain portions denoted with an asterisk have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**TELENAV, INC.**

**2019 EMPLOYEE STOCK PURCHASE PLAN**

(As Amended December 2, 2019)

1. Purpose. The purpose of the Plan is to provide employees of the Company and its Designated Companies with an opportunity to purchase Common Stock through accumulated Contributions. The Company intends for the Plan to have two components: a component that is intended to qualify as an "employee stock purchase plan" under Section 423 of the Code (the "423 Component") and a component that is not intended to qualify as an "employee stock purchase plan" under Section 423 of the Code (the "Non-423 Component"). The provisions of the 423 Component, accordingly, will be construed so as to extend and limit Plan participation in a uniform and nondiscriminatory basis consistent with the requirements of Section 423 of the Code. In addition, this Plan authorizes the grant of an option to purchase shares of Common Stock under the Non-423 Component that does not qualify as an "employee stock purchase plan" under Section 423 of the Code; an option granted under the Non-423 Component will provide for substantially the same benefits as an option granted under the 423 Component, except that a Non-423 Component option may include features necessary to comply with applicable non-U.S. laws pursuant to rules, procedures or sub-plans adopted by the Administrator. Except as otherwise provided herein or by the Administrator, the Non-423 Component will operate and be administered in the same manner as the 423 Component.

2. Definitions.

(a) "Administrator" means the Board or any Committee designated by the Board to administer the Plan pursuant to Section 14.

(b) "Affiliate" means any entity, other than a Subsidiary, in which the Company has an equity or other ownership interest.

(c) "Applicable Laws" means the requirements relating to the administration of equity-based awards, including but not limited to the related issuance of shares of Common Stock, under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any non-U.S. country or jurisdiction where options are, or will be, granted under the Plan.

(d) "Board" means the Board of Directors of the Company.

(e) "Change in Control" means the occurrence of any of the following events:

(i) Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection, the acquisition of additional stock by any one Person, who is considered to own more than fifty percent (50%) of the total voting power of the stock of the Company will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company's voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of fifty percent (50%) or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event shall not be considered a Change in Control under this subsection (i). For this purpose, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities: or

(ii) Change in Effective Control of the Company. If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such Person) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (A) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(e), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Section 409A.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the jurisdiction of the Company's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(f) "Code" means the U.S. Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or Treasury Regulations thereunder will include such section or regulation, any valid regulation or other official applicable guidance promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

(g) "Committee" means a committee of the Board appointed in accordance with Section 14 hereof.

(h) "Common Stock" means the common stock of the Company.

(i) "Company" means Telenav, Inc., a Delaware corporation, or any successor thereto.

(j) "Compensation" means an Eligible Employee's base straight time gross earnings, commissions (to the extent such commissions are an integral, recurring part of compensation), payments for overtime and shift premium, but exclusive of payments for incentive compensation, bonuses, equity compensation income and other similar compensation. The Administrator, in its discretion, may, on a uniform and nondiscriminatory basis, establish a different definition of Compensation for a subsequent Offering Period.

(k) "Contributions" means the payroll deductions and other additional payments that the Company may permit to be made by a Participant to fund the exercise of options granted pursuant to the Plan.

(l) "Designated Company" means any Subsidiary or Affiliate that has been designated by the Administrator from time to time in its sole discretion as eligible to participate in the Plan. For purposes of the 423 Component, only the Company and its Subsidiaries may be Designated Companies, provided, however that at any given time, a Subsidiary that is a Designated Company under the 423 Component shall not be a Designated Company under the Non-423 Component.

(m) "Director" means a member of the Board.

(n) "Eligible Employee" means any individual who is a common law employee providing services to the Company or a Designated Company and is customarily employed for at least twenty (20) hours per week and more than five (5) months in any calendar year by the Employer, or any lesser number of hours per week and/or number of months in any calendar year established by the Administrator (if required under Applicable Laws) for purposes of any separate Offering or for Participants in the Non-423 Component. For purposes of the Plan, the employment relationship will be treated as continuing intact while the individual is on sick leave or other leave of absence that the Employer approves or is legally protected under Applicable Laws with respect to the Participant's participation in the Plan. Where the period of leave exceeds three (3) months and the individual's right to reemployment is not guaranteed either by statute or by contract, the employment relationship will be deemed to have terminated three (3) months and one (1) day following the commencement of such leave. The Administrator, in its discretion, from time to time may, prior to an Enrollment Date for all options to be granted on such Enrollment Date in an Offering, determine (for each Offering under the 423 Component, on a uniform and nondiscriminatory basis or as otherwise permitted by Treasury Regulations Section 1.423-2) that the definition of Eligible Employee will or will not include an individual if he or she: (i) has not completed at least two (2) years of service since his or her last hire date (or such lesser period of time as may be determined by the Administrator in its discretion), (ii) customarily works not more than twenty (20) hours per week (or such lesser period of time as may be determined by the Administrator in its discretion), (iii) customarily works not more than five (5) months per calendar year (or such lesser period of time as may be determined by the Administrator in its discretion), (iv) is a highly compensated employee within the meaning of Section 414(q) of the Code, or (v) is a highly compensated employee within the meaning of Section 414(q) of the Code with compensation above a certain level or is an officer or subject to the disclosure requirements of Section 16(a) of the Exchange Act, provided the exclusion is applied with respect to each Offering under the 423 Component in an identical manner to all highly compensated individuals of the Employer whose employees are participating in that Offering. Each exclusion shall be applied with respect to an Offering under the 423 Component in a manner complying with Treasury Regulations Section 1.423-2(e)(2)(ii). Such exclusions may be applied with respect to an Offering under the Non-423 Component without regard to the limitations of Treasury Regulations Section 1.423-2.

