** Online Merchants**

**Labor Market Information Report**

**West Valley College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

April 2019

# Recommendation

Based on all available data, there appears to be a significant undersupply of Online Merchants compared to the demand for this occupation in the Bay region and in the Silicon Valley sub-region (Santa Clara County.) There is a projected annual gap of 5,023 students in the Bay region and 1,251 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0709.10 - E-Commerce (Technology emphasis) in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at West Valley College and in the region.

# Introduction

This report profiles Online Merchants in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at West Valley College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Online Merchants (13-1199.06), therefore, the data shown in Tables 1 and 2 is for Business Operations Specialists, All Other (at the six digit SOC level) and likely overstates demand for Online Merchants. Tables 3, 4, 6, 9, and 10 use job postings data from Burning Glass at the eight-digit SOC Code level for Online Merchants (13-1199.06).

|  |
| --- |
| * **Business Operations Specialists, All Other (SOC 13-1199):** All business operations specialists not listed separately.
 |
| Entry-Level Educational Requirement: Bachelor's degree |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 23% |

# Occupational Demand

**Table 1. Employment Outlook for Online Merchants in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation  | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Business Operations Specialists, All Other | 48,417 | 51,417 | 3,000  | 6% | 25,118 | 5,024 | $22.59  | $40.50  |

*Source: EMSI 2019.1*

**Bay Region** includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

**Table 2. Employment Outlook for Online Merchants in Silicon Valley Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation  | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Business Operations Specialists, All Other | 11,604 | 12,530 | 926  | 8% | 6,257 | 1,251 | $22.12  | $42.99  |

*Source: EMSI 2019.1*

**Silicon Valley Sub-Region** includes Santa Clara County

### Job Postings in Bay Region and Silicon Valley Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (March 2018 - Feb 2019)**

| Occupation | Bay Region | Silicon Valley |
| --- | --- | --- |
|  Online Merchants (13-1199.06) | 1,099 | 280 |

*Source: Burning Glass*

**Table 4. Top Job Titles for Online Merchants for latest 12 months (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | Silicon Valley | Common Title | Bay | Silicon Valley |
| Sales Associate | 64 | 45 | E-Commerce Sales Program Manager | 11 | 4 |
| Business Analyst | 42 | 17 | Head, E-Commerce Sales | 11 | 1 |
| E-Commerce Sales Manager | 37 | 6 | Data Analyst | 10 | 5 |
| E-Commerce Sales Product Manager | 30 | 8 | E-Commerce Sales Product Associate | 10 | 1 |
| Product Manager, E-Commerce Sales | 30 | 9 | E-Commerce Sales Associate | 9 | 2 |
| Merchandiser | 25 | 5 | E-Commerce Sales Engineer | 9 | 2 |
| E-Commerce Sales Specialist | 21 | 5 | Copywriter | 8 | 4 |
| E-Commerce Sales Coordinator | 18 | 5 | Sales Representative | 8 | 2 |
| Director, E-Commerce Sales | 17 | 1 | Administrative Assistant | 7 | 1 |
| Retail Manager | 15 | 5 | E-Commerce Department | 7 | 3 |
| E-Commerce Sales Analyst | 14 | 11 | E-Commerce Sales Merchandise Assistant | 7 | 1 |
| Senior Product Manager, E-Commerce Sales | 14 | 5 | Marketing Analyst | 7 | 0 |
| Consultant, E-Commerce Sales | 12 | 5 | Operations Specialist | 7 | 1 |
| Merchant | 12 | 2 | Vice President, E-Commerce Sales | 7 | 0 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Online Merchants in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2017) | Jobs in Industry (2022) | % Change (2017-22) | % in Industry (2017) |
| Federal Government, Civilian, Excluding Postal Service (901199) | 4,225 | 4,159 |  (2%) | 8.5% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 3,026 | 3,171 | 9% | 6.5% |
| Local Government, Excluding Education and Hospitals (903999) | 2,049 | 2,061 | 5% | 4.2% |
| Custom Computer Programming Services (541511) | 1,768 | 1,799 | 13% | 3.7% |
| Colleges, Universities, and Professional Schools (State Government) (902612) | 1,722 | 1,734 |  (2%) | 3.6% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 1,608 | 1,682 | 34% | 3.5% |
| State Government, Excluding Education and Hospitals (902999) | 1,282 | 1,301 | 4% | 2.7% |
| Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) (541715) | 1,032 | 1,078 |  (3%) | 2.2% |
| Computer Systems Design Services (541512) | 1,068 | 1,049 | 7% | 2.2% |
| Colleges, Universities, and Professional Schools (611310) | 1,008 | 1,014 | 6% | 2.1% |
| Software Publishers (511210) | 894 | 935 | 21% | 1.9% |
| Administrative Management and General Management Consulting Services (541611) | 862 | 902 | 24% | 1.9% |
| Other Scientific and Technical Consulting Services (541690) | 740 | 712 |  (9%) | 1.5% |
| Natural Gas Distribution (221210) | 739 | 699 |  (9%) | 1.4% |
| General Medical and Surgical Hospitals (622110) | 692 | 687 |  (4%) | 1.4% |
| Research and Development in Biotechnology (except Nanobiotechnology) (541714) | 619 | 648 | 40% | 1.3% |
| Engineering Services (541330) | 613 | 617 | 9% | 1.3% |
| Data Processing, Hosting, and Related Services (518210) | 533 | 574 | 35% | 1.2% |
| Wired Telecommunications Carriers (517311) | 600 | 553 |  (19%) | 1.1% |
| Office Administrative Services (561110) | 625 | 552 |  (16%) | 1.1% |
| Temporary Help Services (561320) | 548 | 546 | 5% | 1.1% |
| Grantmaking Foundations (813211) | 485 | 507 | 25% | 1.0% |

