Everest Group® RESEARCH

Preparing for the Future of Talent

8 Practical Insights for Designing a Future-Ready Talent Model in a Digital-First World

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Introduction

What is Digital?
The use of technology to dramatically enhance the experience of users – whether customers, employees, and/or partners

Among those that succeed, it is a common refrain that it is talent – not technology – that determines success or failure

The Quest for Digital Dominance

All enterprises – big or small – are (or will be) on multi-year digital journeys, the objective of which is to dramatically enhance user experience (customers, employees, and ecosystem partners) through the implementation of digital technologies.

The potential power of improving the customer, employee, and/or partner experience impacts a company's competitiveness in such a profound way that it is a do or die decision for the enterprise. However, despite their best intentions, 78% of enterprises fail in their initial digital transformation efforts[1].

Among those that succeed, it is a common refrain that it is talent – not technology – that determines success or failure of a digital program. Most leaders concede that technology implementation is the easy part; solving the talent and culture equation holds the key to digital dominance.

To be clear, talent is only one of several components that an organization needs to optimize to get digital right. However, as speed becomes the new currency for business (and therefore by extension IT), talent is increasingly key to ensuring organizations are able to realize their digital ambitions at speed. Why? Because, talent is the rate-controlling component in the digital equation, and an organization's inability to get the right talent, at the right place, at the right speed will slow down the entire digital journey.

It is also important to consider current talent supply and demand dynamics: Unemployment rates have steadily decreased in key source geographies for many years (Exhibit 1). In fact, for the first time in several years there are more job openings in technology in the U.S. than qualified talent available to fill the positions.

EXHIBIT 1

Unemployment rates in the U.S. and Europe

Sources: U.S. Bureau of Labor Statistics; Eurostat
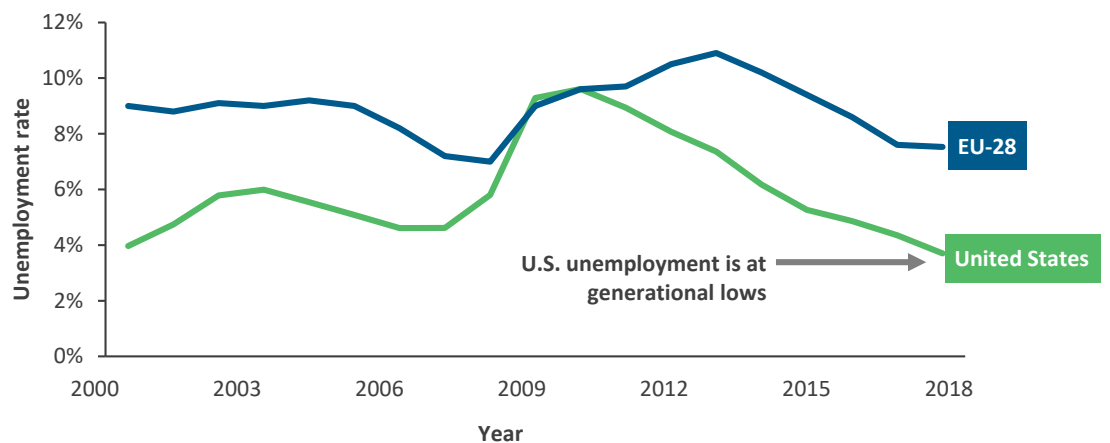
This study, which is based on an analysis of more than 300 enterprises' digital readiness, covers:
- The new demand model for IT in a digital-first world
- Attributes of a new skill and supply model to meet new demand
- 8 best practices for enterprises seeking to optimize their talent supply chains

1   Based on Everest Group's Digital Readiness Pinnacle Study of over 300 enterprises

Changing demand model in IT

Business value as the new IT objective function

The enterprise IT role is undergoing a sea change; businesses of all types are being disrupted and redefined by the rapid digitalization wave. IT has evolved from cost center to critical business enabler. In fact, about 60% of enterprises have prioritized IT services agility and flexibility through digital transformation as the *primary* focus of their IT services strategy, with cost reduction a logical/implicit derivative.