(o) "Employer" means the employer of the applicable Eligible Employee(s).

(p) "Enrollment Date" means the first Trading Day of each Offering Period.

(q) "Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended, including the rules and regulations promulgated thereunder.

(r) "Exercise Date" means the first Trading Day on or after March 1 and September 1 of each Purchase Period. Notwithstanding the foregoing, the first Exercise Date under the Plan will be the first Trading Day on or after September 1, 2020. Notwithstanding the foregoing, in the event that an Offering Period is terminated prior to its expiration pursuant to Section 20, the Administrator, in its sole discretion, may determine that such Offering Period will terminate without options being exercised on the Exercise Date(s) that otherwise would have occurred during such Offering Period.

(s) "Fair Market Value" means, as of any date and unless the Administrator determines otherwise, the value of a share of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the New York Stock Exchange or the Nasdaq Global Select Market, the Nasdaq Global Market, or the Nasdaq Capital Market of The Nasdaq Stock Market, its Fair Market Value will be the closing sales price for a share of such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the date of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value will be the mean between the high bid and low asked prices for a share of the Common Stock on the date of determination (or if no bids and asks were reported on that date, as applicable, on the last Trading Day such bids and asks were reported), as reported in The Wall Street Journal or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

(t) "Fiscal Year" means the fiscal year of the Company.

(u) "New Exercise Date" means a new Exercise Date if the Administrator shortens any Offering Period then in progress.

(v) "Offering" means an offer under the Plan of an option that may be exercised during an Offering Period as further described in Section 4. For purposes of the Plan, the Administrator may designate separate Offerings under the Plan (the terms of which need not be identical) in which Eligible Employees of one or more Employers will participate, even if the dates of the applicable Offering Periods of each such Offering are identical and the provisions of the Plan will separately apply to each Offering. To the extent permitted by Treasury Regulations Section 1.423-2(a)(1), the terms of each Offering need not be identical provided that the terms of the Plan and an Offering together satisfy Treasury Regulations Section 1.423-2(a)(2) and (a)(3).

(w) "Offering Periods" means the overlapping, consecutive periods of approximately twelve (12) months during which an option granted pursuant to the Plan may be exercised, (i) commencing on the first Trading Day on or after March 1 and September 1 of each year and terminating on the first Trading Day on or after March 1 and September 1, approximately twelve (12) months later; provided, however, that the first Offering Period under the Plan will commence with the first Trading Day on or after March 1, 2020, and will end on the first Trading Day on or after March 1, 2021. The duration and timing of Offering Periods may be changed pursuant to Sections 4 and 20.

(x) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(y) "Participant" means an Eligible Employee that participates in the Plan.

(z) "Plan" means this Telenav, Inc. 2019 Employee Stock Purchase Plan.

(aa) "Purchase Period" means the period during an Offering Period and during which shares of Common Stock may be purchased on a Participant's behalf in accordance with the terms of the Plan. Unless the Administrator provides otherwise, Purchase Periods will be the approximately six (6) month period commencing after one Exercise Date and ending with the next Exercise Date, except that the first Purchase Period of any Offering Period will commence on the Enrollment Date and end with the next Exercise Date.

(bb) "Purchase Price" means an amount equal to eighty-five percent (85%) of the Fair Market Value of a share of Common Stock on the Enrollment Date or on the Exercise Date, whichever is lower; provided however, that the Purchase Price may be determined for subsequent Offering Periods by the Administrator subject to compliance with Section 423 of the Code (or any successor rule or provision or any other Applicable Law, regulation or stock exchange rule) or pursuant to Section 20.

(cc) "Section 409A" means Section 409A of the Code and the Treasury Regulations and any formal guidance thereunder, as may be amended or modified from time to time.

(dd) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

(ee) "Trading Day" means a day that the primary stock exchange (or national market system, or other trading platform, as applicable) upon which the Common Stock is listed is open for trading.

(ff) "Treasury Regulations" means the Treasury Regulations of the Code. Reference to a specific Treasury Regulation or Section of the Code shall include such Treasury Regulation or Section, any valid regulation promulgated under such Section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such Section or regulation.

3. Eligibility.

(a) Offering Periods. Any Eligible Employee on a given Enrollment Date will be eligible to participate in the Plan, subject to the requirements of Section 5.

