How Banks Can Become Future Ready

Key points

> Digital trends have been reshaping the banking industry

> Banks need to transform fast to compete and remain relevant

> Three solutions to speed-up digital transformations: upskilling/reskilling the existing workforce, calibrating roles with future skills, and hiring for potential

About This Report

Eightfold Talent Insights Reports contain the findings and insights of Eightfold's research and analysis garnered from its Talent Intelligence Platform.™ This deep-learning platform is powered by the largest global talent dataset, to reveal people's skills and potential as well as workforce trends across sectors and demographics.

For this analysis of talent in the banking industry, Eightfold analyzed approximately 700,000 publicly available profiles from top banks, and benchmarked those findings against approximately 25,000 publicly available profiles from top FinTechs.

Digital trends are reshaping banking, and banks need to transform fast to compete

Disruption may be an overused term, but it certainly is appropriate for financial services. And banks must adapt accordingly.

In many cases, banks' workforces are designed for a world where people walked into bank branches to make a deposit or withdrawal.

Now, consumers are likely to head to the Cloud to make an instant payment on their mobile phones.
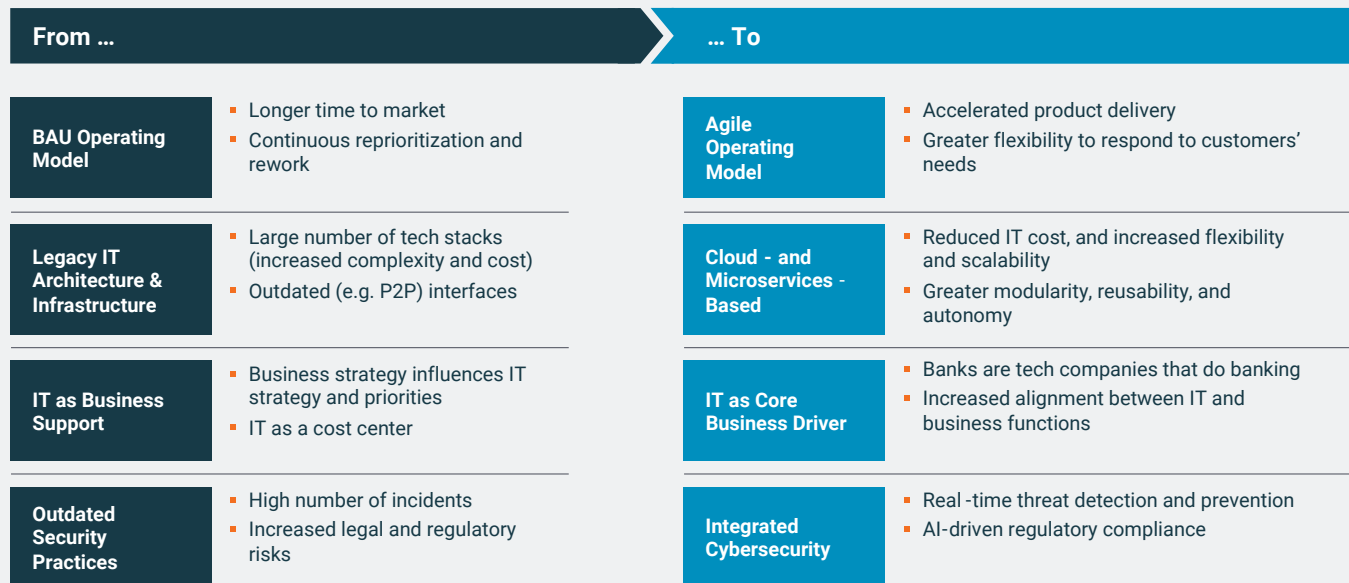
The movement of banking online has increased the importance of cybersecurity and other digital trends. FinTechs are competitors in some cases, and "coopetition" in others. These factors combined continue to put more pressure on banks to transform.

According to Boston Consulting Group, in today's typical bank, up to 90 percent of employees are dedicated to day-to-day operations, with only the remaining 10 percent devoted to change and innovation.

To compete, banks need to rethink talent and transform, and do so quickly. They need to accelerate product delivery and be more flexible in responding to customers. Often having costly, complex tech stacks, they need to reduce IT spending, and increase technical flexibility and scalability. With increased security and regulatory risks, they need to adopt AI-driven risk management practices.

