** Digital Marketing Occupations**

**Labor Market Information Report**

**Foothill College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

July 2019

# Recommendation

Based on all available data, there appears to be a significant undersupply of Digital Marketing workers compared to the demand for this cluster of occupations in the Bay region and in the Silicon Valley sub-region (Santa Clara County). There is a projected annual gap of about 8,345 students in the Bay region and 3,029 students in the Silicon Valley Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0509.70 - E-Commerce (Business 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 Foothill College and in the region.

# Introduction

This report profiles Digital Marketing Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new program at Foothill College.

|  |
| --- |
| * **Marketing Managers (SOC 11-2021):** Plan, direct, or coordinate marketing policies and programs, such as determining the demand for products and services offered by a firm and its competitors, and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services.
 |
| Entry-Level Educational Requirement: Bachelor's degree |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 22% |
| * **Advertising and Promotions Managers (SOC 11-2011):** Plan, direct, or coordinate advertising policies and programs or produce collateral materials, such as posters, contests, coupons, or give-aways, to create extra interest in the purchase of a product or service for a department, an entire organization, or on an account basis.
 |
| *Entry-Level Educational Requirement: Bachelor's degree* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 15%* |
| * **Advertising Sales Agents (SOC 41-3011):** Sell or solicit advertising space, time, or media in publications, signage, TV, radio, or Internet establishments or public spaces.
 |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: Moderate-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 27%* |
| * **Public Relations and Fundraising Managers** **(SOC 11-2031):** Plan, direct, or coordinate activities designed to create or maintain a favorable public image or raise issue awareness for their organization or client; or if engaged in fundraising, plan, direct, or coordinate activities to solicit and maintain funds for special projects or nonprofit organizations.
 |
| Entry-Level Educational Requirement: Bachelor's *degree* |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 10*%* |
| * **Market Research Analysts and Marketing Specialists (SOC 13-1161**): Research market conditions in local, regional, or national areas, or gather information to determine potential sales of a product or service, or create a marketing campaign. May gather information on competitors, prices, sales, and methods of marketing and distribution.
 |
| Entry-Level Educational Requirement: Bachelor's *degree* |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 14*%* |

# Occupational Demand

**Table 1. Employment Outlook for Digital Marketing Occupations 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 |
| Marketing Managers | 16,196 | 17,673 | 1,477  | 9% | 8,469 | 1,694 | $45.08  | $79.63  |
| Market Research Analysts and Marketing Specialists | 38,559 | 44,533 | 5,974  | 15% | 25,484 | 5,097 | $20.63  | $40.24  |
| Advertising and Promotions Managers | 1,360 | 1,443 | 83  | 6% | 799 | 160 | $32.27  | $53.84  |
| Public Relations and Fundraising Managers | 3,408 | 3,686 | 278  | 8% | 1,672 | 334 | $40.04  | $62.57  |
| Advertising Sales Agents | 6,195 | 7,264 | 1,069  | 17% | 5,309 | 1,062 | $13.85  | $28.60  |
| **Total** | **65,718** | **74,599** | **8,881**  | **14%** | **41,733** | **8,346** | **$27.26**  | **$50.29**  |

*Source: EMSI 2019.2*

**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 Digital Marketing Occupations 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 |
| Marketing Managers | 5,793 | 6,249 | 456  | 8% | 2,991 | 612 | $52.16  | $86.84  |
| Market Research Analysts and Marketing Specialists | 14,140 | 16,020 | 1,880  | 13% | 9,171 | 1,890 | $15.90  | $48.09  |
| Advertising and Promotions Managers | 229 | 254 | 25  | 11% | 148 | 31 | $32.30  | $53.00  |
| Public Relations and Fundraising Managers | 1,128 | 1,232 | 104  | 9% | 581 | 119 | $41.51  | $63.39  |
| Advertising Sales Agents | 1,851 | 2,339 | 488  | 26% | 1,771 | 379 | $13.04  | $27.37  |
| **TOTAL** | **23,142** | **26,095** | **2,952**  | **13%** | **14,662** | **3,029** | **$26.16**  | **$56.93**  |

*Source: EMSI 2019.2*

**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 (May 2018 - April 2019)**

| Occupation | Bay Region | Silicon Valley |
| --- | --- | --- |
|  Marketing Managers | 37,297 | 11,911 |
|  Market Research Analysts and Marketing Specialists | 13,919 | 3,814 |
|  Public Relations and Fundraising Managers | 6,348 | 1,580 |
|  Advertising Sales Agents | 374 | 82 |
|  Advertising and Promotions Managers | 334 | 54 |
|  Green Marketers | 52 | 10 |
|  **Total** | **58,324** | **17,451** |