(b) Non-U.S. Employees. Eligible Employees who are citizens or residents of a non-U.S. jurisdiction (without regard to whether they also are citizens or residents of the United States or resident aliens (within the meaning of Section 7701(b)(1)(A) of the Code)) may be excluded from participation in the Plan or an Offering if the participation of such Eligible Employees is prohibited under the laws of the applicable jurisdiction or if complying with the laws of the applicable jurisdiction would cause the Plan or an Offering to violate Section 423 of the Code. In the case of the Non-423 Component, an Eligible Employee may be excluded from participation in the Plan or an Offering if the Administrator has determined that participation of such Eligible Employee is not advisable or practicable.

(c) Limitations. Any provisions of the Plan to the contrary notwithstanding, no Eligible Employee will be granted an option under the Plan (i) to the extent that, immediately after the grant, such Eligible Employee (or any other person whose stock would be attributed to such Eligible Employee pursuant to Section 424(d) of the Code) would own capital stock of the Company or any Parent or Subsidiary of the Company and/or hold outstanding options to purchase such stock possessing five percent (5%) or more of the total combined voting power or value of all classes of the capital stock of the Company or of any Parent or Subsidiary of the Company, or (ii) to the extent that his or her rights to purchase stock under all employee stock purchase plans (as defined in Section 423 of the Code) of the Company or any Parent or Subsidiary of the Company accrues at a rate, which exceeds twenty-five thousand dollars ($25,000) worth of stock (determined at the Fair Market Value of the stock at the time such option is granted) for each calendar year in which such option is outstanding at any time, as determined in accordance with Section 423 of the Code and the regulations thereunder.

4. Offering Periods. The Plan will be implemented by consecutive, overlapping Offering Periods with a new Offering Period commencing on the first Trading Day on or after March 1 and September 1 each year, or on such other date as the Administrator will determine; provided, however, that the first Offering Period under the Plan will commence with the first Trading Day on or after March 1, 2020, and end on the first Trading Day on or after March 1, 2021. The Administrator will have the power to change the duration of Offering Periods (including the commencement dates thereof) with respect to future Offerings without stockholder approval if such change is announced prior to the scheduled beginning of the first Offering Period to be affected thereafter; provided, however, that no Offering Period may last more than twenty-seven (27) months.

5. Participation. An Eligible Employee may participate in the Plan pursuant to Section 3(a) by (i) submitting to the Company's stock administration office (or its designee), a properly completed subscription agreement authorizing Contributions in the form provided by the Administrator for such purpose, or (ii) following an electronic or other enrollment procedure determined by the Administrator, in either case, on or before a date determined by the Administrator prior to an applicable Enrollment Date.

6. Contributions.

(a) At the time a Participant enrolls in the Plan pursuant to Section 5, he or she will elect to have Contributions (in the form of payroll deductions or otherwise, to the extent permitted by the Administrator) made on each pay day during the Offering Period, in an amount not exceeding twenty percent (20%) of the Compensation, which he or she receives on each pay day during such Offering Period. However, prior to the Enrollment Date of an Offering Period, the Administrator, in its discretion and on a uniform and nondiscriminatory basis or as otherwise permitted by Treasury Regulations Section 1.423-2, may set the Contribution percentage limit below this amount with respect to all options granted on the Enrollment Date of such Offering Period. For the avoidance of doubt, should a pay day occur on an Exercise Date, a Participant will have any Contributions made on such day applied to his or her account under the then-current Purchase Period or Offering Period. The Administrator, in its sole discretion, may permit all Participants in a specified Offering to contribute amounts to the Plan through payment by cash, check or other means set forth in the subscription agreement prior to each Exercise Date. A Participant's subscription agreement will remain in effect for successive Offering Periods unless terminated as provided in Sections 10 and 11 hereof.

(b) In the event Contributions are made in the form of payroll deductions, such payroll deductions for a Participant will commence on the first pay day following the Enrollment Date and will end on the last pay day on or prior to the last Exercise Date of such Offering Period to which such authorization is applicable, unless sooner terminated as provided in Sections 10 and 11.

(c) All Contributions made for a Participant will be credited to his or her account under the Plan and Contributions will be made in whole percentages of his or her Compensation only. A Participant may not make any additional payments into such account.