While banking organizations have made significant strides in meeting the digital demands of customers, the industry continues to face challenges when establishing digital-first talent strategies, with only 15 percent of the top in-demand skills currently being employed within their IT workforces.

The Path to a Future-facing Banking Industry

From …		… To	
BAU Operating Model	• Longer time to market • Continuous reprioritization and rework	**Agile Operating Model**	• Accelerated product delivery • Greater flexibility to respond to customers' needs
Legacy IT Architecture & Infrastructure	• Large number of tech stacks (increased complexity and cost) • Outdated (e.g. P2P) interfaces	**Cloud - and Microservices - Based**	• Reduced IT cost, and increased flexibility and scalability • Greater modularity, reusability, and autonomy
IT as Business Support	• Business strategy influences IT strategy and priorities • IT as a cost center	**IT as Core Business Driver**	• Banks are tech companies that do banking • Increased alignment between IT and business functions
Outdated Security Practices	• High number of incidents • Increased legal and regulatory risks	**Integrated Cybersecurity**	• Real -time threat detection and prevention • AI-driven regulatory compliance

Source: McKinsey (Next-gen technology transformation in Financial Services)

Succeeding in digital transformation

To be successful, digital transformations should focus on three main areas:

> **Technology & Processes:** Integrate latest digital technologies into all areas of the business and upgrade existing processes and way of working.

> **Culture:** Coach for a growth mindset and foster a culture of trust, collaboration, and ownership; communicate frequently to ensure transparency and organizational adaptability.

> **Talent:** According to *Harvard Business Review*, 78 percent of transformations fail, often due to a lack of attention to the critical role of culture and talent. JP Morgan, for one, has said that "attracting and acquiring top talent with modern skills" will be a part of its $12 billion technology spend.
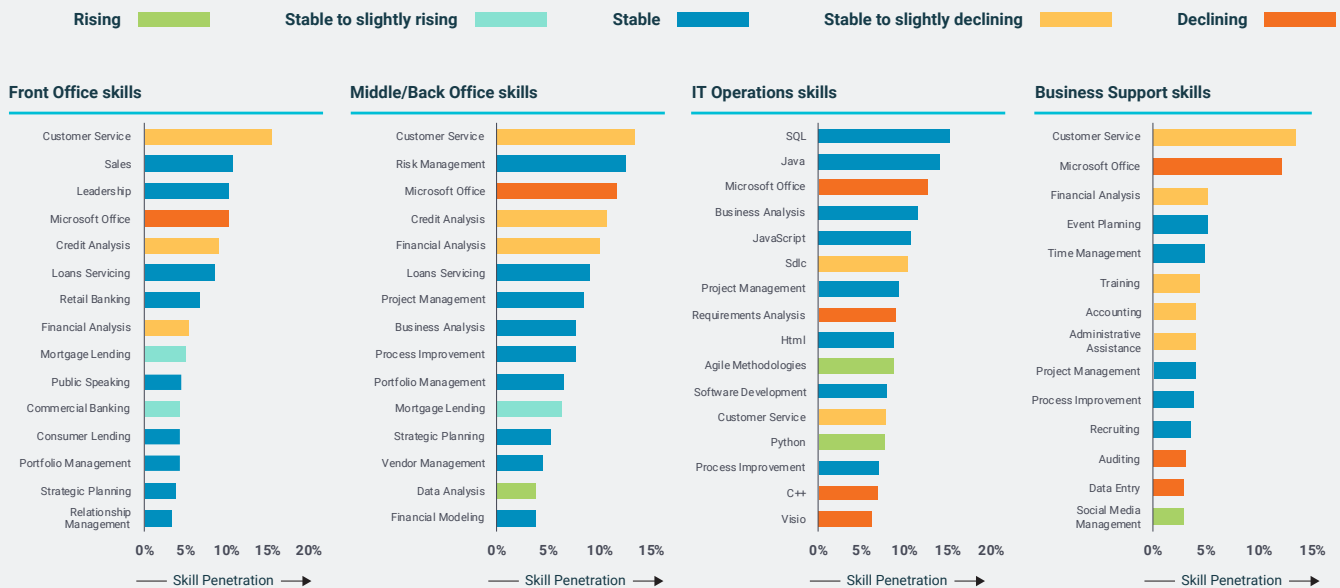
Adapting and Evolving the Banking Workforce

Four main groups make up a bank's structure:

> About 45 percent is the customer-facing division of a bank, which includes functions such as sales, customer service, and advisory services.

