

HEALTH WEALTH CAREER

CLOSING THE SKILL GAP - RECRUIT OR RESKILL?

AUTHORS:

ANIRBAN B ROY

RADHIKA KATYAL

WORKFORCE STRATEGY
& ANALYTICS



MAKE TOMORROW, TODAY

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THE CHANGING SKILL LANDSCAPE

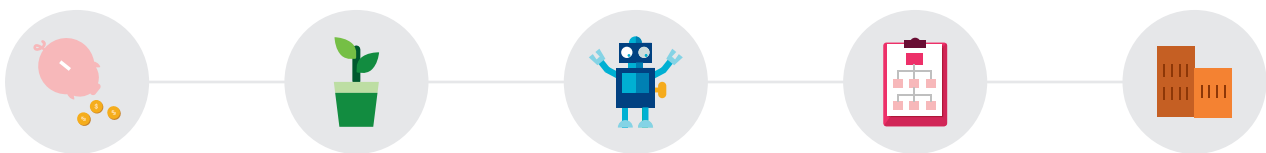
The skills landscape is changing faster than ever. The skill-set that was required to excel in any job role five years ago is quite different from what is required from the same role today. Therefore, organizations are on a constant lookout for talent that can keep up with the rapidly changing skill demand of job roles. Owing to the continual shrinkage in the shelf-life of a skill, organizations must scrutinize in more detail to meet the high skill demand required for job roles. For a business that desires consistent growth, it is imperative to hire a workforce that is eager to learn new skills at an accelerated pace while unlearning the old skills that are either already irrelevant or will become obsolete soon. But it's easier said than done.

NATURE OF WORK TASKS IS CHANGING RAPIDLY...

Work tasks are becoming increasingly novel and requiring strong analytical and interpersonal skills.

Work tasks can be of four types- routine manual, non-routine manual, routine cognitive and non-routine cognitive. Over the last ten years, the majority of the employment has come from 'non-routine cognitive' task-based jobs such as professional business services (IT, consulting, business research and support services). Jobs involving routine cognitive tasks such as customer service, accounting, or data entry are increasingly getting automated. Routine manual tasks such as product assembly, agriculture or manufacturing are being mechanized with much greater precision at a lower cost, and in a much shorter time-frame.

Automation is taking over non-routine manual tasks such as driving and cooking, with the advent of self-driving cars and AI-powered robots.



Change in the Nature of Work Tasks Over the Years

	Nature of work	Example of work
1980	Performing tasks involving repetitive motions	<ul style="list-style-type: none"> • Assembly line workers • Construction workers • Carpenters
	Doing work requiring manual dexterity or spatial orientation	<ul style="list-style-type: none"> • Drivers • Cooks
	Being exact or accurate in speech or writing or calculation	<ul style="list-style-type: none"> • Cashiers • Accountants • Telephone Operators • Teachers
	<ul style="list-style-type: none"> • Analyzing data/ information • Thinking creatively • Solving problems and making decisions • Coaching others • Guiding, directing and motivating others • Establishing and maintaining relations 	<ul style="list-style-type: none"> • Lawyers • Bureaucrats • Doctors • Managers/CXOs • Software developers/Coders • Data Scientists • Stock Market Traders • Consultants
2020		

...SO ARE THE SKILLS REQUIRED TO PERFORM THEM

The skill set required to perform the job today would be very different from the skill-set required to perform the same job one year later. You will have to learn on the go, adapt and grow. The failure to do so will render you obsolete for your current employer. Organizations need multitaskers and versatile employees.

For example, a few ago language proficiency was the only skill needed by content writers. Now companies want content writers who are capable of keyword research, SEO and can write varied kinds of content - tweets, emails, blogs, whitepapers, articles, website content and advertisements, among others.