(d) A Participant may discontinue his or her participation in the Plan as provided in Section 10. Unless and until determined otherwise by the Administrator, in its sole discretion, a Participant may not increase the rate of his or her Contribution, during any Offering Period for such Offering Period, and may decrease the rate of his or her Contributions only one (1) time during any Purchase Period to zero percent (0%) (and not to any other percent) (the "0% Rate"), in accordance with the procedures set forth in this subsection (d). Any 0% Rate will apply only to the then-ongoing Purchase Period, and any subsequent Purchase Periods and Offering Periods will resume at the Contribution rate that was in effect for the Participant as of immediately before the 0% Rate became effective, unless the Participant's participation in the ESPP has terminated as provided in Sections 10 and 11 or made any Contribution adjustments applicable to future Purchase Periods or Offering Periods in accordance with the Plan terms. A Participant may make a Contribution rate adjustment pursuant to this subsection (d) by (i) properly completing and submitting to the Company's stock administration office (or its designee), a new subscription agreement authorizing the change in Contribution rate in the form provided by the Administrator for such purpose, or (ii) following an electronic or other procedure prescribed by the Administrator, in either case, on or before a date determined by the Administrator that occurs prior to an applicable Exercise Date. If a Participant has not followed such procedures to change the rate of his or her Contributions, the rate of his or her Contributions will continue at the originally elected rate throughout the then-ongoing Purchase Period and Offering Period (unless the Participant's participation in the Plan has terminated as provided in Sections 10 and 11). The Administrator may, in its sole discretion, limit or amend the nature and/or number of Contribution rate changes (including to permit, prohibit and/or limit increases and/or decreases to rate changes) that may be made by Participants during any Purchase Period or Offering Period, and may establish such other conditions or limitations as it deems appropriate for Plan administration. Any change in Contribution rate made pursuant to this Section 6(d) will be effective as of the first full payroll period following five (5) business days after the date on which the change is made by the Participant (unless the Administrator, in its sole discretion, elects to process a given change in Contribution rate earlier).

(e) Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and Section 3(d), a Participant's Contributions may be decreased to zero percent (0%) by the Administrator at any time during an Offering Period (or Purchase Period, as applicable). Subject to Section 423(b)(8) of the Code and Section 3(d) hereof, Contributions will recommence at the rate originally elected by the Participant effective as of the beginning of the first Offering Period (or Purchase Period, as applicable) scheduled to end in the following calendar year, unless the Participant's participation in the Plan has terminated as provided in Sections 10 and 11.

(f) Notwithstanding any provisions to the contrary in the Plan, the Administrator may allow Participants to participate in the Plan via cash contributions instead of payroll deductions if (i) payroll deductions are not permitted or advisable under Applicable Laws, (ii) the Administrator determines that cash contributions are permissible for Participants participating in the 423 Component and/or (iii) the Participants are participating in the Non-423 Component.

(g) At the time the option is exercised, in whole or in part, or at the time some or all of the Common Stock issued under the Plan is disposed of (or at any other time that a taxable event related to the Plan occurs), the Participant must make adequate provision for the Company's or Employer's federal, state, local or any other tax liability payable to any authority including taxes imposed by jurisdictions outside of the U.S., national insurance, social security or other tax withholding obligations, if any, which arise upon the exercise of the option or the disposition of the Common Stock (or any other time that a taxable event related to the Plan occurs). At any time, the Company or the Employer may, but will not be obligated to, withhold from the Participant's compensation the amount necessary for the Company or the Employer to meet applicable withholding obligations, including any withholding required to make available to the Company or the Employer any tax deductions or benefits attributable to the sale or early disposition of Common Stock by the Eligible Employee. In addition, the Company or the Employer may, but will not be obligated to, withhold from the proceeds of the sale of Common Stock or use any other method of withholding the Company or the Employer deems appropriate to the extent permitted by Treasury Regulations Section 1.423-2(f).

7. Grant of Option. On the Enrollment Date of each Offering Period, each Eligible Employee participating in such Offering Period will be granted an option to purchase on each Exercise Date during such Offering Period (at the applicable Purchase Price) up to a number of shares of Common Stock determined by dividing such Eligible Employee's Contributions accumulated prior to such Exercise Date and

retained in the Eligible Employee's account as of the Exercise Date by the applicable Purchase Price; provided that in no event will an Eligible Employee be permitted to purchase during each Purchase Period more than 5,000 shares of Common Stock (subject to any adjustment pursuant to Section 19) and provided further that such purchase will be subject to the limitations set forth in Sections 3(c) and 13 and in the subscription agreement. The Eligible Employee may accept the grant of such option with respect to any Offering Period under the Plan by electing to participate in the Plan in accordance with the requirements of Section 5. The Administrator may, for future Offering Periods, increase or decrease, in its absolute discretion, the maximum number of shares of Common Stock that a Participant may purchase during each Purchase Period or Offering Period, as applicable. Exercise of the option will occur as provided in Section 8, unless the Participant's participation in the Plan has terminated pursuant to Sections 10 or 11. The option will expire on the last day of the Offering Period.

