TECHNOLOGY

Digital Prowess: Technology Skills Expectations in the Contemporary Workplace
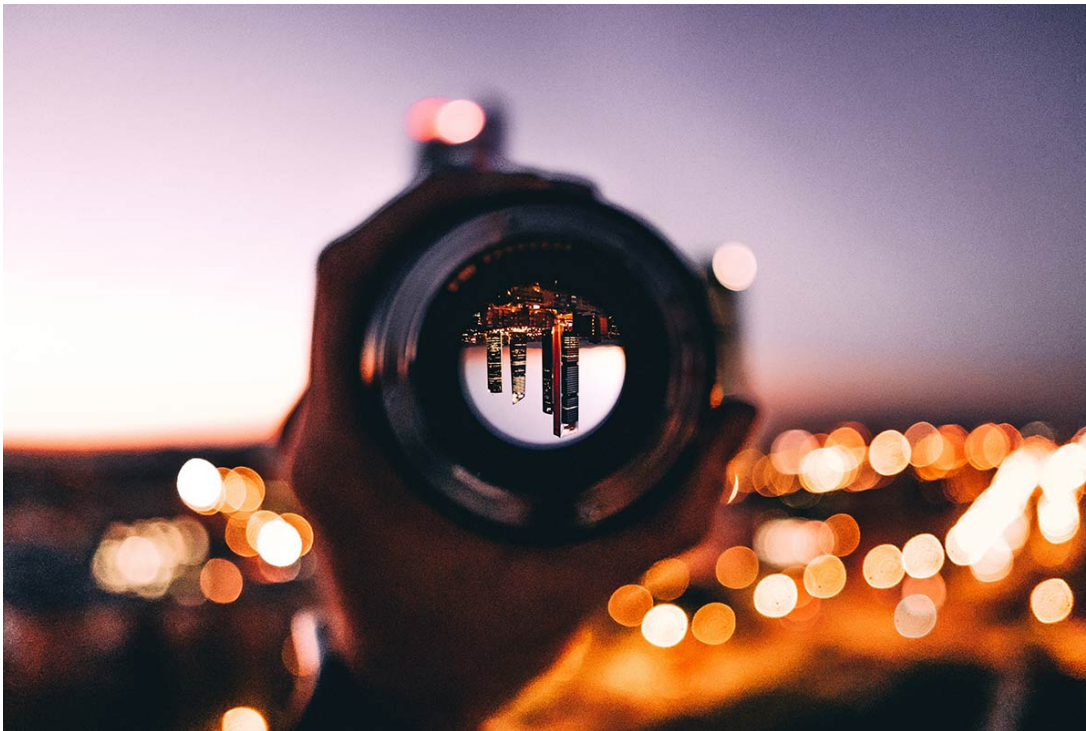
by J. Mark Munoz

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Are your employees familiar with these emerging technologies?

✅ **INSIGHT | INTERVIEW**   01 Aug 2021

Technologies such as artificial intelligence, internet of things, blockchain, augmented reality, and cloud quantum computing have grown in usage in corporations around the world. It is estimated that the digital economy will contribute to about $60 Trillion in

revenue by 2025 (Atluri et al, 2017).

Amidst this landscape, one can only speculate on how these technologies and the changes they bring will alter the workforce of today and that of the future. Executives need to answer important questions such as: what technological skills are currently expected of employees? Are academic institutions and corporations providing the right skills for digital success? How can organizations optimize digital talent and performance?

In this article, insights from four executives working in industries with interfaces in human resources management and technology are featured. Their viewpoints shed light on some of the key questions that need answers in a digital economy as well as the technological competencies essential for success in the contemporary business environment.

Christopher Platt, Co-Founder / CEO, ThriveMap

Munoz: In your opinion, in this digital economy, what basic tech knowledge should employees have?

Platt: What we are hearing from employers is a talent shortage of basic digital capabilities. In particular the ability to use multiple technology products simultaneously and multi-task between them. Assessing this isn't as simple as testing multi-tasking or technical knowledge in a broad sense as technology is ever-changing. A better approach is to educate employees on the utility of technology to achieve optimal business outcomes and ask them to leverage technology to deliver their own solutions to business challenges. This creates a flywheel effect and passes on that learning to make the process simpler and more efficient for the next person. In many roles that involves thinking creatively about how technology can be used, how systems should talk to each other and which manual tasks can and should be automated.

Munoz: What percentage of employees have these skills, and what are the implications on company operations?

