



Research

Resources

Blog

About



Economic Graph



LinkedIn's 2017 U.S. Emerging Jobs Report

Published on Dec 7, 2017



Economic Graph Team



12975

The job market in the U.S. is brimming right now with fresh and exciting opportunities for professionals in a range of emerging roles.

New types of jobs means new potential for workers at all levels, especially for those looking to change careers. Overall, job growth in the next decade is expected to outstrip growth during the previous decade, creating 11.5 million jobs by 2026, according to the **U.S. Bureau of Labor Statistics**. Even further, it's estimated that 65% of children entering primary school today will ultimately hold jobs that don't yet exist.

To help find those up-and-coming roles and to better understand what skills are needed to succeed, we analyzed LinkedIn data from the last five years, as well as some survey data, to identify which jobs and skills are on the rise, what they're replacing, and what these trends indicate about the jobs market in the years to come.

Here's what we found:

- **Tech is king:** Jobs with the top growth potential are tech-focused, with demand coming from tech and non-tech companies alike. Machine learning engineer, data scientist, and

big data engineers rank among the top emerging jobs -- with companies in a wide range of industries seeking those skills.

- **Soft skills matter:** Not all of the emerging tech jobs require technical skills. Sales development representative, customer success manager, and brand partner rank among the top emerging jobs at companies where a technical background is not a necessity. Traditional soft skills like communication and management underpin all of these emerging jobs.
- **Jobs with high mobility on the rise:** Several top emerging jobs reflect broader societal trends, such as wellness, flexibility and location mobility. More people are getting healthy which could explain why barre instructor featured among our emerging jobs. Not quite as surprising, licensed realtors ranked highly as the post-Great Recession recovery of the real estate market rolls forward. Just in the past year, the number of licensed realtors has surged 40 percent. These type of roles tend to be more widely distributed across U.S. regions.
- **Low supply of talent for top jobs:** Data scientist roles have grown over 650 percent since 2012, but currently 35,000 people in the US have data science skills, while hundreds of companies are hiring for those roles - even those you may not expect in sectors like retail and finance - supply of candidates for these roles cannot keep up with demand.
- **Future-proofing skills is critical:** Some of these emerging skills didn't even exist five years ago, and many professionals are not confident their current skill set will be relevant within the next 1-2 years.

Read on to see how skills and experience might play into the jobs of tomorrow, and the paths to get there.

TOP 20 EMERGING JOBS IN THE UNITED STATES

There are more than **1,600** open roles for machine learning engineer currently in the U.S.