> About 15 percent is the IT department of a bank, which includes functions such as software development, architecture, and security.

> About 30 percent are support operations to the front office, which includes risk management, financial control, and strategic management.

> About 10 percent includes the administration and support of a bank, which includes functions such as HR, accounting, and auditing.

We've evaluated the current banking workforce across roles, skills, and future readiness.

> **Roles:** One third of the top front office roles are declining in prevalence, while the majority of the IT roles have been gaining in prevalence.

> **Skills:** In the four talent groups mentioned above, the top skills across all four groups are either stable or declining, which signifies that banks do not have a future-ready workforce.

> **Future readiness:** Innovation trends are increasing the need for new skills and capabilities. Banks have clear disadvantages in IT/digital skills compared to FinTechs.

A closer look at skills reveals that banks must incorporate new skills

Rising | Stable to slightly rising | Stable | Stable to slightly declining | Declining

Front Office skills

Skill	
Customer Service	
Sales	
Leadership	
Microsoft Office	
Credit Analysis	
Loans Servicing	
Retail Banking	
Financial Analysis	
Mortgage Lending	
Public Speaking	
Commercial Banking	
Consumer Lending	
Portfolio Management	
Strategic Planning	
Relationship Management	

← Skill Penetration →

Middle/Back Office skills

Skill	
Customer Service	
Risk Management	
Microsoft Office	
Credit Analysis	
Financial Analysis	
Loans Servicing	
Project Management	
Business Analysis	
Process Improvement	
Portfolio Management	
Mortgage Lending	
Strategic Planning	
Vendor Management	
Data Analysis	
Financial Modeling	

← Skill Penetration →

IT Operations skills

Skill	
SQL	
Java	
Microsoft Office	
Business Analysis	
JavaScript	
Sdlc	
Project Management	
Requirements Analysis	
Html	
Agile Methodologies	
Software Development	
Customer Service	
Python	
Process Improvement	
C++	
Visio	

← Skill Penetration →

Business Support skills

Skill	
Customer Service	
Microsoft Office	
Financial Analysis	
Event Planning	
Time Management	
Training	
Accounting	
Administrative Assistance	
Project Management	
Process Improvement	
Recruiting	
Auditing	
Data Entry	
Social Media Management	

← Skill Penetration →

Source: Eightfold Talent Intelligence Platform

Alarm bells should be ringing at banks

A closer look reveals just how much the skills needed in the financial sector are changing.

Take the job of credit risk manager, for instance. Very few of the skills that were rising in 2010 were rising in 2020. Tableau, Python, Predictive Analytics, and Agile Methodologies are among the many credit risk management skills rising in 2020 but not in 2010.

Or, consider a software engineer. Among the 2010 rising skills we find: jQuery, Jira, Apache Maven, JSON, C#, and AJAX. The 2020 list of rising skills includes react.js, MongoDB, Amazon Web Services, and Machine Learning, among others.

FinTechs innately lean towards digital-first strategies

The composition of a typical FinTech workforce is quite different from that of a traditional bank. A bank's IT department may account for up to 15 percent of its workforce. In FinTech, it could exceed 55 percent.

On the other hand, the front office functions like sales and the support operations of a bank are typically much larger versus a FinTech.

FinTechs employ a digital-first strategy, which is evident in the composition of their organization structures

% Bank Workforce Employed
% FinTech Workforce Employed

Front Office

~45%
~20%
Customer-facing divisions, including functions such as **sales**, **customer service**, and **advisory services**

Middle / Back Office

Support operations of the front office, including **risk management**, **financial control**, and **strategic management**
~30%
~15%

IT Operations

~15%
~55%
IT department, including functions such as **software development**, **architecture**, and **security**

Business Support

Administration and support, including functions such as **HR**, **accounting**, and **auditing**
~10%
~10%

Source: McKinsey (Banking operations for a customer-centric world); Eightfold Analysis

Transforming the Bank Teller

Perhaps no role more personifies a bank than that of a bank teller. It's the traditional interface with customers, the physical presence, the "hard copy" of a role that has partially turned digital.