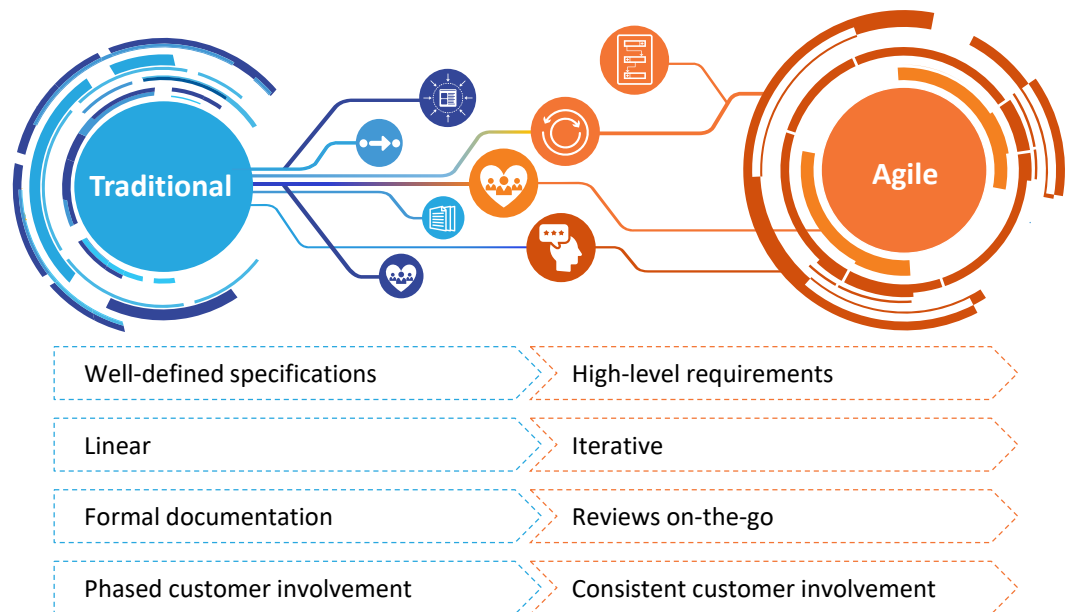### The need for speed – an Agile first mindset

As business value becomes the primary objective, speed (and not cost) is the new currency in IT. Though considered a fad only two years ago, Agile development methods are seeing widespread adoption, with over 90% of enterprises indicating that they are using Agile in some shape or form. However, although its adoption is common, fewer than 20% organizations consider themselves to have high levels of maturity in using Agile.

Deployment of Agile results in a material shift in the ways an organization works, and, therefore, it also has profound impacts on the talent supply model, as described in Exhibit 2.

EXHIBIT 2

Impact of Agile on how organizations work

Source: Everest Group (2019)

Traditional	Agile
Well-defined specifications	High-level requirements
Linear	Iterative
Formal documentation	Reviews on-the-go
Phased customer involvement	Consistent customer involvement

Other factors impacting demand for talent

Beyond business realities, demand for talent is also significantly impacted by other factors, most notably immigration reforms and the global geopolitical environment, for example:

- *Immigration reform:* Expectations of H1B reforms in the United States caused some enterprises to rethink their visa-free demand
- *Geopolitical environment:* The conflict in Russia and Ukraine have caused enterprises to be selective about sourcing talent from these destinations and/or limiting their exposure in them

These cases of supply influencing demand create real near- and long-term impacts for enterprises' IT talent strategies.

Attributes of a new supply model

The new talent model for productivity – proximate, persistent, and cross-functional

As enterprises adopt an Agile first approach to IT and embrace DevOps, their underlying talent models are changing across three broad dimensions to enable their teams to operate at high productivity levels:

1. Proximity and co-location
High performing talent models tend to emphasize co-location or proximity, a model that locates parts of the same team together, or, at least, in contiguous time zones, which enables significant collaboration and context-sharing. This model contrasts with the scaled offshore models that leverage arbitrage first. To be clear, distributed labor models will continue, but enterprises achieve the highest productivity when teams are proximate. As a result, we are seeing more instances of enterprises and service providers increasing their hiring in nearshore and onshore locations.

2. Persistence
Another attribute of high-performing talent is persistent teams (i.e., teams that stay together). The traditional IT factory model, whether delivering services onshore internally or with third parties, assembles teams for specific projects. In contrast to this project orientation, a DevOps team is journey oriented. It continues to support and drive forward a set of functionalities throughout an ongoing journey to achieve breakthrough performance.

The traditional, project-oriented model is wasteful. Companies spend a lot of time forming teams with qualified skills and equipping them with accelerators such as a cloud environments and agile methodologies. But much of the time is spent working up the learning curve: assembling the team, normalizing the team, understanding the new environment, building the requirements. Only a small portion of time focuses on delivery.

