



BLURRING LINES

How Business and Technology
Skills Are Merging to Create
High Opportunity Hybrid Jobs



EXECUTIVE SUMMARY



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With technology driving the everyday lives of most Americans, a new kind of hybrid job blending technology with marketing is gaining in the market. Specifically, these are occupations requiring a combination of programming skills and skills commonly found in design, data analysis, and marketing. In a 12-month period (April 2014 – March 2015), more than a quarter million advertised job postings sought hybrid talent in positions such as User Experience Designer, Data Scientist, and Product Manager.

This demand is both a boon and a challenge. These hybrid jobs are a classic example of technology driving job creation, and workers with the needed skills can command salaries comparable to those for positions with more advanced technical requirements. However, at the same time, these positions call for a set of skills that aren't typically taught as a package. The training ecosystem preparing job seekers for these roles is relatively weak, and these roles do not typically align well with established higher education programs. Computer science programs and traditional vocational IT schools do not usually teach the broad business skill sets these roles require, while design and business schools yield graduates without the necessary technical knowledge. The talent deficit can be seen in the higher salaries in these hybrid fields, as employers compete for the available talent.

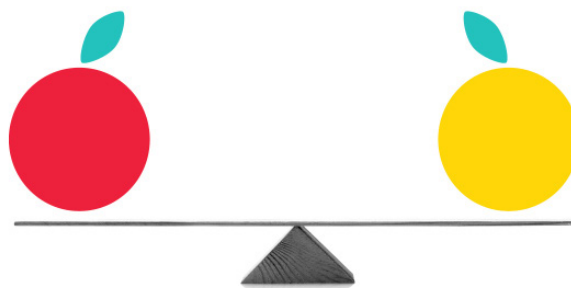
Yet this challenge is not as daunting as it could be. The training to prepare for an entry-level hybrid job can often be addressed without the equivalent of a second degree. The technology skills that mix with more traditional business competencies to define these jobs are relatively accessible and easy-to-learn. Accelerated learning programs can often provide the short-term training needed to address entry-level skill needs.

This report focuses on jobs demanding the following skill sets:

- » Data Analytics
- » Digital Marketing and Marketing Automation
- » Mobile Development
- » IT Product Management
- » User Interface/ User Experience
- » Web Development and Design

Key Findings

- » **These roles are in high demand:** More than 250,000 positions were open in the last year for these hybrid technical roles.
- » **These jobs pay well:** Advertised salaries for these roles range from \$65,000 to \$111,000 per year. This range is well above the national average starting salary, and in line with IT roles requiring more significant technical training.
- » **These roles are highly concentrated in “tech hubs”:** A small number of cities with technology focused economies comprise the vast majority of employer demand for these roles. San Jose, for example, has seven times the number of postings per capita compared to the national average. The top 10 cities for hybrid technical role demand account for 50% of all postings in these fields, but only 25% of the total national population.
- » **These roles are within reach for job seekers with common software skills:** The technical skill requirements for these roles include web programming skills such as HTML5; database skills such as SQL; and programming languages such as Python and Java. While these skills are growing in demand, they also can be learned without an extensive background in computer science.
- » **Web development and mobile development positions are in the highest demand:** More than 100,000 positions for web and mobile developers have been available over the past year.
- » **Mobile development, data analytics, and product management positions pay the highest salaries:** These roles each have an average advertised salary of more than \$100,000, demonstrating both their high value to employers and the shortage of qualified talent.
- » **Data analytics, digital marketing, and mobile development are growing especially fast:** Demand for data science skills has tripled over the past five years, while demand for digital marketing and mobile skills has more than doubled.





TOTAL DEMAND BY SKILL CLUSTER



Web Development & Design

67,250

Job Counts
Last 12 Months

3%

Change
From 2011

\$87,217

Average
Advertised Salary



Digital Marketing & Marketing Automation

45,991

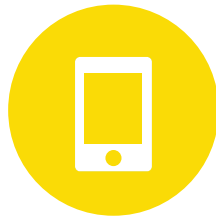
Job Counts
Last 12 Months

145%

Change
From 2011

\$76,783

Average
Advertised Salary



Mobile Development

41,032

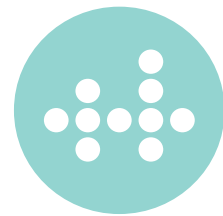
Job Counts
Last 12 Months

135%

Change
From 2011

\$111,380

Average
Advertised Salary



Data Analytics

41,000

Job Counts
Last 12 Months

372%

Change
From 2011

\$105,540

Average
Advertised Salary



Product Management

40,752

Job Counts
Last 12 Months

7%

Change
From 2011

\$106,471

Average
Advertised Salary



**User Interface/
User Experience (UI/UX)**

29,825

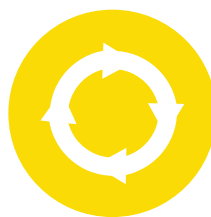
Job Counts
Last 12 Months

15%

Change
From 2011

\$99,177

Average
Advertised Salary



All Hybrid Jobs

265,850

Job Counts
Last 12 Months

53%

Change
From 2011

\$96,206

Average
Advertised Salary



All IT Jobs

1,975,788

Job Counts
Last 12 Months

7%

Change
From 2011

\$86,475

Average
Advertised Salary