KEY STEPS IN CLOSING YOUR ORGANIZATION'S SKILL GAP

1. IDENTIFY THE CURRENT SKILLS FOR EACH JOB-FAMILY

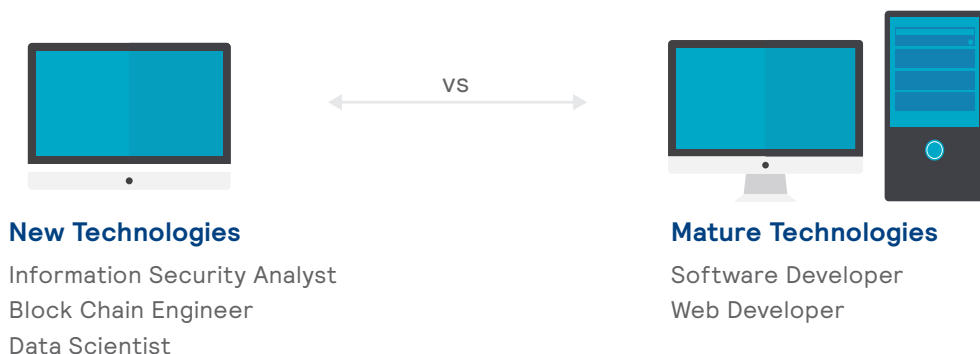
With the rise of automation, digitalization and machine learning, IT has a new found meaning, leaving behind some old legacies. **Organizations in the era of dynamism cannot neglect to adopt newer technologies. Their doing would make them completely redundant.**

Companies are now in a state of war, where each one is seeking the same skill-set that fellow competitors need. **The competition to acquire talent has become fierce with a 2% unemployment rate, which, given the industry standards, is fairly low for tech workers (The Bureau of Labor Statistics).**

The State of Tech Hiring, a survey of 50 tech employers and 161 tech workers found that Machine Learning, Scalability & Design Thinking rank as the most valuable skills in the tech market.

The market has a demand for both new and mature technologies. Technical recruiters, whose jobs are becoming a growing challenge, need to identify the person with the respective in-demand technical skills and hire him/her. Also, the huge demand-supply gap compounds their misery. A government report estimates that one million jobs are going unfilled every year. Hence if the employers don't imbibe these technological proficiencies into their organizations, then they have already lost the battle against this growing demand.

I would suggest arming yourself with technology to employ a sureshot means of fighting it. In today's competitive market, recruiters seeking to hire the right technological fit or wishing to upskill, ought to look for these skills and qualifications in their desired match.



NEW TECHNOLOGIES



1. Information Security Analyst

Simply put, they are the ones who protect the information system. With the increasing infiltration of networks, there has been a growing need for expertise in cybersecurity. Companies want to prevent their information systems against hackers and cyber-attacks, hence this profile is in huge demand. The Bureau of Labor Statistics shows that the profession is expected to increase more than 28%, resulting in 28,400 new jobs.

Qualifications & Skills:

- A bachelor's degree in Computer science, cybersecurity or related field
- C, C++, Java or PHP programming languages
- Security information and event management [SIEM]
- Cloud computing and SaaS models
- Windows, Linux and UNIX operating systems
- DLP, anti-virus and anti-malware

Qualifications & Skills:

- A degree in computer science or engineering
- Experience in Java, Golang, Rust, Scala, Python, C++, C#
- Experience of working on open source technologies and new language like
- Solidity An understanding of bitcoin or other currencies



3. Data Scientist

As Big Data and machine learning set their feet in the business world, data scientists are becoming increasingly important in industries from finance to health to drug discovery. A data scientist takes a huge amount of unorganised data and, using her maths, statistics and programming skills, organizes it. After structuring, she analyses the data for insights and finds solutions for company challenges.

Qualifications & Skills:

- A degree in science, technology, engineering, math or an equivalent professional qualification
- R, Python
- Machine learning
- Hadoop platform, experience in hive or pig preferred
- SQL/Database coding



2. Block Chain Engineer

They are the ones who figure out how to secure a changeless, distributed database. This role borrows skill-sets from a web developer, database developer as well as a distributed system developer. They design protocols, plan for unfriendly incentives and do a lot of testing of assumptions. Immutable ledger is useful for a lot of applications, but the fact that they are hard to design has led to a high demand for these engineers.