Platt: It varies by role type, by industry type and also by organizational type. For example, in many startups and scaleups, it's expected that individual contributors should use technology to optimize the efficiency of their role. Salespeople in scale-ups will all have automated outreach, calendar scheduling and task management. They'll also be A/B testing constantly to optimize their output and be expected to report learnings to the business. This methodical use of technology to improve outputs is quickly becoming adopted in more traditional organizational types, industries and roles too. An effective employee should be thinking about how they can automate elements of their role and hypothesize solutions before the business does it for them.

Munoz: What should companies do to optimize digital talent in corporate America?

Platt: Like most answers to complex questions, it depends; firstly on the goals of the organization, then it depends on the context of the business, the role-type, the industry and so on. However, an overarching philosophy that I hope gets traction is that it's more important to learn than it is to get it right the first time. Companies should approach upskilling and recruiting with a view to learning what works best for them. It may be best to launch a digital apprenticeship, it may be better to assess technical skills in the hiring process or it may be better to upskill existing employees. The only way a company is ever going to know for sure is by launching experiments and measuring the results.

Subhashini Tripathi, Co-founder and Chief Data Scientist, Pexitics

Munoz: In your opinion, in this digital economy, what basic tech knowledge should employees have?

Tripathi: The basic knowledge I expect an employee to have is proficiency in the use of smartphone and mobile applications, emails, MS office (Excel, PowerPoint, Word) and video conferencing. These skills should be adequate for basic jobs such as clerks, servers and security personnel. For managerial or customer interfacing employees, more digital competencies are needed such as the ability to use Google Drive and related apps, creating lists, doing basic data entry into the different coordination applications that are being used, understanding when to use different communication platforms such as Skype and Zoom, and finding solutions to technological glitches and problems. In addition,

the ability to do research and analyze data gathered is important. Since my company also offers data science consulting and products, my technical consultants and developers are required to know programming languages such as Python, R , Tableau, Power BI, .Net (dotNet), and Azure.

Munoz: What percentage of employees have these skills, and what are the implications on company operations?

Tripathi: For basic jobs, the tech skill level requirement are currently low but I foresee a much higher usage post-Covid. Internet penetration and reliability have gone up and some employees made an effort to upgrade their skills and have become more comfortable with digital applications and technology. In our company, I have observed that it is the senior, non-technical consultants who struggle with the use of collaborative technology. About 99% of my firm's technical staff have the digital skills to do their job well. I would say about 75% of employees in non-technical work roles possess the skills to excel in their jobs. As an executive of a consulting firm, I get to interact with executives across different industries and job functions. I have found that operations oriented and non-technical employees (ie, procurement staff, banking executives, retail workers) find it challenging to integrate technologies and often need help and training for remote work systems and processes. These employees are most comfortable with in-person interactions and struggle with digital interfacing.

Munoz: What should companies do to optimize digital talent in corporate America?

Tripathi: Organizations should include digitalization as a core policy pillar and strategize to shape it in their organizational culture. This way, job descriptions can be upgraded to specifically include digital skills. Furthermore, Key Performance Indicators (KPIs) for jobs may have a digital skill component. Utilizing digital KPIs will push productivity measures and hiring metrics to include such competencies. In addition, learning and development teams possibly from external consultants, should evaluate existing digital competencies across the organization through online talent and competency assessments. These assessments would help organizations uncover the necessary knowledge and skill upgrades for employees and effectively plan out an integrated and cost-efficient development plan. A Digitalization Plan can be prepared outlining digital competency improvement targets and timelines. Given the fast-changing digital landscape, periodic assessments are necessary. Additional organizational benefits can be derived if these digital assessments can be conducted in tandem with vendors, contractors, suppliers and relevant stakeholders.

Vikas Dua, Head of HR, IPG DXTRA

Munoz: In your opinion, in this digital economy, what basic tech knowledge should employees have?

Dua: In today's economy, there is perhaps no domain untouched by technology. Entrants to the job market are much better placed if they bring with themselves, technical expertise or knowledge. The specific technical knowledge will depend on the individual's domain of choice. However, the must-have or hygiene technical skill at the very least, therefore, is to have a technical bent of mind. This essentially means that the individual is aware of the broad technical developments in the eco-system around and is able to leverage and integrate some of them to advance one's quality of work.

Munoz: What percentage of employees have these skills, and what are the implications on company operations?