Eightfold analyzed the most prevalent skills in the banking sector, identifying each as either a "rising skill," "stable skill," or "declining skill" (see definitions at the bottom of this report). While banks have the largest advantage over FinTechs in Credit Analysis skillsets, this is not a "rising skill." FinTechs, on the other hand, have a high penetration of skills in JavaScript, Python, SQL, and HTML. Three out of four of these skills are stable, and one, Python, is on the rise.

But many traditional bank teller skills are transferrable to rising roles such as universal banker or customer relationship manager. There's a high degree of overlap, for example, with the teller and universal banker roles, with skills such as customer satisfaction and retail banking integral to each. Moving to a universal banker role requires the addition of cross selling, consumer lending, financial analysis, and small business lending skills.

To successfully transition to the role of customer relationship manager, many bank tellers would need to reskill in the areas of business development, strategic planning, portfolio management, relationship management, and financial analysis.

Through the power of talent intelligence, banks can clearly assess existing skills and transition key roles like tellers to meet the dynamic needs of their organizations and their customers.

Innovation trends are increasing the need for new skills and capabilities

All of the trends in financial services are increasing the need for new capabilities.

> **Mobile/online banking** is increasing the need for user experience and UI design expertise, as well as app-development skills.

> **The rise of blockchain & evolution of payments** is creating a need for skills such as blockchain architecture, wireframing, e-payment, and HyperLedger.

> **The increased use of AI and big data** is growing the need for Python, TensorFlow, machine learning, deep learning, Hadoop, and natural-language processing skills.

> **Cloud computing and open-banking APIs** are sparking a need for Amazon Web Services, OpenStack, and integration skills.

> **Cybersecurity's** growing importance means more network security, DevSecOps, and cyber risk management skill needs.

Three solutions to overcome talent challenges

Banks have three main opportunities to better compete with the talent challenges FinTechs pose: upskilling/reskilling, calibrating roles with future skills, and hiring for potential.

Upskilling/reskilling helps bridge the skills gap between rising and declining skills

For each of the talent groups, we can see which skills are declining and which are rising.

For business support roles, for instance, data entry and GAAP Standards are declining. Social media management and digital marketing are increasing. For front office roles, cash management and call center support are on the decline, while digital sales and investment banking are on the rise.

This is where "adjacent skills" come in. By building upon adjacent skills, employees can be upskilled and reskilled into skills that are rising in the workforce.
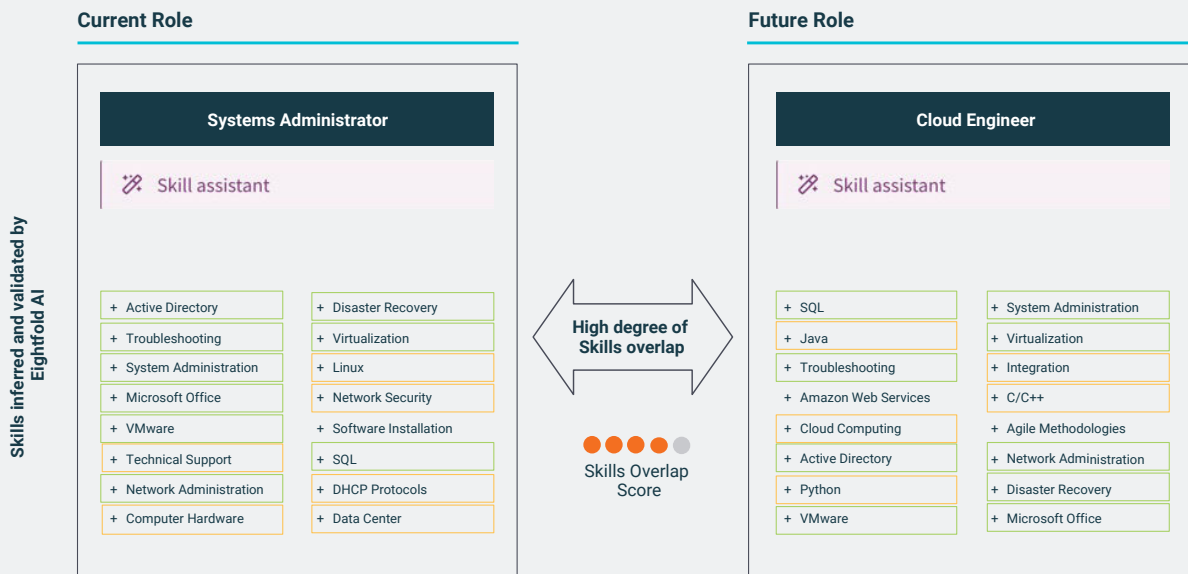
Take a bank's systems administrator, for example. It's a role that's declining in prevalence. There are a number of career tracks, and careers in rising roles, that a system administrator could pursue: business systems consultant; cloud engineer; network engineer; technology manager; or DevOps engineer.