8. Exercise of Option.

(a) Unless a Participant withdraws from the Plan as provided in Section 10 or the Participant's participation in the Plan terminated as provided in Section 11, his or her option for the purchase of shares of Common Stock will be exercised automatically on the Exercise Date, and the maximum number of full shares subject to the option will be purchased for such Participant at the applicable Purchase Price with the accumulated Contributions from his or her account; provided, however, that for Participants participating in an Offering under the Non-423 Component in the jurisdiction of the People's Republic of China, the Company, in its sole discretion, may either (i) in lieu of exercising the option to purchase shares of Common Stock, settle the option in cash in an amount equal to the number of shares of Common Stock the Participant otherwise would have been able to purchase on such Exercise Date multiplied by the Fair Market Value of a share of Common Stock on such Exercise Date, less the Purchase Price that otherwise would have been required to be paid to purchase the shares of Common Stock (a "Cash Settlement"), (ii) following the exercise of the option, repurchase the shares of Common Stock purchased pursuant to the exercise of the option for cash on such Exercise Date at a per share purchase price equal to the Fair Market Value of a share of Common Stock on such Exercise Date (a "Cash Repurchase"), or (c) following the exercise of the option, deliver shares of Common Stock pursuant to such procedures as required by Applicable Laws. No fractional shares of Common Stock will be purchased; any Contributions accumulated in a Participant's account, which are not sufficient to purchase a full share will be retained in the Participant's account for the subsequent Purchase Period or Offering Period, as applicable, subject to earlier termination of the Participant's participation in the Plan as provided in Sections 10 and 11. Any other funds left over in a Participant's account after the Exercise Date will be returned to the Participant. During a Participant's lifetime, a Participant's option to purchase shares of Common Stock hereunder is exercisable only by him or her.

(b) If the Administrator determines that, on a given Exercise Date, the number of shares of Common Stock with respect to which options are to be exercised may exceed (i) the number of shares of Common Stock that were available for sale under the Plan on the Enrollment Date of the applicable Offering Period, or (ii) the number of shares of Common Stock available for sale under the Plan on such Exercise Date, the Administrator may in its sole discretion (x) provide that the Company will make a pro rata allocation of the shares of Common Stock available for purchase on such Enrollment Date or Exercise Date, as applicable, in as uniform a manner as will be practicable and as it will determine in its sole discretion to be equitable among all Participants exercising options to purchase Common Stock on such Exercise Date, and continue all Offering Periods then in effect or (y) provide that the Company will make a pro rata allocation of the shares of Common Stock available for purchase on such Enrollment Date or Exercise Date, as applicable, in as uniform a manner as will be practicable and as it will determine in its sole discretion to be equitable among all participants exercising options to purchase Common Stock on such Exercise Date, and terminate any or all Offering Periods then in effect pursuant to Section 20. The Company may make a pro rata allocation of the shares of Common Stock available on the Enrollment Date of any applicable Offering

Period pursuant to the preceding sentence, notwithstanding any authorization of additional shares of Common Stock for issuance under the Plan by the Company's stockholders subsequent to such Enrollment Date.

9. Delivery. As soon as reasonably practicable after each Exercise Date on which a purchase of shares of Common Stock occurs, the Company will arrange the delivery to each Participant of the shares purchased upon exercise of his or her option in a form determined by the Administrator (in its sole discretion) and pursuant to rules established by the Administrator. The Company may permit or require that shares be deposited directly with a broker designated by the Company or with a trustee or designated agent of the Company, and the Company may utilize electronic or automated methods of share transfer. The Company may require that shares be retained with such broker, trustee or agent for a designated period of time and/or may establish other procedures to permit tracking of disqualifying dispositions or other dispositions of such shares. No Participant will have any voting, dividend, or other stockholder rights with respect to shares of Common Stock subject to any option granted under the Plan until such shares have been purchased and delivered to the Participant as provided in this Section 9.

10. Withdrawal.

(a) A Participant may withdraw all but not less than all the Contributions credited to his or her account and not yet used to exercise his or her option under the Plan at any time by (i) submitting to the Company's stock administration office (or its designee) a written notice of withdrawal in the form determined by the Administrator for such purpose (which may be similar to the form attached hereto as Exhibit B), or (ii) following an electronic or other withdrawal procedure determined by the Administrator. The Administrator may set forth a deadline of when a withdrawal must occur to be effective prior to a given Exercise Date in accordance with policies it may approve from time to time. All of the Participant's Contributions credited to his or her account will be paid to such Participant as soon as administratively practicable after receipt of notice of withdrawal and such Participant's option for the Offering Period will be terminated automatically, and no further Contributions for the purchase of shares will be made for such Offering Period. If a Participant withdraws from an Offering Period, Contributions will not resume at the beginning of the succeeding Offering Period, unless the Participant re-enrolls in the Plan in accordance with the provisions of Section 5.

(b) A Participant's withdrawal from an Offering Period will not have any effect upon his or her eligibility to participate in any similar plan that may hereafter be adopted by the Company or in succeeding Offering Periods that commence after the termination of the Offering Period from which the Participant withdraws.

11. Termination of Employment. Upon a Participant's ceasing to be an Eligible Employee, for any reason, he or she will be deemed to have elected to withdraw from the Plan and the Contributions credited to such Participant's account during the Offering Period but not yet used to purchase shares of Common Stock under the Plan will be returned to such Participant or, in the case of his or her death, to the person or persons entitled thereto under Section 15, and such Participant's option will be automatically terminated. Unless determined otherwise by the Administrator in a manner that, with respect to an Offering under the 423 Component, is permitted by, and compliant with, Section 423 of the Code, a Participant whose employment transfers between entities through a termination with an immediate rehire (with no break in service) by the Company or a Designated Company shall not be treated as terminated under the Plan; however, if a Participant transfers from an Offering under the 423 Component to the Non-423 Component, the exercise of the option will be qualified under the 423 Component only to the extent it complies with Section 423 of the Code; further, no Participant will be deemed to switch from an Offering under the Non-423 Component to an Offering under the 423 Component or vice versa unless (and then only to the extent) such switch would not cause the 423 Component or any option thereunder to fail to comply with Section 423 of the Code.

