**** **Digital Marketing Occupations**

**Labor Market Information Report**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

May 2018

# 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 East Bay sub-region (Alameda and Contra Costa Counties) The annual gap is about 9,160 students annually in the Bay region and 2,125 in the East Bay.

However, three occupations selected by Diablo Valley College when submitting their LMI request are above middle-skill occupations. When only the demand for the two middle-skill occupations is used and compared to supply, the undersupply in the Bay region is still significant at 3,939. In the East Bay sub-region the undersupply decreases to 1,262 when only the demand for the two middle-skill occupations is used and compared to supply.

This report also provides student outcomes data on employment and earnings for programs on TOP 0509.00 - Marketing and Distribution in the state and region. It is recommended that this 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 sub-region, region and state, as well as to outcomes across all CTE programs at Diablo Valley College and in the region.

# Introduction

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

|  |
| --- |
| * **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: 16%* |
|  |
| * **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: 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%* |
|  |
| * **Sales Reps, Wholesale and Manufacturing, Except Technical and Scientific Products (SOC 41-4012***): Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.* |
| *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: 31%* |

# 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 | Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Advertising and Promotions Managers | 1,226 | 1,333 | 108 | 9% | 755 | 151 | $27.37 | $47.72 |
| Public Relations and Fundraising Managers | 2,710 | 2,944 | 234 | 9% | 1,350 | 270 | $36.82 | $62.39 |
| Market Research Analysts and Marketing Specialists | 37,158 | 42,350 | 5,193 | 14% | 24,011 | 4,802 | $22.88 | $40.06 |
| Advertising Sales Agents | 4,473 | 5,034 | 561 | 13% | 3,608 | 722 | $12.77 | $27.73 |
| Sales Reps, Wholesale and Manufacturing, Except Technical and Scientific Products | 31,227 | 33,104 | 1,877 | 6% | 18,125 | 3,625 | $15.72 | $29.44 |
| **Total** | **76,793** | **84,765** | **7,972** | **10%** | **47,848** | **9,570** | **$19.95** | **$35.93** |

*Source: EMSI 2018.2*

**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 East Bay Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Advertising and Promotions Managers | 218 | 232 | 14 | 6% | 128 | 26 | $23.37 | $40.17 |
| Public Relations and Fundraising Managers | 640 | 679 | 39 | 6% | 299 | 60 | $32.15 | $59.07 |
| Market Research Analysts and Marketing Specialists | 6,355 | 7,067 | 712 | 11% | 3,886 | 777 | $20.14 | $34.70 |
| Advertising Sales Agents | 830 | 858 | 28 | 3% | 570 | 114 | $11.57 | $24.42 |
| Sales Reps, Wholesale and Manufacturing, Except Technical and Scientific Products | 10,559 | 10,963 | 404 | 4% | 5,844 | 1,169 | $15.28 | $28.70 |
| **TOTAL** | **18,602** | **19,799** | **1,197** | **6%** | **10,727** | **2,145** | **$17.45** | **$31.74** |

*Source: EMSI 2018.2*

**East Bay Sub-Region** includes Alameda and Contra Costa Counties

### Job Postings in Bay Region and East Bay Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (May 2017 - April 2018)**

|  |  |  |
| --- | --- | --- |
| Occupation | Bay Region | East Bay |
| Sales Reps, Wholesale & Manufacturing, Except Tech & Scientific Products (41-4012.00) | 25,042 | 5,989 |
| Market Research Analysts and Marketing Specialists (13-1161.00) | 7,386 | 1,193 |
| Public Relations and Fundraising Managers (11-2031.00) | 3,986 | 716 |
| Advertising Sales Agents (41-3011.00) | 225 | 52 |
| Advertising and Promotions Managers (11-2011.00) | 221 | 34 |
| Green Marketers (11-2011.01) | 30 | 5 |
| **Total** | **36,890** | **7,989** |