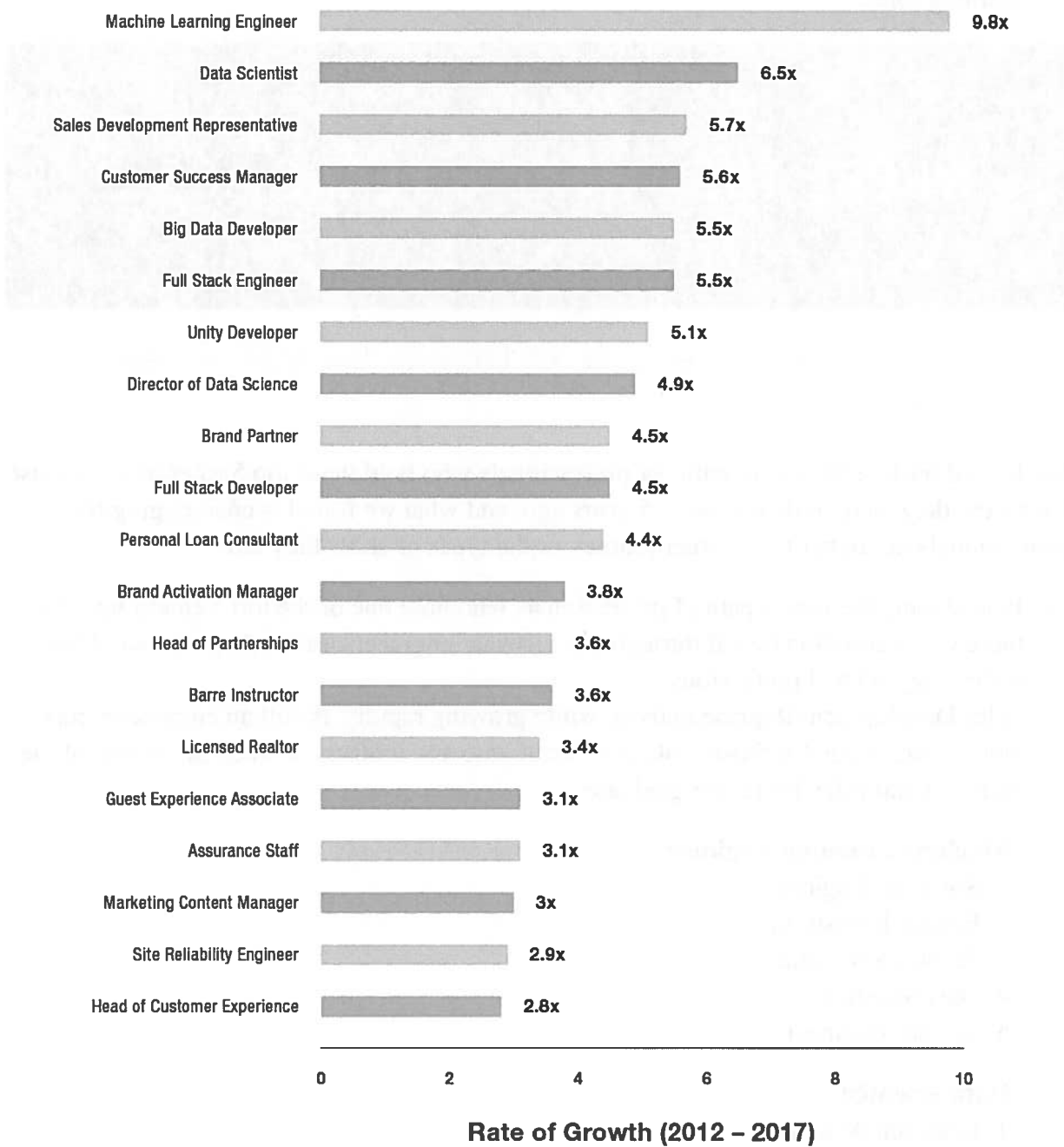
The explosion of tech roles over the past five years comes as no surprise given the impact of technology in every sector. Our **November Workforce Report** noted that hiring is up nearly 10% in the hardware industry, and nearly 15% in the software industry from October 2016.

- Specifically, the growth and widespread application of more sophisticated technology - like artificial intelligence - we are seeing more specialized machine learning and data-

specific roles top the list of emerging jobs. These jobs are also widely available outside the technology industry.

- The number of customer experience roles that made the list indicates that the “age of the customer” was more than jargon. These jobs are among some of the non-automatable jobs on the market today, and the skills associated with them aren’t necessarily taught in university, as they rely heavily on soft skills.

Top 20 Emerging Jobs



There can't be emerging jobs without some jobs being replaced. When looking at the roles that are starting to lose steam in today's professional landscape, two trend stands out:

- Comprehensive sets of skills that cover multiple disciplines are seemingly in higher demand. Many of the roles on this list cover multiple disciplines and are applicable to multiple industries.
- Certain specialist roles are on the decline. From specialized developer roles, to legal specialists, and even specialized logistics roles, we are seeing these roles be replaced in favor of more comprehensive skill sets and job titles. For example, Flash-related roles are on the decline as the technology loses steam in favor of more big data and machine learning roles.

WHERE THEY WERE 5 YEARS AGO...

Software engineers are feeding into nearly all of these emerging jobs.

We looked back at the career paths of professionals who hold these top 5 roles to get a sense for where they were in their careers 5 years ago, and what we found is encouraging for professionals no matter their career journey or the types of skills they have.

- In analyzing the career path of professionals who hold one of the top 5 emerging jobs, there was a common thread throughout: software engineers are feeding into all of the technology-related professions.
- Sales Development Representatives, while growing rapidly, is still an entry-level role and a great option for those looking to break into any industry. In fact, this is one of the most popular roles for recent graduates.