We can analyze how the current and future (rising) roles are related; the relation, for example, between a Systems Administrator and a cloud engineer. There is a high degree of skills overlap. SQL skills, VMWare, and Troubleshooting skills are common in both positions. There are also a number of adjacent skills.

From there, we can see the new skills required for a systems administrator to transition into cloud engineering, such as Java, Python, and Amazon Web Services.

Next, analyze how the current and future roles are related

Direct Skill Overlap
Related Skill Overlap

Current Role

Systems Administrator

✦ Skill assistant

+ Active Directory
+ Troubleshooting
+ System Administration
+ Microsoft Office
+ VMware
+ Technical Support
+ Network Administration
+ Computer Hardware

+ Disaster Recovery
+ Virtualization
+ Linux
+ Network Security
+ Software Installation
+ SQL
+ DHCP Protocols
+ Data Center

High degree of Skills overlap

⬤⬤⬤⬤⭘

Skills Overlap Score

Future Role

Cloud Engineer

✦ Skill assistant

+ SQL
+ Java
+ Troubleshooting
+ Amazon Web Services
+ Cloud Computing
+ Active Directory
+ Python
+ VMware

+ System Administration
+ Virtualization
+ Integration
+ C/C++
+ Agile Methodologies
+ Network Administration
+ Disaster Recovery
+ Microsoft Office

Skills inferred and validated by Eightfold AI

Source: Eightfold Talent Intelligence Platform

Banks can undertake a similar process for every role, whether it be a bank teller, home mortgage consultant, or network support technician. A Talent Intelligence Platform™ will identify which rising skills an employee needs to add to their portfolio, and enable the employee to upskill and reskill. As such, banks can retain those individuals who have institutional knowledge and equip them with the skills of the future.

Banks should calibrate roles with future skills

Banks, like most organizations, tend to fill a job with a job requisition and a job description. The requisitions usually reflect the way the job has been done in the past. And, banks generally tend to search for candidates from within the industry.

Instead, to compete with FinTechs and future-ready their organizations, banks should rethink how they calibrate roles. This starts with the ability to see which skills are emerging in each role. From there, the bank can seek these relevant skills in each new hire, and as spelled out above, reskill and upskill current employees.

Let's explore the changing role of a product manager, for example. A bank can identify candidates with rising skills, or skills that are adjacent to rising skills. Rising skills for product managers include user research, rapid prototyping, and data analysis. Importantly, these skills may be found in a financial-sector candidate, but they could also be found in a candidate in another industry, such as the tech sector. According to The FinTech Job Report: Technology Is Eating Finance, "Despite the name FinTech, the job roles in FinTech companies are quite different from financial services, and much more similar to technology companies. Transferable skills to get into FinTech are more 'Tech' than 'Fin.'"
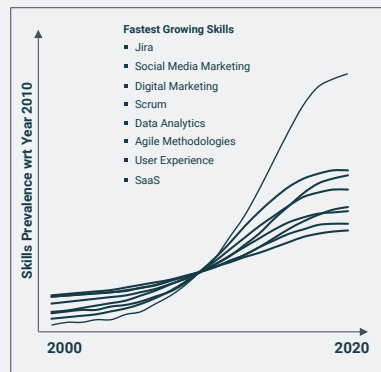
Banks should build the workforce of tomorrow by calibrating roles with the skills of the future