MATURE TECHNOLOGIES



1. Software Developer

He is the person concerned with all dimensions of software development program- from research and design to programming and testing of computer software- he does it all. Software Developers are basically the innovative minds of a computer program. There is an expected growth of 30% from 2016 to 2026 for software developers. (Source: The Bureau of Labor Statistics.)

Qualifications & Skills:

- A bachelor's degree in computer science, software engineering or related field or a degree in mathematics
- C++, C#, Java, Python, Lisp
- PHP
- SQL/MySQL
- HTML/Css3



2. Web Developer

They are the ones who create the website. When you have a good user experience, thank them for the effort! In this age of digitalization, where everything from buying clothes to food, to making friends, has gone digital, the position of web developers becomes even more desirable. E-commerce seems to be the main reason for the increasing number of web developers. As we see companies expanding their web presence to satisfy consumer needs and making the purchase easier, more web developers are required to build websites. The Bureau of Labor Statistics shows that the demand for this profile is expected to increase by 13% till 2026.

Qualifications & Skills:

- A bachelor's degree in Computer science or Information technology
- SQL, JavaScript, Linux command line
- HTTP protocol
- AJAX
- Separation of concerns [MVC etc.]



2.DETERMINE THE DESIRED LEVEL OF SKILLS - CONSIDER JOB RELEVANCE IN FUTURE & EMPLOYEES' LEARNING AGILITY

Much before you go about creating a training program to 'upgrade' your current workforce to match the current market demands, you need to think about the people who are undergoing training, i.e. your employees.

Questions like 'Would they be interested in learning a particular topic', or 'will they be able to grasp the topic on, 'which they are being trained,' often go unanswered, which creates a rift between the expected results and the observations of the training program. Amid multiple variables, **how do you decide on whom to train?**

Two main factors that should influence your decision of who you want to train in your organization are:



**JOB & SKILL
REDUNDANCY INDEX**



**EMPLOYEE LEARNING
AGILITY SCORE**



**JOB & SKILL
REDUNDANCY INDEX**

Not all jobs are created equal. In 2013, 'The Future of Employment', a highly-cited study by Oxford University, examined 702 common occupations and found that some jobs, notably, telemarketers, tax preparers, and sports referees, are at greater risk than others, including recreational psychologists, dentists and physicians.

To understand which jobs might get redundant in your organization, you have to analyze different job roles and skills in your organization.

SKILL REDUNDANCY ANALYSIS

KEY SKILLS	LIKELIHOOD OF REDUNDANCY	REASON FOR REDUNDANCY LIKELIHOOD
Collaboration skills	Low	Technological advances are changing the concepts of geographical boundaries, and the future is a globally connected world
Competent Product Knowledge	Medium	The products of today are not likely to be the products of tomorrow. It needs to be updated from time to time with the latest products
Customer Retention/ Loyalty	Low	Key skill for maintaining organizational growth and stability, and requires higher level of social intelligence and creativity to retain customers
Customer Servicing	Medium	High volume customer servicing use cases can be automated
Process Optimisation Skills	Medium	Standard processes can be analyzed using past data, to optimize processes with little to no human intervention
Relationship Management	Low	Key skill for maintaining organizational growth and stability, and requires higher level of social intelligence and creativity to engage customers
Selling Skills	Low	Selling skills in a B2B space requires creating different strategies for different clients, and hence requires higher level of creativity
Strategic Thinking	Low	This requires a high level of creativity, and dealing with ambiguity, which cannot be replaced using a machine

Mercer Mettl Redundancy

Identifying key factors that lead to redundancy across job roles, creating a redundancy matrix for job roles, based on the score on the redundancy matrix, and ultimately calculating their likelihood of redundancy.



EMPLOYEE LEARNING AGILITY SCORE

According to researchers at Teachers College, Columbia University, and the Center for Creative Leadership, learning agility is defined as the mindset and corresponding collection of practices that allow employees to continually develop, grow and utilize new strategies to equip them for facing increasingly complex problems faced in their organizations.