A persistent team with the same set of resources over a prolonged period of time ensures context and is much better at aligning with longer term business objective. Even though these teams might be more expensive, the productivity-weighted benefits tend to offset the increased costs.

3. Cross-functional
Another attribute of high performance talent models is teams that are empowered and self sufficient and that include representatives from across the entire product lifecycle. A strong cross-functional team, for example, would include business analysts, developers, quality engineers, and experts in security and operations, among others. This model values multi-talented skills versus specialization.

In addition, beyond technology competencies, strengthening business and domain alignment is increasingly critical in these newer models, enabling IT teams to be true business partners.

8 practical insights for designing a future-ready talent model

The new IT demand model, coupled with the attributes of the new supply model, require enterprises to rethink their talent strategies to effectively design models that support their digital transformation journeys.

Outlined below are eight must have practices for enterprises seeking to design a future-ready talent model.

1. Develop business-aligned skill roadmaps; make demand management a science

Ensuring that the enterprise is able to staff projects with the right skills at the right time requires a strategic approach to demand management that goes beyond an annual planning cycle.

Sophisticated IT strategy and planning organizations taken demand management to a science; in doing so they:

- Build a business-informed technology demand roadmap
- Forecast the skill inventory based on their desired technology roadmap
- Segment skills into different pools (e.g., standard, mainstream, specialized)
- Understand demand and supply gaps across different skill pools (see Exhibit 3)
- Launch hiring and reskilling mandates based on the analyzed demand roadmap
- Recalibrate the roadmap and targets quarterly

EXHIBIT 3

Example demand-supply gap analysis

Source: Everest Group (2019)

Black: standard skills; Blue: specialized skills

Category	Skills with high demand in the future (3-5 years)		
	High demand-supply gap in the future	**Low demand-supply gap in the future**	**Supply exceeds demand in the future**
Programming languages	JavaScript, SQL, Java, C#, Objective-C, Perl, MATLAB Ruby, Go, R, NoSQL, Python	C, Cobol, HTML5	C++, PHP
Database technologies	QlikView, Apache Spark, Hadoop, Teradata	MongoDB	Microsoft SQL Server, SAP Sybase ASE, MySQL, Microsoft Access
Tools/products /frameworks	React, Riverbed, AppDynamics, RPA tools, Workday	Oracle, jQuery, Internet Information Services, SharePoint Selenium, Angular.JS, Node.JS	HPE Unified Functional Testing, Tomcat, SAP
Infrastructure services	VMware, AWS, Azure	Cisco, Windows server, EMC, call center / help-desk, ServiceNow, Avaya, Tivoli Office365, Citrix	Unix server, Linux server, HP security
Agile/DevOps	Ansible, Chef, Puppet, Docker, Jenkins	Git	

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When companies execute these on their demand management programs, they are able to identify situations in which supply exceeds demand. From there, they can target current employees whose training they can accelerate to teach them new skills to reduce overall reliance on hiring to access those skills.

For example, there is high transferability of legacy to new skills in areas of application development, databases, mobile application development, and scripting languages, as demonstrated in Exhibit 4.

EXHIBIT 4

Example reskilling and up-skilling potential

Source: Everest Group (2018)

Skill category		Potential to reskill/upskill	Examples of skills that can be upskilled
Application development		High	Java, Python, C
Database programming		Medium	PL/SQL
Mobile application development		High	C#, C++, JavaScript, Java, Python
Scripting language		High	Perl, Smalltalk, JavaScript
Database		High	MS SQL, Cognos, traditional DBAs
Tools/products/ frameworks		High	JQuery, JavaScript, PHP, HP & IBM tools, IDE & project management tools, screen scraping, scripting tools

Once the enterprise ascertains the talent needs that it can address with reskilling, it can communicate targeted and more accurate hiring needs to the talent acquisition team.

2. Leverage a multi-location, multi-specialty strategy

If the Amazon HQ2 selection provided one lesson, it is that achieving scaled talent pools is difficult in a single location, even if you are one of the world's largest technology companies.

As enterprises with 500 or more resources in technology seek to create next-generation talent models, multi-location delivery strategies have significant merit. Not only does this approach help achieve scale faster, it helps lower risks.

Established locations such as Silicon Valley, New York City, and Seattle offer a large talent pool with state-of-the-art infrastructure, making them the locations of choice for IT talent. However, competitive intensity results in overheated, high cost markets. As a result, companies are increasingly exploring alternative tier-2/3 locations to access talent while lowering operating costs, as described in Exhibits 5 and 6).