12. Interest. No interest will accrue on the Contributions of a participant in the Plan, except as may be required by Applicable Laws, as determined by the Company, and if so required by the laws of a particular jurisdiction, shall, with respect to Offerings under the 423 Component, apply to all Participants in the relevant Offering under the 423 Component, except to the extent otherwise permitted by Treasury Regulations Section 1.423-2(f).

13. Stock.

(a) Subject to adjustment upon changes in capitalization of the Company as provided in Section 19 hereof, the maximum number of shares of Common Stock that will be made available for sale under the Plan will be 2,500,000 shares of Common Stock. For the avoidance of doubt, the number of shares of Common Stock reserved for issuance under the Plan shall be reduced by any shares of Common Stock actually issued and delivered under the Plan (including Cash Repurchases), but shall not be reduced by the number of shares of Common Stock referenced for purposes of determining the amount of any Cash Settlement. The shares may be authorized, but unissued, or reacquired Common Stock.

(b) Until the shares of Common Stock are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), a Participant will have only the rights of an unsecured creditor with respect to such shares, and no right to vote or receive dividends or any other rights as a stockholder will exist with respect to such shares.

(c) Shares of Common Stock to be delivered to a Participant under the Plan will be registered in the name of the Participant or, if required under Applicable Laws, in the name of the Participant and his or her spouse.

14. Administration. The Plan will be administered by the Board or a Committee appointed by the Board, which Committee will be constituted to comply with Applicable Laws. The Administrator will have full and exclusive discretionary authority to construe, interpret and apply the terms of the Plan, to delegate ministerial duties to any of the Company's employees, to designate separate Offerings under the Plan, to designate Subsidiaries and Affiliates as participating in the 423 Component or Non-423 Component, to determine eligibility, to adjudicate all disputed claims filed under the Plan and to establish such procedures that it deems necessary or advisable for the administration of the Plan (including, without limitation, to adopt such procedures, sub-plans, and appendices to the enrollment agreement as are necessary or appropriate to permit the participation in the Plan by employees who are foreign nationals or employed outside the U.S., the terms of which sub-plans and appendices may take precedence over other provisions of this Plan, with the exception of Section 13(a) hereof, but unless otherwise superseded by the terms of such sub-plan or appendix, the provisions of this Plan shall govern the operation of such sub-plan or appendix). Unless otherwise determined by the Administrator, the Eligible Employees eligible to participate in each sub-plan will participate in a separate Offering under the 423 Component, or if the terms would not qualify under the 423 Component, in the Non-423 Component, in either case unless such designation would cause the 423 Component to violate the requirements of Section 423 of the Code. Without limiting the generality of the foregoing, the Administrator is specifically authorized to adopt rules and procedures regarding eligibility to participate, the definition of Compensation, handling of Contributions, making of Contributions to the Plan (including, without limitation, in forms other than payroll deductions), establishment of bank or trust accounts to hold Contributions, payment of interest, conversion of local currency, obligations to pay payroll tax, determination of beneficiary designation requirements, withholding procedures and handling of stock certificates that vary with applicable local requirements. The Administrator also is authorized to determine that, to the extent permitted by Treasury Regulations Section 1.423-2(f), the terms of an option granted under the Plan or an Offering to citizens or residents of a non-U.S. jurisdiction will be less favorable than the terms of options granted under the Plan or the same Offering to employees resident solely in the U.S. Every finding, decision and determination made by the Administrator will, to the full extent permitted by law, be final and binding upon all parties.

15. Designation of Beneficiary.

(a) If permitted by the Administrator, a Participant may file a designation of a beneficiary who is to receive any shares of Common Stock and cash, if any, from the Participant's account under the Plan in the event of such Participant's death subsequent to an Exercise Date on which the option is exercised but prior to delivery to such Participant of such shares and cash. In addition, if permitted by the Administrator, a Participant may file a designation of a beneficiary who is to receive any cash from the Participant's account under the Plan in the event of such Participant's death prior to exercise of the option. If a Participant is married and the designated beneficiary is not the spouse, spousal consent will be required for such designation to be effective.

(b) Such designation of beneficiary may be changed by the Participant at any time by notice in a form determined by the Administrator. In the event of the death of a Participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such Participant's death, the Company will deliver such shares and/or cash to the executor or administrator of the estate of the Participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or relatives of the Participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

(c) All beneficiary designations will be in such form and manner as the Administrator may designate from time to time. Notwithstanding Sections 15(a) and (b) above, the Company and/or the Administrator may decide not to permit such designations by Participants in non-U.S. jurisdictions to the extent permitted by Treasury Regulations Section 1.423-2(f).