Measuring Learning Agility

From research, it is evident that highly agile learners “excel at absorbing information from their experience and then extrapolating from those to navigate unfamiliar situations.” Learning Agility is a measure of an individual’s skills that enable him/her to do so. This assessment captures the cognitive abilities required by an individual to use information gathered from past experiences and use them in the future.

Mercer Mettl’s Test for Learning Agility is based on Learning Agility Simulation exercise which helps measure three primary constructs for Learning Agility.

Learning Speed – the speed with which information makes its way to working memory and gets retrieved, which, in turn, leads to a specific behavioral response.

Flexibility – measures the metacognitive abilities of candidates, which reflects one’s ability to think about her thinking.

Pattern Recognition – measures how individuals identify logics from patterns and solve problems.

3. RESKILL OR RECRUIT?

Now that we are well versed with the top tech talent in-demand, the required qualification and the growth prospects, what are we waiting for, let us grab them?

- Recruiting talent is one way to attain technological proficiency. It is tempting to reach out for the shiny ones, but a quick decision may lead to a poorly integrated, underperforming system. Hence, before hiring, assess the skills of the selected candidates via various assessments that test their knowledge in the required field. Once you have evaluated the candidates, it becomes easier and less time consuming to make the best and right decision for your organization.
- Sometimes you may also find your match within the company, if you identify high potential employees and reskill them. They are a better bet since they are already aware of your company’s working, its environment and will perform with an intention to improve everything. Decide wisely between recruiting a new person or upskilling an existing employee, keeping in mind long-term business goals.



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According to the Latest workplace L&D report published by LinkedIn,

69% Identifying, assessing and closing the skill gap is the top priority for L&D professionals.

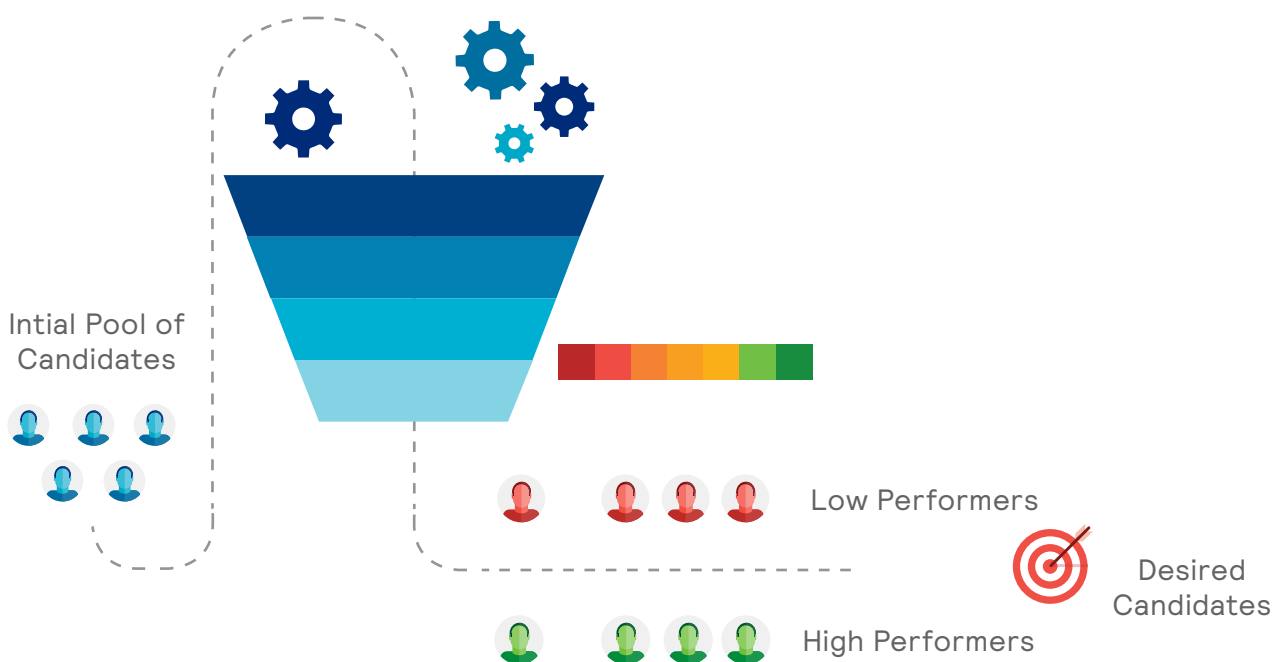
43% Talent Developers expect a budget increase in 2019