*Source: Burning Glass*

**Table 4. Top Job Titles for Digital Marketing Occupations for latest 12 months (May 2017 - April 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | East Bay | Common Title | Bay | East Bay |
| Account Manager | 4,380 | 846 | Director of Communications | 240 | 46 |
| Sales Representative | 3,269 | 966 | Community Manager | 218 | 19 |
| Sales Specialist | 1,038 | 194 | Sales Professional | 212 | 79 |
| Sales Consultant | 1,032 | 260 | Sales Account Manager | 199 | 38 |
| Account Executive | 910 | 193 | Public Relations Manager | 194 | 8 |
| Marketing Specialist | 892 | 159 | Sales Operations Analyst | 189 | 13 |
| Communications Manager | 837 | 113 | Sales Advisor | 178 | 77 |
| Marketing Coordinator | 742 | 165 | Sales Manager | 175 | 44 |
| Inside Sales Representative | 729 | 259 | Business Development Representative | 155 | 38 |
| Marketing Associate | 657 | 129 | Inside Sales | 151 | 61 |
| Outside Sales Representative | 630 | 235 | Email Marketing Specialist | 144 | 54 |
| Account Representative | 512 | 187 | Bilingual Sales/Agent, Finance And Insurance Industry Information And Technology Industry | 131 | 64 |
| Marketing Analyst | 497 | 68 | Marketing Manager | 131 | 21 |
| Sales Executive | 418 | 79 | Independent Sales Representative | 130 | 45 |
| Business to Business Sales Representative | 367 | 118 | Social Media Specialist | 127 | 20 |
| Sales | 324 | 66 | Field Sales Representative | 125 | 23 |
| Sales Development Representative | 320 | 48 | Sales Associate | 124 | 34 |
| Marketing Assistant | 311 | 90 | Development Associate | 123 | 20 |
| Social Media Manager | 302 | 30 | Technical Sourcer | 123 | 3 |
| Sales Coordinator | 301 | 82 | Account Coordinator | 119 | 9 |
| Account Director | 278 | 35 | Entry Sales | 114 | 66 |
| Enterprise Account Manager | 257 | 14 | Account Manager/Sales | 106 | 22 |
| Senior Account Manager | 247 | 35 | Operations Specialist | 104 | 11 |
| Director of Development | 242 | 71 | Home Improvement Sales Representative | 101 | 43 |

*Source: Burning Glass*

# Industry Concentration

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Industry – 3 Digit NAICS (No. American Industry Classification) Codes** | **Jobs in Industry (2017)** | **Jobs in Industry (2022)** | **% Change (2017-22)** | **% in Industry (2017)** |
| Professional, Scientific, and Technical Services (541) | 16,643 | 19,073 | 15% | 21.7% |
| Merchant Wholesalers, Durable Goods (423) | 10,028 | 10,454 | 4% | 13.1% |
| Merchant Wholesalers, Nondurable Goods (424) | 7,785 | 8,095 | 4% | 10.1% |
| Other Information Services (519) | 5,254 | 6,870 | 31% | 6.8% |
| Wholesale Electronic Markets and Agents and Brokers (425) | 4,068 | 4,378 | 8% | 5.3% |
| Computer and Electronic Product Manufacturing (334) | 3,292 | 3,395 | 3% | 4.3% |
| Publishing Industries (except Internet) (511) | 3,255 | 3,615 | 11% | 4.2% |
| Management of Companies and Enterprises (551) | 3,049 | 3,206 | 5% | 4.0% |
| Administrative and Support Services (561) | 1,618 | 1,790 | 11% | 2.1% |
| Beverage and Tobacco Product Manufacturing (312) | 1,264 | 1,383 | 9% | 1.6% |
| Religious, Grantmaking, Civic, Professional & Similar Organizations (813) | 1,233 | 1,342 | 9% | 1.6% |
| Nonstore Retailers (454) | 941 | 1,258 | 34% | 1.2% |
| Real Estate (531) | 809 | 855 | 6% | 1.1% |
| Credit Intermediation and Related Activities (522) | 807 | 870 | 8% | 1.1% |
| Specialty Trade Contractors (238) | 790 | 894 | 13% | 1.0% |
| Educational Services (611) | 732 | 818 | 12% | 1.0% |
| Professional, Scientific, and Technical Services (541) | 16,643 | 19,073 | 15% | 21.7% |

*Source: EMSI 2018.2*

**Table 6. Top Employers Posting Digital Marketing Occupations in Bay and East Bay (May 2017 - April 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Employer** | **Bay** | **Employer** | **Bay** | **Employer** | **East Bay** |
| Oracle | 1,024 | Accenture | 117 | Yelp | 200 |
| Yelp | 576 | Vmware Incorporated | 110 | Oracle | 189 |
| Google Inc. | 408 | Comcast | 108 | Sears | 119 |
| Salesforce | 322 | Centurylink | 103 | Sentext Solutions | 78 |
| Facebook | 319 | Advantage Sales & Marketing | 101 | 24 Hour Fitness | 77 |
| Sears | 287 | Intero Real Estate | 101 | Kaiser Permanente | 58 |
| Sentext Solutions | 199 | Verizon Communications Inc | 101 | University California | 58 |
| Kelly Moore Paint Company Inc | 169 | Apple Inc. | 100 | Capital Markets Placement | 55 |
| 24 Hour Fitness | 164 | Redpoint Ventures | 97 | O'Reilly Automotive Inc | 53 |
| Capital Markets Placement | 155 | Staples | 97 | UC San Diego | 50 |
| O'Reilly Automotive Inc | 148 | Sherwin Williams | 95 | Mutual of Omaha Company | 46 |
| Macy's | 147 | Stanford University | 95 | Johnson Controls Inc | 44 |
| Dell | 143 | University California | 91 | UC Berkeley | 43 |
| Cisco Systems Incorporated | 136 | Allied Universal Corporation | 88 | Comcast | 42 |
| Wells Fargo | 134 | Gap Inc. | 88 | Centurylink | 40 |
| Linkedin Limited | 132 | Amazon | 86 | Advantage Sales & Marketing | 39 |
| Best Buy | 129 | SAP | 86 | Pandora Media | 37 |
| New York Life | 122 | Aflac | 84 | Aflac | 36 |