16. Transferability. Neither Contributions credited to a Participant's account nor any rights with regard to the exercise of an option or to receive shares of Common Stock under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in Section 15 hereof) by the Participant. Any such attempt at assignment, transfer, pledge or other disposition will be without effect, except that the Company may treat such act as an election to withdraw funds from an Offering Period in accordance with Section 10 hereof.

17. Use of Funds. The Company may use all Contributions received or held by it under the Plan for any corporate purpose, and the Company will not be obligated to segregate such Contributions except under Offerings or for Participants in the Non-423 Component for which Applicable Laws require that Contributions to the Plan by Participants be segregated from the Company's general corporate funds and/or deposited with an independent third party, provided that, if such segregation or deposit with an independent third party is required by Applicable Laws, it will apply to all Participants in the relevant Offering under the 423 Component, except to the extent otherwise permitted by Treasury Regulations Section 1.423-2(f). Until shares of Common Stock are issued, Participants will only have the rights of an unsecured creditor with respect to such shares.

18. Reports. Individual accounts will be maintained for each Participant in the Plan. Statements of account will be given to participating Eligible Employees at least annually, which statements will set forth the amounts of Contributions, the Purchase Price, the number of shares of Common Stock purchased and the remaining cash balance, if any.

19. Adjustments, Dissolution, Liquidation, Merger or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares of Common Stock or other securities of the Company, or other change in the corporate structure of the Company affecting the Common Stock occurs (other than any ordinary dividends or other ordinary distributions), the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of Common Stock that may be delivered under the Plan, the Purchase Price per share, the class and the number of shares of Common Stock covered by each option under the Plan that has not yet been exercised, and the numerical limits of Sections 7 and 13.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, any Offering Period then in progress will be shortened by setting a New Exercise Date, and will terminate immediately prior to the consummation of such proposed dissolution or liquidation, unless provided otherwise by the Administrator. The New Exercise Date will be before the date of the Company's proposed dissolution or liquidation. The Administrator will notify each Participant in writing or electronically, prior to the New Exercise Date, that the Exercise Date for the Participant's option has been changed to the New Exercise Date and that the Participant's option will be exercised automatically on the New Exercise Date, unless prior to such date the Participant's participation in the Plan has terminated as provided in Sections 10 and 11.

(c) Merger or Change in Control. In the event of a merger or Change in Control, each outstanding option will be assumed or an equivalent option substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the option, the Offering Period with respect to which such option relates will be shortened by setting a New Exercise Date on which such Offering Period shall end. The New Exercise Date will occur before the date of the Company's proposed merger or Change in Control. The Administrator will notify each Participant in writing or electronically prior to the New Exercise Date, that the Exercise Date for the Participant's option has been changed to the New Exercise Date and that the Participant's option will be exercised automatically on the New Exercise Date, unless prior to such date the Participant's participation in the Plan has terminated as provided in Sections 10 and 11.

20. Amendment or Termination.

(a) The Administrator, in its sole discretion, may amend, suspend, or terminate the Plan, or any part thereof, at any time and for any reason. If the Plan is terminated, the Administrator, in its discretion, may elect to terminate all outstanding Offering Periods either immediately or upon completion of the purchase of shares of Common Stock on the next Exercise Date (which may be sooner than originally scheduled, if determined by the Administrator in its discretion), or may elect to permit Offering Periods to expire in accordance with their terms (and subject to any adjustment pursuant to Section 19). If the Offering Periods are terminated prior to expiration, all amounts then credited to Participants' accounts that have not been used to purchase shares of Common Stock will be returned to the Participants (without interest thereon, except as otherwise required under Applicable Laws, as further set forth in Section 12 hereof) as soon as administratively practicable.

(b) Without stockholder consent and without limiting Section 20(a), the Administrator will be entitled to change the Offering Periods and Purchase Periods, designate separate Offerings, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange rate applicable to amounts withheld in a currency other than U.S. dollars, permit Contributions in excess of the amount designated by a Participant in order to adjust for delays or mistakes in the Company's processing of properly completed Contribution elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with Contribution amounts, and establish such other limitations or procedures as the Administrator determines in its sole discretion advisable that are consistent with the Plan.

(c) In the event the Administrator determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Administrator may, in its discretion and, to the extent necessary or desirable, modify, amend or terminate the Plan to reduce or eliminate such accounting consequence including, but not limited to:

(i) amending the Plan to conform with the safe harbor definition under the Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto), including with respect to an Offering Period underway at the time;

(ii) altering the Purchase Price for any Offering Period or Purchase Period including an Offering Period or Purchase Period underway at the time of the change in Purchase Price;

(iii) shortening any Offering Period or Purchase Period by setting a New Exercise Date, including an Offering Period or Purchase Period underway at the time of the Administrator action;

(iv) reducing the maximum percentage of Compensation a Participant may elect to set aside as Contributions; and

(v) reducing the maximum number of shares of Common Stock a Participant may purchase during any Offering Period or Purchase Period.

Such modifications or amendments will not require stockholder approval or the consent of any Plan Participants.