*Source: Burning Glass*

**Table 4a. Top Job Titles for Digital Marketing Occupations for latest 12 months (May 2018 - April 2019) Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Bay | Common Title | Bay |
| Marketing Manager | 7,428 | Director, Product Management | 387 |
| Product Manager | 3,868 | Technical Product Manager | 385 |
| Product Marketing Manager | 3,091 | Director of Communications | 375 |
| Director of Marketing | 2,351 | Sales Operations Analyst | 370 |
| Senior Product Manager | 1,857 | Public Relations Manager | 344 |
| Marketing Specialist | 1,746 | Shopper | 340 |
| Marketing Associate | 1,633 | Development Associate | 336 |
| Marketing Coordinator | 1,505 | Marketing Operations Manager | 321 |
| Communications Manager | 1,345 | Email Marketing Manager | 281 |
| Digital Marketing Manager | 859 | Vice President of Marketing | 280 |
| Marketing Analyst | 756 | Technical Sourcer | 270 |
| Social Media Manager | 682 | Operations Specialist | 264 |
| Marketing Assistant | 642 | Social Media Specialist | 262 |
| Community Manager | 499 | Director of Development | 242 |

**Table 4.b Top Job Titles for Digital Marketing Occupations for latest 12 months (May 2018 - April 2019) Silicon Valley Sub-Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Silicon Valley | Common Title | Silicon Valley |
| Marketing Manager | 2,180 | Social Media Manager | 155 |
| Product Manager | 1,262 | Director, Product Management | 149 |
| Product Marketing Manager | 1,192 | Marketing Assistant | 136 |
| Director of Marketing | 705 | Software Manager | 115 |
| Marketing Specialist | 685 | Operations Specialist | 106 |
| Senior Product Manager | 617 | Marketing Operations Manager | 103 |
| Communications Manager | 355 | Director of Communications | 98 |
| Marketing Coordinator | 342 | Public Relations Manager | 93 |
| Marketing Associate | 298 | Social Media Specialist | 78 |
| Digital Marketing Manager | 243 | Technical Sourcer | 77 |
| Marketing Analyst | 184 | Principal Product Manager | 74 |
| Sales Operations Analyst | 176 | Marketing Communications Manager | 70 |
| Community Manager | 157 | Security Manager | 67 |
| Technical Product Manager | 155 | Market Research Analyst | 56 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Digital Marketing Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2018) | Jobs in Industry (2022) | % Change (2018-22) | % in Industry (2018) |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 8,445 | 11,383 | 34.8% | 12.5% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 4,649 | 5,015 | 7.9% | 6.9% |
| Electronic Computer Manufacturing (334111) | 3,257 | 3,492 | 7.2% | 4.8% |
| Custom Computer Programming Services (541511) | 3,224 | 3,676 | 14.0% | 4.8% |
| Software Publishers (511210) | 3,025 | 3,605 | 19.2% | 4.5% |
| Administrative Management and General Management Consulting Services (541611) | 2,422 | 2,927 | 20.9% | 3.6% |
| Advertising Agencies (541810) | 2,014 | 2,068 | 2.7% | 3.0% |
| Computer Systems Design Services (541512) | 1,838 | 2,059 | 12.0% | 2.7% |
| Other Scientific and Technical Consulting Services (541690) | 1,726 | 1,644 |  (4.8%) | 2.6% |
| Marketing Consulting Services (541613) | 1,162 | 1,392 | 19.8% | 1.7% |
| Data Processing, Hosting, and Related Services (518210) | 1,145 | 1,475 | 28.8% | 1.7% |
| Public Relations Agencies (541820) | 992 | 1,026 | 3.4% | 1.5% |
| Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) (541715) | 869 | 816 |  (6.1%) | 1.3% |

*Source: EMSI 2019.2*

**Table 6. Top Employers Posting Digital Marketing Occupations in Bay Region and Silicon Valley Sub-Region (May 2018 - April 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Silicon Valley |
| Facebook | 1,265 | Workday, Inc | 212 | Google Inc. | 534 |
| Google Inc. | 739 | Linkedin Limited | 187 | Cisco Systems Incorporated | 473 |
| Walmart / Sam's | 627 | eBay | 182 | Apple Inc. | 376 |
| Salesforce | 623 | Vmware Incorporated | 167 | Intuit | 320 |
| Cisco Systems Incorporated | 582 | Instacart | 166 | Servicenow | 250 |
| Uber | 441 | Twitter | 163 | Paypal | 213 |
| Apple Inc. | 383 | Intel Corporation | 163 | Adobe Systems | 199 |
| Gap Inc. | 366 | IBM | 157 | Stanford University | 184 |
| Intuit | 343 | University California | 148 | Amazon | 164 |
| Visa | 336 | Kaiser Permanente | 148 | Vmware Incorporated | 163 |
| Adobe Systems | 325 | Genentech | 135 | Intel Corporation | 161 |
| Amazon | 304 | Hewlett-Packard | 134 | Walmart / Sam's | 151 |
| Servicenow | 290 | Sephora | 133 | Facebook | 137 |
| Shipt | 256 | Gilead Sciences | 129 | Hewlett-Packard | 127 |
| Oracle | 254 | Dell | 129 | Palo Alto Networks | 119 |
| Paypal | 241 | Splunk, Inc | 122 | eBay | 118 |
| Stanford University | 228 | Juul Labs | 121 | Dell | 111 |

*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 0509.70 - E-Commerce (Business emphasis). There are no colleges in the Silicon Valley Sub-Region issuing awards on this TOP code.