Rising ▮   Stable to slightly rising ▮   Stable Skill ▮   Stable to slightly declining ▮   Declining ▮
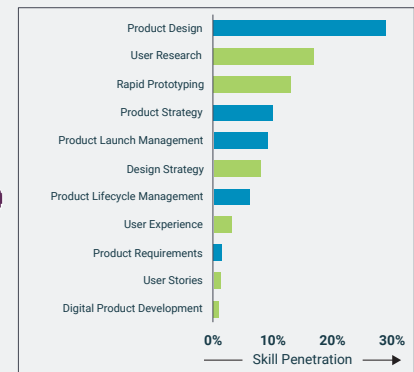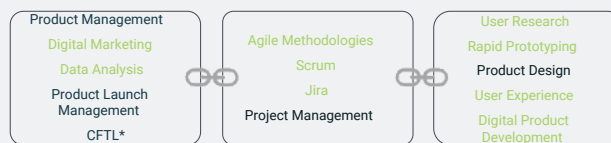
Top skills for Product Managers (PMs)

Product Management
CFTL*
Project Management
Product Development
Customer Service
Strategic Planning
Product Marketing
Data Analysis
Market Research
Training
Business Analysis
Competitive Analysis
SQL
Business Development
Agile Methodologies

0% 10% 20% 30%
Skill Penetration →

Emerging skills for PMs in the workforce

Fastest Growing Skills
- Jira
- Social Media Marketing
- Digital Marketing
- Scrum
- Data Analytics
- Agile Methodologies
- User Experience
- SaaS

Skills Prevalence wrt Year 2010

2000   2020

Skills in Big Tech companies

Product Design
User Research
Rapid Prototyping
Product Strategy
Product Launch Management
Design Strategy
Product Lifecycle Management
User Experience
Product Requirements
User Stories
Digital Product Development

0% 10% 20% 30%
Skill Penetration →

Future-ready Product Manager role

Product Management
Digital Marketing
Data Analysis
Product Launch Management
CFTL*

Agile Methodologies
Scrum
Jira
Project Management

User Research
Rapid Prototyping
Product Design
User Experience
Digital Product Development

Source: Eightfold Talent Intelligence Platform / *Cross Functional Team Leadership

A hiring-for-potential approach opens up a larger talent pool.

By analyzing who has what potential to learn the most in-demand skills, we can see how the potential pool of talent increases sharply. For example, consider the adjacent skills to Python, such as Java, C++, and R. People with these skills are highly likely to be able to learn Python. By including these high-potential workers in a pool of Python-skilled people, the pool triples.

Hiring for potential requires a new mindset based on skills and potential. Coupled with upskilling/reskilling and calibrating roles with future skills, it can help banks address skills gaps and remain competitive.

Key terms in this paper are defined as follows:

Role penetration: % of employees in a role (out of the total number of employees in a group/cohort)

Skill penetration: % of employees with a given skill (out of the total number of employees in a group/cohort)

Relative skill penetration: Skill Penetration within a given company MINUS Skill Penetration in the market or competitors

Skill prevalence (Rising/Declining/Stable): the increase/decrease of individuals with those skills in the workforce

Prevalence index (Role): Role prevalence relative to the highest point on the chart. A value of 100 represents peak use of role

Adjacent skills: Frequently co-occurring skills within profiles in the global workforce

Adjacent roles: Roles that have high direct and related skill overlap. The higher the overlap of direct and related skills, the higher the adjacency score

About Eightfold AI

Eightfold AI® delivers the Talent Intelligence Platform,™ the most effective way for organizations to retain top performers, upskill and reskill the workforce, recruit top talent efficiently, and reach diversity goals. Eightfold AI's deep learning artificial intelligence platform has been issued numerous patents based on its ability to empower enterprises to transform their talent into a competitive advantage.
For more information, visit www.eightfold.ai.

eightfold.ai

The Eightfold Talent Intelligence Platform™ is a purpose-built, deep-learning artificial intelligence technology that is powered by an ever-refreshing global data set of billions of talent data points and over 1.4M unique skills.

For more information, visit **www.eightfold.ai**