21. Notices. All notices or other communications by a Participant to the Company under or in connection with the Plan will be deemed to have been duly given when received in the form and manner specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

22. Conditions Upon Issuance of Shares. Shares of Common Stock will not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such shares pursuant thereto will comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares may then be listed, and will be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an option, the Company may require the person exercising such option to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

23. Section 409A. The Plan is intended to be exempt from the application of Section 409A, and, to the extent not exempt, is intended to comply with Section 409A and any ambiguities herein will be interpreted to so be exempt from, or comply with, Section 409A. In furtherance of the foregoing and notwithstanding any provision in the Plan to the contrary, if the Administrator determines that an option granted under the Plan may be subject to Section 409A or that any provision in the Plan would cause an option under the Plan to be subject to Section 409A, the Administrator may amend the terms of the Plan and/or of an outstanding option granted under the Plan, or take such other action the Administrator determines is necessary or appropriate, in each case, without the Participant's consent, to exempt any outstanding option or future option that may be granted under the Plan from or to allow any such options to comply with Section 409A, but only to the extent any such amendments or action by the Administrator would not violate

Section 409A. Notwithstanding the foregoing, the Company and any of its Parent or Subsidiaries shall have no liability, responsibility, or obligation to reimburse, indemnify, or hold harmless a Participant or any other party if the option to purchase Common Stock under the Plan that is intended to be exempt from or compliant with Section 409A is not so exempt or compliant or for any action taken by the Administrator with respect thereto. The Company makes no representation that the option to purchase Common Stock under the Plan is compliant with Section 409A.

24. Term of Plan. The Plan will become effective upon approval by the stockholders of the Company following its adoption by the Board (the date of such stockholder approval, the "Effective Date"). It will continue in effect for a term of ten (10) years from the date adopted by the Board, unless terminated earlier under Section 20.

25. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

26. Governing Law. The Plan shall be governed by, and construed in accordance with, the laws of the State of California (except its choice-of-law provisions).

27. No Right to Employment. Participation in the Plan by a Participant shall not be construed as giving a Participant the right to be retained as an employee of the Company or a Subsidiary or Affiliate, as applicable. Furthermore, the Company or a Subsidiary or Affiliate may dismiss a Participant from employment at any time, free from any liability or any claim under the Plan.

28. Severability. If any provision of the Plan is or becomes or is deemed to be invalid, illegal, or unenforceable for any reason in any jurisdiction or as to any Participant, such invalidity, illegality or unenforceability shall not affect the remaining parts of the Plan, and the Plan shall be construed and enforced as to such jurisdiction or Participant as if the invalid, illegal or unenforceable provision had not been included.

29. Compliance with Applicable Laws. The terms of this Plan are intended to comply with all Applicable Laws and will be construed accordingly.

30. Automatic Transfer to Low Price Offering Period. To the extent permitted by Applicable Laws, if the Fair Market Value of a share of Common Stock on any Exercise Date in an Offering Period is lower than the Fair Market Value of a share of Common Stock on the Enrollment Date of such Offering Period, then all Participants in such Offering Period will be withdrawn automatically from such Offering Period immediately after the exercise of their option on such Exercise Date and re-enrolled automatically in the immediately following Offering Period as of the first day thereof at the applicable Contribution rate in effect for the Participant.

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**Exhibit 31.1**

**CERTIFICATION OF THE PRESIDENT AND CHIEF EXECUTIVE OFFICER
PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Dr. HP Jin, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Telenav, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2020

By: /s/ Dr. HP JIN
Dr. HP Jin
President and Chief Executive Officer

**Exhibit 31.2**

**CERTIFICATION OF THE CHIEF FINANCIAL OFFICER
PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Adeel Manzoor, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Telenav, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

| | | |
|---|---|---|
| Date: May 8, 2020 | By: | /s/ ADEEL MANZOOR |
| | | Adeel Manzoor |
| | | Chief Financial Officer |

**Exhibit 32.1**

**CERTIFICATION OF PRESIDENT AND CHIEF EXECUTIVE OFFICER**
**PURSUANT TO 18 U.S.C. § 1350, AS ADOPTED PURSUANT TO SECTION 906**
**OF THE SARBANES-OXLEY ACT OF 2002**

I, Dr. HP Jin, the president and chief executive officer of Telenav, Inc. (the “Company”), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the three months ended March 31, 2020 (the “Report”), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

| | | |
|---|---|---|
| Date: May 8, 2020 | By: | /s/ Dr. HP JIN |
| | | Dr. HP Jin |
| | | President and Chief Executive Officer |

**Exhibit 32.2**

**CERTIFICATION OF CHIEF FINANCIAL OFFICER**
**PURSUANT TO 18 U.S.C. § 1350, AS ADOPTED PURSUANT TO SECTION 906**
**OF THE SARBANES-OXLEY ACT OF 2002**

I, Adeel Manzoor, the chief financial officer of Telenav, Inc. (the "Company"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the three months ended March 31, 2020 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

| | | |
|---|---|---|
| Date: May 8, 2020 | By: | /s/ ADEEL MANZOOR |
| | | Adeel Manzoor |
| | | Chief Financial Officer |