**Table 7. Awards on TOP 0509.70 - E-Commerce (Business emphasis) in the Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Associates | Certificates | Noncredit | Total |
| **Santa Rosa** | North Bay | 0 | 1 | 0 | 1 |
| **Total Bay Region** | **0** | **1** | **0** | **1** |
| **Total Silicon Valley Sub-Region** | **0** | **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 8,346 annual openings for the Digital Marketing occupational cluster and one annual (3-year average) award for an annual undersupply of 8,345 students. In the Silicon Valley Sub-Region, there is also a gap with 3,029 annual openings and no annual awards for an annual undersupply of 3,029 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0509.70 - E-Commerce (Business emphasis)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay (All CTE Programs) | Foothill College (All CTE Programs) | State (0509.70) | Bay (0509.70) | Silicon Valley (0509.70) | Foothill College (0509.70) |
| % Employed Four Quarters After Exit | 74% | 77% | 67% | n/a | n/a | n/a |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $15,301 | $7,947 | n/a | n/a | n/a |
| Median % Change in Earnings | 46% | 82% | 54% | n/a | n/a | n/a |
| % of Students Earning a Living Wage | 63% | 76% | 45% | n/a | n/a | n/a |

*Source: Launchboard Pipeline (version available on 6/28/19)*

# Skills, Certifications and Education

**Table 9. Top Skills for Digital Marketing Occupations in Bay Region (May 2018 - April 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Marketing | 20,023 | Business Development | 5,077 | Stakeholder Management | 2,738 |
| Product Management | 19,665 | Facebook | 4,565 | Data Science | 2,712 |
| Project Management | 11,773 | Sales | 4,404 | Customer Contact | 2,675 |
| Product Marketing | 10,695 | Market Research | 4,204 | Marketing Programs | 2,651 |
| Social Media | 10,249 | SQL | 4,175 | Email Marketing | 2,608 |
| Budgeting | 9,767 | Thought Leadership | 4,118 | Content Marketing | 2,586 |
| Product Development | 8,183 | Product Sales | 3,720 | Articulating Value Propositions | 2,567 |
| Market Strategy | 7,028 | E-Commerce | 3,609 | Quality Assurance and Control | 2,486 |
| Marketing Management | 6,193 | Scheduling | 3,597 | Market Planning | 2,477 |
| Business-to-Business | 6,160 | Competitive Analysis | 3,591 | Content Development | 2,387 |
| Digital Marketing | 6,156 | Content Management | 3,010 | Marketo | 2,380 |
| Salesforce | 5,837 | Adobe Photoshop | 2,913 | Strategic Planning | 2,319 |
| Key Performance Indicators  | 5,564 | Google Analytics | 2,824 | Marketing Communications | 2,311 |
| Software as a Service (SaaS) | 5,469 | Experiments | 2,785 | Marketing Strategy Dev | 2,293 |
| Customer Service | 5,150 | Data Analysis | 2,759 | Description, Demo of Products | 2,265 |

*Source: Burning Glass*

**Table 10. Certifications for Digital Marketing Occupations in the Bay Region (May 2018 - April 2019)**

Note: 96% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

|  |  |  |  |
| --- | --- | --- | --- |
| Certification | Postings | Certification | Postings |
| Driver's License | 1,065 | Certified Fund Raising Executive (CFRE) | 35 |
| Project Management Certification | 345 | Investment Advisor | 28 |
| Project Management Professional (PMP) | 182 | Certified Scrum Product Owner (CSPO) | 28 |
| Certified Public Accountant (CPA) | 103 | Security Clearance | 26 |
| Real Estate Certification | 81 | Cisco Certified Network Associate (CCNA) | 25 |
| Certified ScrumMaster (CSM) | 63 | Food Handler Certification | 23 |
| Google AdWords Training | 60 | Agile Certification | 23 |
| IT Infrastructure Library (ITIL) Certification | 55 | ITIL Certification | 22 |
| Series 7 | 50 | Six Sigma Certification | 21 |
| Cisco Certified Internetwork Expert (CCIE) | 39 | Chartered Property Casualty Underwriter  | 21 |
| Certified Salesforce Administrator | 38 | Leadership In Energy And Environmental Design (LEED) Certified | 20 |
| Certified Information Systems Security Professional  | 35 | First Aid CPR AED | 20 |

*Source: Burning Glass*

**Table 11. Education Requirements for Digital Marketing Occupations in Bay Region**

Note: 37% 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 | Percent 12 Mos. Postings |
| High school or vocational training | 641 | 2% |
| Associate Degree | 590 | 2% |
| Bachelor’s Degree or Higher | 33,084 | 96% |

*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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