1. THE MODERN RECRUITMENT APPROACH

In this era of growing demand, time is money. You cannot afford to waste it. Automating the hiring process with a modern approach has complimented your time and money equally. Modern assessment tools make your investment worthwhile and your approach smarter. Let us explain how.

- Sourcing: this is, by far, the most frequently cited challenge by hiring managers. Be stellar and optimized to the source. Modern recruitment platforms such as Facebook, LinkedIn, community events and hackathons represent an outbound sourcing strategy. While going offline and meeting people is also a way to source candidates. These tools have increased the visibility and expanded the pool, hence attracting talent has become easier and less time-consuming.
- Selection assessments- are used to identify the skills that cannot be evaluated in the first step.
- The content of these tools follows a basic framework-Concept, Knowledge, Application and Analysis.
- The online assessments could be MCQs or Hand-on Simulators.
- These tests measure aptitude, personality, honesty and abilities, where a higher score relates to higher job performance.
- Interviews- selection testing trims down the pool of prospects, now you can conduct the interviews, either telephonic or face to face and get your ideal match.

FILTRATION AND SELECTION



The modern approach has a two-fold motive. They are: filtration and selection. For instance, you have 25 people, now this automated platform, by conducting assessments, will not only filter high and low performers, but also give you a comprehensive score as submission of all values, and hence aid the selection

Note that these modern tech assessment tools are not just about assessing better but also assist in automating the hiring procedure.

Let me explain this with the same example where a company had to hire ten coders. Now, instead of following the lengthy traditional approach, the company follows a more organized system.

- It gives the pool of candidates a code challenge on an online platform.
- This platform subsequently evaluates the performance based on the various parameters and narrows down your list of options to the best available.

The integration of the internet with different platforms- mobile, cloud, social, or big data has made tech flourish in all shapes. Finding the right match is still a big hurdle in the way. With the integration of modern tech assessment tools from various online platforms such as Codility, HackerRank, or Mettl, you can point at the professionals in-demand.

This way, you have your list of the desired candidates in the most efficient way.

2. THE MODERN RE SKILLING APPROACH

How to train your current employees, so that the business objectives are met, and you get a high return on investment of the training program, are eternal questions asked by stakeholders in the L&D departments globally.

The challenge can be fundamentally broken down into two pillars:



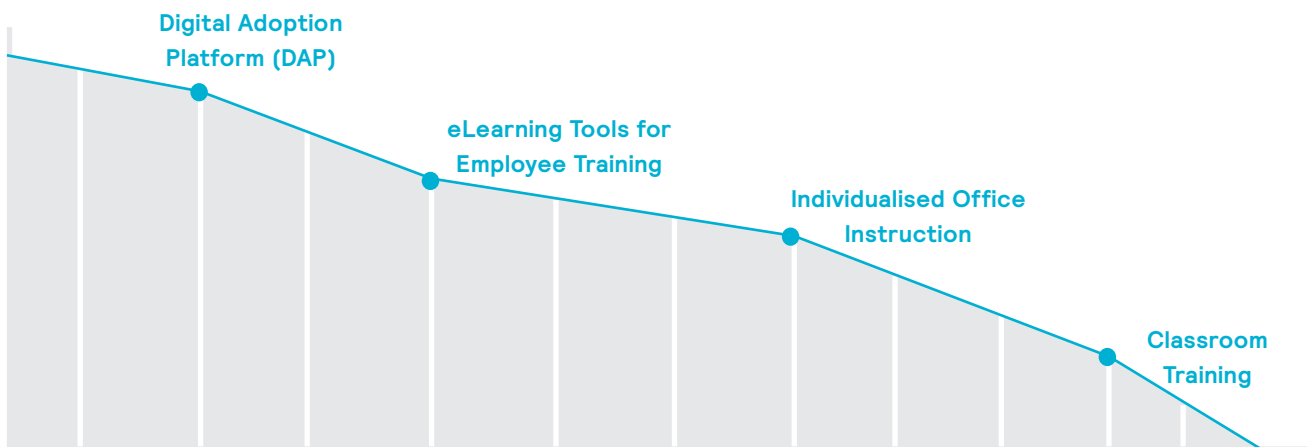


CREATING THE RIGHT TRAINING PROGRAM

- Identifying the upcoming Job Family/Skill Level Grouping in an organization
- Creating a competency framework for every job
- Identifying the jobs that are slated to be obsolete in the upcoming years
- Assessing the employee's domain knowledge in order to align the training program with business objectives
- Assessing the employee's motivation to ensure it results in the mutual benefit of both the organization and the employee.



DELIVERING THE TRAINING PROGRAM RIGHT



04

Classroom Training

The drawbacks of the classroom training then is mostly the same as it is today – since workers were learning how to do their jobs out of context, they had to remember what they were taught in the classroom until they were back in the production line.

Additionally, due to the nature of classroom learning, their training was abstract and theoretical. This forced employees to translate what they had learned into practical action, adding to the cognitive load.

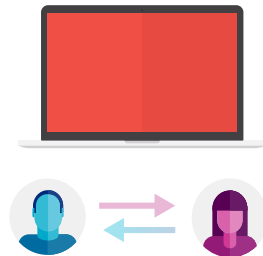


03

Individualized Office Instruction

Individualized instruction typically exchanges the teacher for self-study materials, thus cutting costs and increasing scalability. This method relies on programmed elements, or, job training that has been divided into easily digestible steps.

Still, individualized instruction is not without expense. It requires skilled people to prepare the subject matter and supervise the process. Finally, like classroom training, it is usually off-task and out of context of the actual job.



02

eLearning Tools for Employee

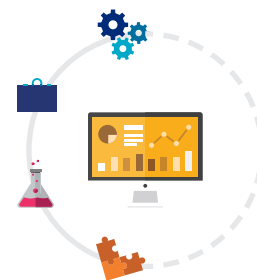
As computers became ubiquitous during the late 80s and early 90s, computer-based training (CBT) was the obvious progression. An eLearning method augments the individualized instruction with digital tools, capitalizing on technology's speed, branching capability and visual display.



01

Digital Adoption Platform (DAP)

The key to the future of employee training tools is the context, eliminating the gap between theoretical training and practical application. By offering a hands-on approach to learning workplace tools, companies can cut training time and budget.



CONCLUSION

The arena of learning and development, as well as recruitment, has undergone massive transformation in the past few years, with the onset of new technology, a mobile-first mentality, and the influx of millennials in the workforce.

To keep your employees up to date with the ever-changing requirements of new skills, you need to have data-backed insights to be able to continually improve your recruiting, as well as training programs, and derive consistent returns on expectations.



ABOUT US

At Mercer | Mettl, our mission is to enable organizations to make better people decisions by making credible people decisions across two key areas: Acquisition and Development. Since our inception in 2010, we have partnered with 2900+ corporates, 31 sector skill councils/ government departments, and 15+ educational institutions across 90+ countries.

CONTACT US



INDIA OFFICE

+91-9555114444

Plot No.85, Sector 44, Gurgaon,
Haryana, India - 122003

Australia: +61390699664

Indonesia: +6285574678938

Singapore: +6531386714

South Africa: +27875517192

UAE: +9718000320460



contact@mettl.com

www.mettl.com

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