Machine Learning Engineer

1. Software Engineer
2. Research Assistant
3. Teaching Assistant
4. Data Scientist
5. System Engineer

Data Scientist

1. Research Assistant
2. Teaching Assistant

3. Software Engineer
4. Data Scientist
5. Business Analyst

Sales Development Representative

1. Server
2. Sales Associate
3. Account Manager
4. Administrative Assistant
5. Customer Service Representative

Customer Success Manager

1. Account Manager
2. Project Manager
3. Customer Service Representative
4. Program Manager
5. Sales Manager

Big Data Developer

1. Software Engineer
2. Hadoop Developer
3. System Engineer
4. Java Engineer
5. ETL Developer

WHERE CAN YOU FIND THESE JOBS?

Among these emerging jobs, some of them offer more mobility for those looking to explore new cities or industries, while others are more limited.

Let's take a look at the jobs that are widely available in cities across the country, but have fewer opportunities to pivot to a different industry...

These Are the Jobs Available in Many Cities, But Few Industries

- Roles in the real estate, fitness, or retail space tend to be more widely distributed across U.S. regions.

- However, while these roles offer more options for location mobility, there are fewer options to pivot industries.
 1. Licensed Realtor
 2. Brand Partner
 3. Independent Travel Agent
 4. Brand Activation Manager
 5. Barre Instructor

These Are the Jobs That Offer Industry Mobility, But Are Concentrated in the U.S.'s 10 Largest Metros

- These are jobs that are highly concentrated in the top 10 largest urban areas in the United States, but span across several industries.
- Many of the emerging roles in tech are concentrated in urban areas, like San Francisco, New York and Los Angeles.
- When looking at industry mobility among these emerging roles, many of them skew heavily towards the software and IT skill set, but provide opportunities across nearly every industry.
 1. Head of Partnerships
 2. Head of Customer Experience
 3. Data Scientist
 4. iOS App Developer
 5. User Experience Researcher

WHEN IT COMES TO SKILLS,
SOFT SKILLS REMAIN STRONG

Most Common Skills Among Emerging Jobs

According to a recent survey conducted by LinkedIn and Capgemini, nearly 30% of professionals believe their skills will be redundant in the next 1-2 years, if they aren't already, with another 38% stating they believe their skills will be outdated within the next 4-5 years. This feeling is largely driven by lack of access to adequate training to stay abreast of new - largely digital - skills that are necessary to be successful in today's fast-paced jobs landscape.

We looked at the skills that were most strongly represented among the top 20 emerging jobs. While many of these roles require specialized experience or an advanced degree, one thing remains constant: soft skills are important across the board. You'll also notice these skills encompass a range of professions from marketing, to engineering, to sales, and it's likely many possess at least one.

1. Management
2. Sales
3. Communication
4. Marketing
5. Start-Ups
6. Python
7. Software Development
8. Analytics
9. Cloud Computing
10. Retail

We also took a look at the skills that were growing the fastest across these professions, and the same trend emerged: soft skills are represented across the board, as well as basic computer literacy. We noticed skills like social media, Microsoft Office, and digital marketing skills were on the rise across a number of these emerging jobs.

Most Important Soft Skills (According to Hiring Managers)

For those not interested in roles associated with the above skills - never fear, soft skills are an incredibly important part of being a fit for any role and more than 60% of hiring managers told us they had a hard time screening for them. We surveyed more than 1,200 hiring managers to find out what they're looking for in a candidate when it comes to soft skills:

1. Adaptability
2. Culture Fit
3. Collaboration
4. Leadership
5. Growth Potential
6. Prioritization

Learn more about how to prepare to talk about these skills in an interview, in [this blog post](#).

These Are the Top Skills for the Top 5 Emerging Jobs

When looking more granularly at the skills most common among professionals in the top 5 emerging jobs, we're able to get a clearer picture of the skills needed to be successful in these roles.

- Whether it's understanding the ins and outs of enterprise software to help customers, or specialized engineering and programming skills - it's clear that technology has become a part of nearly every role.
- The rise of customer success managers can likely be attributed to the explosion of Software-as-a-Service (SaaS) offerings, a theory that holds true when looking at the skills these professionals possess. Two of the top five skills for this role are related to enterprise and SaaS software know-how.
 - If professionals don't have the hard tech skills needed, or aren't interested in pursuing a career in engineering or development, but want to work in the technology industry, pivoting to a more customer-centric role is a great way to get a foot in the door.