*Source: Burning Glass*

# Educational Supply

There are 20 colleges in the Bay Region issuing 61 awards annually on TOP 0509.00 - Marketing and Distribution. There are 10 other educational institutions issuing 347 awards annually on CIP 09.0903 – Advertising or on CIP 52.1401 Marketing/Marketing Management, for a total of 408 awards annually in the Bay region. There are four community colleges and one other postsecondary institution issuing 21 awards annually in the East Bay sub-region.

**Table 7. Awards on TOP 0509.00 - Marketing and Distribution or on CIP 09.0903 - Advertising or on CIP 52.1401 Marketing/Marketing Management, General**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Head-count | No. of Transfer Students | Bachelor’s Degrees | Associate Degrees | Certifi-cates | Total |
| Canada | Mid-Peninsula | 58 | n<10 | 0 | 0 | 0 | 0 |
| Chabot Hayward | East Bay | 189 | 19 | 0 | 3 | 5 | 8 |
| Deanza | Silicon Valley | 551 | 100 | 0 | 7 | 8 | 15 |
| Diablo Valley | East Bay | 199 | 17 | 0 | 0 | 5 | 5 |
| Gavilan | Silicon Valley | 17 | n<10 | 0 | 0 | 0 | 0 |
| Laney | East Bay | 18 | n<10 | 0 | 1 | 1 | 2 |
| Las Positas | East Bay | 232 | 30 | 0 | 1 | 0 | 1 |
| Marin | North Bay | 13 | 0 | 0 | 0 | 0 | 0 |
| Merritt | East Bay | 74 | n<10 | 0 | 0 | 0 | 0 |
| Mission | Silicon Valley | 32 | n<10 | 0 | 0 | 0 | 0 |
| Monterey | SC-Monterey | 49 | n<10 | 0 | 0 | 0 | 0 |
| Napa Valley | North Bay | 57 | n<10 | 0 | 0 | 0 | 0 |
| Ohlone | East Bay | 515 | 39 | 0 | 0 | 0 | 0 |
| San Francisco | Mid-Peninsula | 231 | 12 | 0 | 4 | 10 | 14 |
| San Jose City | Silicon Valley | 43 | n<10 | 0 | 2 | 3 | 5 |
| San Mateo | Mid-Peninsula | on another TOP | 12 | 0 | 3 | 4 | 7 |
| Santa Rosa | North Bay | 207 | 22 | 0 | 0 | 0 | 0 |
| Skyline | Mid-Peninsula | 19 | 0 | 0 | 0 | 0 | 0 |
| Solano | North Bay | 30 | 11 | 0 | 1 | 1 | 2 |
| West Valley | Silicon Valley | 66 | 33 | 0 | 0 | 2 | 2 |
| Academy of Art University | Mid-Peninsula | n/a | n/a | 54 | 6 | 0 | 60 |
| Argosy University-The Art Institute of CA-SF | Mid-Peninsula | n/a | n/a | 2 | 0 | 0 | 2 |
| Golden Gate University-SF | Mid-Peninsula | n/a | n/a | 0 | 0 | 3 | 3 |
| Holy Names University | East Bay | n/a | n/a | 5 | 0 | 0 | 5 |
| Menlo College | Mid-Peninsula | n/a | n/a | 53 | 0 | 0 | 53 |
| Miami Ad School-San Francisco | Mid-Peninsula | n/a | n/a | 0 | 0 | 51 | 51 |
| Pacific Union College | North Bay | n/a | n/a | 1 | 0 | 0 | 1 |
| San Jose State University | Silicon Valley | n/a | n/a | 48 | 0 | 0 | 48 |
| Santa Clara University | Silicon Valley | n/a | n/a | 85 | 0 | 0 | 85 |
| University of San Francisco | Mid-Peninsula | n/a | n/a | 39 | 0 | 0 | 39 |
| **Total Bay Region** | | **2,607** | **319** | **287** | **28** | **93** | **408** |
| **Total East Bay Sub-Region** | | **1,234** | **115** | **5** | **5** | **11** | **21** |