EXHIBIT 5

Examples of tier-2 and tier-3 locations in the United States for IT services delivery

Source: Everest Group (2019)

● Tier-1   ● Tier-2/3

Seattle

Hartford   Providence

Chicago   New York

San Francisco   Salt Lake City   Indianapolis

Denver

Raleigh

Charlotte

Phoenix

Atlanta

Dallas

Austin
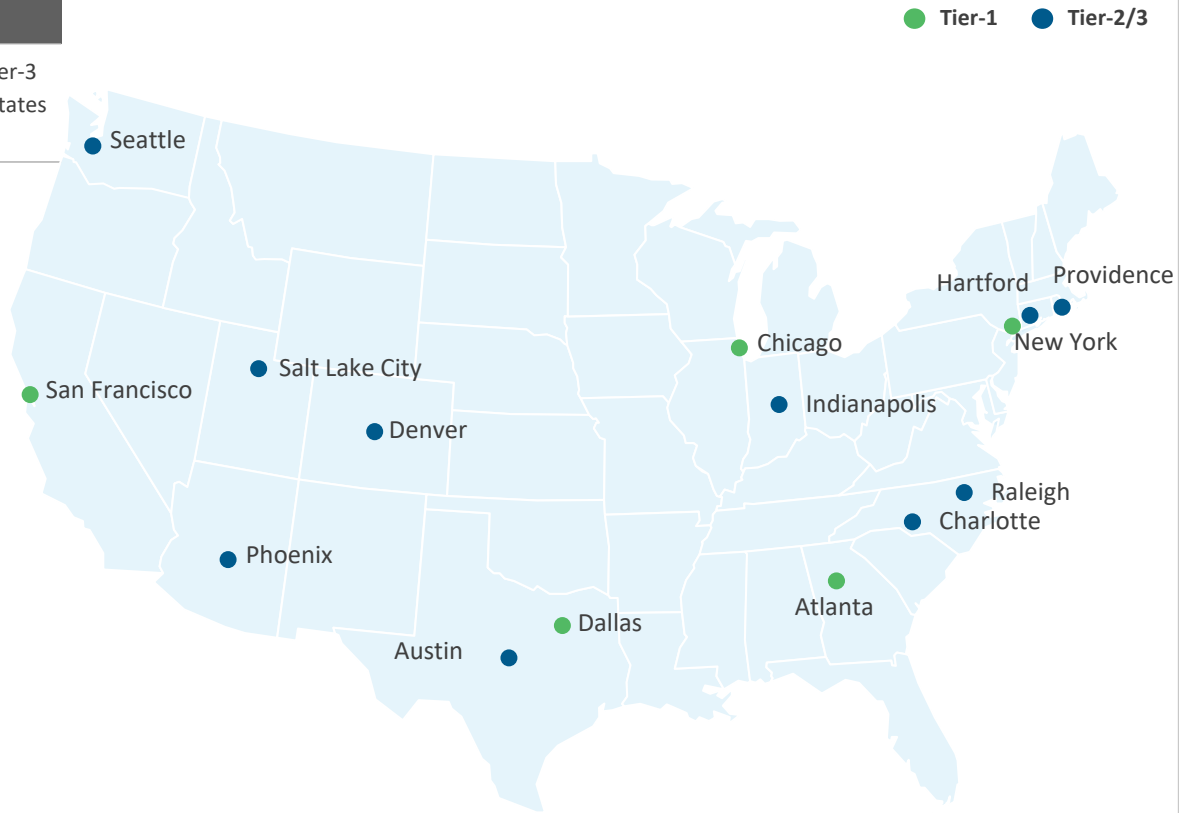
Tier- 2 and -3 locations in the United States offer cost arbitrage 15 to 20 percent over tier-1 metro locations. Moreover, many of these locations are moderately to highly scalable, as noted in Exhibit 6.