*Source: EMSI 2019.1*

**Table 6. Top Employers Posting Jobs by Online Merchants in Bay Region and Silicon Valley Sub-Region (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Silicon Valley |
| Autonation | 65 | Itouchless | 8 | Autonation | 45 |
| Redolent, Inc | 33 | Safeway Incorporated | 8 | Redolent, Inc | 23 |
| Aramark | 27 | Sony Electronics Incorporated | 8 | Bayone Solutions | 11 |
| Phalita Com | 22 | Autodesk Incorporated | 6 | Apple Inc. | 9 |
| Levi Strauss | 17 | Charlotte Russe Holding Incorporated | 5 | Phalita Com | 8 |
| Bayone Solutions | 15 | Clorox Company | 5 | Salvation Army | 6 |
| Walmart / Sam's | 15 | Ipsy | 5 | Wipro | 5 |
| Williams-Sonoma | 15 | JP Morgan Chase Company | 5 | Centurylink | 4 |
| Facebook | 14 | Minted | 5 | Phalita Solutions | 4 |
| Goodwill | 13 | Morphe | 5 | Symantec | 4 |
| The Realreal | 13 | Phalita Solutions | 5 | Talent Space Inc | 4 |
| Wipro | 12 | Rodan Fields Llc | 5 | Albertsons Companies | 3 |
| Talent Space Inc | 11 | Sephora | 5 | Cisco Systems Incorporated | 3 |
| Apple Inc. | 10 | Bmw San Francisco | 4 | Flexton Incorporated | 3 |
| Salvation Army | 10 | Centurylink | 4 | Google Inc. | 3 |
| Albertsons Companies | 9 | Diligente Technologies | 4 | Shoe Palace | 3 |
| Albertsons | 8 | Exxact Corporation | 4 | Timetec International Inc | 3 |

*Source: Burning Glass*

# Educational Supply

There is one community college in the Bay Region issuing one award on average annually (last 3 years) on TOP 0709.10 - E-Commerce (Technology emphasis). There are no colleges in the Silicon Valley Sub-Region issuing awards on this TOP code.

**Table 7. Awards on TOP 0709.10 - E-Commerce (Technology emphasis) in the Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Total |
| San Jose City College | Silicon Valley | 23 |  |  | 0 |
| Santa Rosa | North Bay | n/a |  | 1 | 1 |
| **Total Bay Region** |  | **0** | **1** | **1** |
| **Total Silicon Valley Sub-Region** |  | **0** | **0** | **0** |

# *Source: IPEDS, Data Mart and Launchboard*

NOTE: Headcount of students who took one or more courses is for 2016-17. The annual average for awards is 2014-17 unless there are only awards in 2016-17. The annual average for other postsecondary is for 2013-16.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 5,024 annual openings for Online Merchants and one annual (3-year average) award for an annual undersupply of 5,023 students. In the Silicon Valley Sub-Region, there is also a gap with 1,251 annual openings and no annual (3-year average) awards for an annual undersupply of 1,251 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0709.10 - E-Commerce (Technology emphasis)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay (All CTE Programs) | West Valley College (All CTE Programs) | State (0709.10) | Bay (0709.10) | Silicon Valley (0709.10) | West Valley College (0709.10) |
| % Employed Four Quarters After Exit | 74% | 68% | 63% | n/a | n/a | n/a |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $9,771 | $9,835 | n/a | n/a | n/a |
| Median % Change in Earnings | 46% | 41% | 78% | n/a | n/a | n/a |
| % of Students Earning a Living Wage | 63% | 57% | 59% | n/a | n/a | n/a |

*Source: Launchboard Pipeline (version available on 3/28/19)*

# Skills and Education

**Table 9. Top Skills for Online Merchants in Bay Region (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| E-Commerce | 1,026 | Web Analytics | 90 | Software Development | 46 |
| Product Management | 247 | Quality Assurance and Control | 79 | Stakeholder Management | 45 |
| Merchandising | 224 | Google Analytics | 76 | Customer Acquisition | 44 |
| Retail Industry Knowledge | 207 | Business Analysis | 73 | Data Entry | 44 |
| Project Management | 192 | Scrum | 62 | Order Management | 44 |
| Customer Service | 182 | Social Media | 61 | Process Improvement | 44 |
| Budgeting | 173 | Sales Goals | 59 | Agile Development | 42 |
| Sales | 173 | A/B testing | 58 | Email Marketing | 42 |
| Key Performance Indicators (KPIs) | 129 | Atlassian JIRA | 57 | Business-to-Business | 41 |
| Product Development | 112 | Content Management | 57 | Facebook | 41 |
| Customer Contact | 107 | Business Process | 56 | Marketing | 41 |
| Digital Marketing | 102 | Data Analysis | 56 | Consumer Research | 40 |
| Scheduling | 97 | Business Strategy | 52 | Adobe Photoshop | 39 |
| Product Sales | 91 | Program Management | 49 | Java | 39 |
| SQL | 90 | Market Strategy | 47 | Business Development | 38 |

*Source: Burning Glass*

**Table 10. Education Requirements for Online Merchants in Bay Region**

Note: 41% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

|  |  |
| --- | --- |
| Education (minimum advertised) | Latest 12 Mos. Postings |
| High school or vocational training | 80 (12%) |
| Associate Degree | 18 (3%) |
| Bachelor’s Degree or Higher | 551 (85%) |

*Source: Burning Glass*

# Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

# Sources

O\*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard [www.calpassplus.org/Launchboard/](http://www.calpassplus.org/Launchboard/)

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

Living Insight Center for Community Economic Development

Chancellor’s Office MIS system

# Contacts

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