# *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. No. of Transfer students is for 2016-17.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 9,570 annual openings for the Digital Marketing occupational cluster and 408 annual awards for an annual undersupply of 9,162. In the East Bay, there is also a gap with 2,145 annual openings and 21 annual awards for an annual undersupply of 2,124. However, three occupations selected by Diablo Valley College when submitting their LMI request are above middle-skill occupations. When only the demand for the two middle-skill occupations is used and compared to supply, the undersupply in the Bay region is still significant at 3,939. In the East Bay sub-region the undersupply decreases to 1,262 when only the demand for the two middle-skill occupations is used and compared to supply.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0509.00 - Marketing and Distribution**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2015-16** | **Bay  (All CTE Programs)** | **DVC**  **(All CTE Programs)** | **State (050900)** | **Bay (050900)** | **East Bay (050900)** | **Top College on 050900 in the region** | |
| % Employed Four Quarters After Exit | 74% | 68% | 61% | 67% | 70% | Laney | 83%  (10 students) |
| Median Earnings Two Quarters After Exit | $10,310 | $9,735 | $7,475 | $9,635 | $9,670 | Chabot | $10,395  (no. of students n/a) |
| Median % Change in Earnings | 46% | 52% | 53% | 52% | 70% | West Valley | 149%  (14 students) |
| % of Students Earning a Living Wage | 63% | 55% | 50% | 51% | 55% | San Francisco | 68%  (19 students) |

*Source: Launchboard Pipeline (version available on 5/11/18)*

# Skills, Certificates and Education

**Table 9. Top Skills for Digital Marketing Occupations in Bay Region (May 2017 - April 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Skill** | **Postings** | **Skill** | **Postings** | **Skill** | **Postings** |
| Sales | 20,168 | Facebook | 1,602 | Adobe Photoshop | 974 |
| Teamwork/Collaboration | 9,366 | Sales Development | 1,582 | Strategic Planning | 928 |
| Customer Service | 7,115 | Digital Marketing | 1,565 | Customer Billing | 876 |
| Marketing | 5,198 | Merchandising | 1,452 | Customer Accounts | 852 |
| Salesforce | 5,189 | Cold Calling | 1,399 | Market Research | 846 |
| Business Development | 4,991 | Sales Cycle | 1,348 | Journalism | 832 |
| Sales Goals | 4,595 | Business Planning | 1,319 | Lead Generation | 831 |
| Project Management | 4,333 | Oracle | 1,318 | Product Development | 814 |
| Social Media | 4,170 | Customer Relationship Management (CRM) | 1,201 | Data Analysis | 801 |
| Product Sales | 4,167 | Key Performance Indicators (KPIs) | 1,198 | Marketing Materials | 796 |
| Customer Contact | 3,960 | Complex Sales | 1,191 | Onboarding | 788 |
| Budgeting | 3,735 | Product Marketing | 1,160 | Account Development | 783 |
| Account Management | 3,515 | Appointment Setting | 1,132 | Cross Sell | 771 |
| Outside Sales | 3,190 | Sales Strategy | 1,128 | Sales Training | 767 |
| Prospective Clients | 2,950 | Sales Support | 1,118 | Lifting Ability | 759 |
| Business-to-Business | 2,697 | Sales Planning | 1,114 | Content Management | 742 |
| Inside Sales | 2,645 | Product Management | 1,069 | Request for Proposal (RFP) | 734 |
| Scheduling | 2,410 | Direct Sales | 1,064 | Email Marketing | 727 |
| Retail Industry Knowledge | 2,132 | Business Acumen | 1,054 | Content Development | 726 |
| Sales Management | 2,069 | E-Commerce | 1,047 | Internet Advertising | 726 |
| Description and Demonstration of Products | 2,019 | Advertising Sales | 1,030 | Instagram | 719 |
| Software as a Service (SaaS) | 1,948 | Staff Management | 1,029 | Newsletters | 711 |
| Client Base Retention | 1,759 | Fundraising | 1,028 | Adobe Indesign | 708 |
| Sales Calls | 1,716 | Upselling Products and Services | 1,028 | Business Administration | 695 |
| Negotiation Skills | 1,709 | Business-to-Business Sales | 1,002 | Marketing Materials | 796 |
| Product Knowledge | 1,706 | Retail Sales | 979 | Onboarding | 788 |
| Market Strategy | 1,615 | SQL | 977 | Business Administration | 695 |

*Source: Burning Glass*

**Table 10. Certifications for Digital Marketing Occupations in the Bay Region (May 2017 - April 2018)**

Note: 87% of records have been excluded because they do not include a certification. As a result, the table has not been included in this report.

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

|  |  |
| --- | --- |
| **Education (minimum advertised)** | **Latest 12 Mos. Postings** |
| High school or vocational training | 3,737 (80%) |
| Associate Degree | 668 (17%) |
| Bachelor’s Degree or Higher | 121 (3%) |

*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

For more information, please contact:

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