

# 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	201 <i>7</i> 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	1 <i>7,</i> 673	1 <b>,</b> 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

Occupation	Bay Region	Silicon Valley
Total	58,324	1 <b>7</b> ,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
				Cisco Systems	
Google Inc.	739	Linkedin Limited	187	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	Posting s	Certification	Posting s
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)	
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	
IT Infrastructure Library (ITIL) Certification	55	ITIL Certification	
Series 7	50	Six Sigma Certification	21
Cisco Certified Internetwork Expert (CCIE)	39	Chartered Property Casualty Underwriter	21
		Leadership In Energy And Environmental	
Certified Salesforce Administrator	38	Design (LEED) Certified	20

Certified Information Systems Security Professional	35	First Aid CPR AED	20
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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/
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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