Dua: This would vary from industry to industry. Take for example, a basic call-center environment that requires only the basic technical capability to operate a computer system and a defined workflow. In this case, the percentage of employees that have this skill would be about 30-40%. On the other hand, if one were to analyze an organization that does higher end work involving the expertise of data scientists, the percentage would be closer to 100%, given that the work environment would need people of high caliber and skills. In scenarios where the essential skills are found to be inadequate or low, organizations have attempted to solve the issue through different mechanisms. In some cases, they take the services of 'Training companies' that upskill prospective employees to the desired skill level. In other cases, organizations build their own training capability especially when they see this 'skills gap' as a persistent issue, the resolution of which is integral for their success in the marketplace.

Munoz: What should companies do to optimize digital talent in corporate America?

Dua: The recent years have shrunk distances and transformed learning like never before. In order to optimize digital talent, the approach advised would be to leverage digital frameworks. Not only organizations, but individuals themselves should make the most of remote learning delivery platforms to build capability. Encompassing both, synchronous and asynchronous learning models, these can enable professionals to be coached by the best faculty globally on subject areas of their

requirement. A concerted effort in making learning opportunities available to their employees, will be a perk that will be immensely valued as we see technology also eroding some of the jobs at the bottom of the pyramid.

Sanjoe Jose, CEO, Talview

Munoz: In your opinion, in this digital economy, what basic tech knowledge should employees have?

Jose: Being tech-savvy is essential for most jobs in the digital economy. Job seekers and employees should equip themselves with a minimum knowledge in computer/smart device operations, finding information by using a search engine, using digital collaboration tools like Zoom/Teams, Microsoft Office 365, etc. If you are a field employee considering aspects like using digital navigation tools like Maps and using digital payment applications. As these systems are evolving at a fast pace, employers are putting a lot of emphasis on learning ability for the new hires.

Munoz: What percentage of employees have these skills, and what are the implications on company operations?

Jose: According to National Skill Coalition, one-third (31%) of US workers lack digital skills. Under investing in upgrading digital skills for employees can make companies laggards. A lot of recent growth in online learning amongst corporate employees has been focused on these areas. Companies looking to take advantage of remote/flexible work trends need to prioritize this.

Munoz: What should companies do to optimize digital talent in corporate America?

Jose: Companies will see a significant talent shortage in the coming years, primarily due to the skill gap. They should start programs such as reskilling, digital skill workshops, and skill gap assessments, which will help build a qualified talent pipeline in tandem with the evolution of the economy.

Insights gathered from the interviews underscore five areas that need attention in today's organizations:

Unevenness and inconsistencies in technological competencies – the interviews indicate that technological competencies and requirements vary across organizations, functions and roles. This suggest that the extent of technological upgrades, restructuring and employee development would be different from one company to another.

Multiplicity of developmental needs – it is evident from the interviews that employee skill enhancement is critical in a digital economy. There is a need to elevate skills in order for employees to utilize a wide breadth of technological products efficiently across multiple work tasks. Organizations need to address a pressing need: how to best cater to the unique training needs of every single employee given the disparity of knowledge and abilities?

Multidimensional talent development – faced with a growing pressure to elevate digital competencies, organizations need to undertake multitude of measures such as new policy creation, reconfiguring of job functions and structures, reskilling, upskilling, and assessments in order to keep up. There is therefore a high need to prioritize well, use creativity and focus on efforts that lead to an optimal impact.

Strategic operational and resource commitment – in the process of embracing digitalization, organizations need to be prepared to commit financial, manpower and other key resources. They need to formulate a well-devised technological plan and put in place the right policies in order to accomplish set goals within desired timelines.

Proactive and creative action – organizations as well as employees need to take control of their technological destiny and developmental journey. Those that don't wait and are willing to infuse innovative thinking to obtain a distinct advantage differentiate themselves and truly standout.

Additionally, research suggests that digital transformation requires management efficiencies (Besson & Rowe, 2012). It impacts operational routines, organizational capabilities and ultimately defines an organization's culture (Chen et al, 2014; Tan et al, 2015; Cui & Pan, 2015).

In the contemporary business environment, depending on organization types and work roles, some level of digital prowess is expected. Success comes to those who plan wisely, use whatever skills they possess well, and leverage their abilities to provide inimitable value.

▶ References

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Dr. J. Mark Munoz is a tenured Full Professor of Management at Millikin University, and a former Visiting Fellow at the Kennedy School of Government at Harvard University. Aside from top-tier journal publications, he has authored/edited/co-edited more than 20 books such as: Global Business Intelligence and The AI Leader.