Machine Learning Engineer

1. Machine Learning
2. Research
3. Algorithms
4. Software
5. Deep Learning

Data Scientist

1. Data Science
2. Machine Learning
3. Analytics
4. Data Mining
5. Python

Sales Development Representative

1. Sales
2. Sales Management
3. Business Development
4. Account Planning
5. Start-Ups

Customer Success Manager

1. Management
2. Software as a Service
3. Enterprise Software
4. Sales
5. Customer Success Management

Big Data Developer

1. Big Data
2. Hadoop
3. Java

4. [Apache] Hive
5. Start-Ups

Skills Trending On the Decline

When analyzing the skills that are on the decline among these roles, a couple trends stood out.

- The increasing focus on digital skills and digital experiences, meaning skills like “shopper marketing” - that are traditionally focused on understanding shopping habits in physical stores - are on the decline.
- Additionally, as noted above, legacy technology skills associated with older technology systems like Java are also decreasing across the more technology-focused roles.
- Extremely saturated and general skills like “strategy” and “marketing” are being replaced by more specific skills associated with these professions, for example “integrated marketing.”

THE RISE OF FREELANCE WORKERS

Beyond emerging roles, we're seeing a surge of freelance professionals in the United States, and they're often choosing to pursue freelance work as a side hustle to a full-time job. So much so that in a recent survey of freelance professionals, a quarter of them told us their freelance work is in an entirely different professional field than their full-time career. In fact, the skills associated with one of our emerging jobs, Barre Instructor, indicates this is a freelance job on the side that U.S. professionals are embracing.

However, this is often more than just a side hustle; in the same survey, nearly 20% of freelancers indicated they will make six figures or more this year with freelance work alone. What's more, freelancers are driving more workforce growth than traditional 9-to-5ers.

Where The Growth Is Happening

Growth in the freelance sector is booming, especially for legacy industries including retail and healthcare, and oil and energy.

Industry Sector

Freelance 5-Year Growth

Non-Freelance 5-Year Growth

◀ Swipe

Healthcare	47%	20%
Retail & Consumer Products	42%	5%
Staffing	41%	30%
Oil & Energy	39%	9%
Professional Services	34%	15%

The states where freelancers are seeing the most growth also might surprise you. The freelance population is growing quickly in the South and Midwest, but for now remains heavily concentrated on the coasts in New York, California, and Oregon.

State	Freelance 5-Year Growth	Non-Freelance 5-Year Growth	◀ Swipe
North Dakota	45%	24%	
Louisiana	44%	17%	
Mississippi	44%	16%	
District to Columbia	41%	17%	
West Virginia	40%	16%	

What This All Means

It may come as no surprise that technology-centric roles stole the show among emerging jobs in the United States, but the prevalence of machine learning and data science roles and skills indicate a shift in the types of technology we can expect to be using in the near future, as well as what professionals should be preparing themselves for.

Having an academic background and a comprehensive suite of skills were also strong trends, especially among professionals who are now machine learning engineers and data scientists. Both of these roles are also often held by professionals with 10 years or more of professional experience, so for those just starting out and having trouble landing one of these titles, don't be discouraged!

It's always a good reminder that soft skills will always be important, no matter the profession. The ability to collaborate, be a leader, and learn from colleagues will stand out in interviews, and even more once starting a job.

Methodology:

The results of this analysis represent the world seen through the lens of LinkedIn data. As such, it is influenced by how members choose to use the site, which can vary based on

professional, social, and regional culture, as well as overall site availability and accessibility. These variances were not accounted for in the analysis.

We looked at all members who list dated work experience on their profile and grouped the millions of unique, user-inputted job titles based on common job roles (which have many permutations). For example, the “machine learning engineer” job title includes user inputted titles such as “machine learning software engineer” and “machine learning engineer II.” We then counted the frequencies of job titles that were held in 2012 and compared the results to job titles that were held in 2017. “Emerging jobs” refers to the job titles that saw the largest growth in frequency over that 5 year period.

To determine common career paths, we looked at members who list a current position with one of the “emerging” job titles and counted the frequencies of job titles these members held in 2012. The availability of jobs by region and by industry are based on the company and location information of members who currently hold these job titles.

Related Topics

Economic Graph Video

[View](#)

Our Latest Updates

[View](#)

The latest Economic Graph updates are on our LinkedIn page

Visit and follow