EXHIBIT 6

Market landscape for key tier-2 and tier-3 locations (using New York as the index)

Source: Everest Group (2018)

Ease of hiring 1,000+ FTEs over 2-4 years
- 🟩 Comfortable, no challenges
- 🟨 Achievable with focused efforts
- 🟥 Difficult to achieve

City	Cost	Talent pool		Market activity
	Indexed operating cost (New York = 100)	Annual employable entry-level talent Number	Ease of hiring 1,000+ FTEs	Examples of leading players
New York		1,500-2,000	🟩	Google, Facebook, Goldman Sachs, JPMC, Bloomberg LP, Citi, IBM, Credit Suisse, Barclays, Deutsche Bank
Austin	83-85	600-800	🟨🟩	Visa, Dell, IBM, Google, Dell, Oracle, Apple, Cisco, Facebook, Microsoft
Charlotte	83-85	500-700	🟨🟥	Bank of America, Microsoft, Wells Fargo, IBM, TIAA, Red Hat, NTT Data, Bosch, Fiserv, Experis
Denver	84-86	700-900	🟨🟩	Avaya, CA Technologies, Cognizant, Salesforce, IBM, Google, Facebook, Twitter, Trimble
Hartford	86-88	300-400	🟨🟥	Accenture, Google, 3M, Aetna, Cigna, ESPN, Amazon, Pratt & Whitney, Infosys
Indianapolis	80-82	700-900	🟨🟩	Roche, Salesforce, Eli Lilly, Genesys, HPE, JPMC, Cognizant, Infosys
Providence	90-92	300-400	🟨🟥	Google, Facebook, Dell, LinkedIn, Twitter, Airbnb, Adobe, IBM, Amazon, Salesforce, Delphi
Raleigh	81-83	600-800	🟨🟩	PayPal, Microsoft, IBM, Facebook, Airbnb, Cisco, SAS, Infosys, RedHat
Salt Lake City	79-81	400-600	🟨	Oracle, 3M, UnitedHealth Group, GE Healthcare, eBay, Raytheon, Teleperformance
Seattle	93-95	800-1,000	🟨🟩	Microsoft, Google, Amazon, Facebook, Uber, Accenture, Ericsson, Capgemini

Note: Annual employable pool refers to the yearly incremental pool of employable graduates with requisites skills (both technical and soft skills) and willingness to work in IT services. This is a much smaller proportion of overall graduate pool

Finally, beyond leveraging a multi-location strategy, scaled talent models also benefit when clients put multiple disciplines (aligned to the principle of cross-functional teams) across sites versus trying to designate locations for specific skill sets. For example, designating a location to focus exclusively on security or mobility is less attractive than locating multiple specialties in each location.

3. Establish a scaled, always-on learning platform

While organizations focus on hiring the right people, they may be overlooking existing talent that is working on older technologies or domains. Upskilling, cross-skilling and reskilling these employees can help organizations to meet changing demands.

Upskilling or reskilling tend to require less investment than hiring and training a new resource. As enterprises reskill their employees, they create a more well-rounded, cross-trained workforce that increases the entire team's effectiveness and often produces amplified business results.

Whether starting a learning program from scratch or are adding training content to an existing program, creating a scaled solution is critical to success. For growing companies, investing in a learning management system (LMS) is immensely beneficial. Harnessing the scalability of an LMS enables the learning program to grow as the company grows.

Keys to a successful next-generation learning strategy:
- Align learning objectives with the demand planning exercise
- Make learning anytime, anywhere, and always-on
- Accommodate different learning styles by including a mix of classroom settings in addition to digital distribution channels
- Empower employees to choose their paths; by putting them in charge of their personal development plans, they take more ownership over their personal and professional development
- Embed gamification to drive engagement and track progress
- Create power users and evangelists to drive grass-roots adoption
- Link the training platform with the overall performance management system; provide rewards and recognition (visibly) as employees progress

4. Embrace the ecosystem – academia, government, start-ups

Enterprises are realizing that reskilling and training alone many not be enough and they need to augment traditional approaches of hiring and learning. For example, partnering with universities to create trained talent is an effective way to accelerate time-to-value for new hires.

Such partnerships are mutually beneficial as they allow both parties to rely on each other for their strengths. Enterprises offer funding for research and the experience to commercialize products, while universities/institutions provide access to a large pool of talent, ideas, and intellectual property.

Furthermore, companies gain access to a network of faculty, key opinion leaders, and lead scientists, and the ability to team up with other companies interested in similar research.

Specific ecosystem engagement actions:
- Engage in graduate recruitment programs to hire resources
- Co-develop curriculum relevant to the digital services disciplines
- Offer internship programs to hire top performers
- Run training programs for employees in specific technology areas
- Leverage tech start-ups for training and collaboration
- Partner with government and local chambers of commerce to realize the best incentives

5. Look beyond STEM – embrace the arts, humanities, and social sciences

Enterprises seeking to succeed in the digital game and fend off disruption will need to be creative with technology – and this is going to require a diversity of skills and viewpoints beyond traditional science, technology, engineering and math (STEM) expertise.

Given the fundamental desire of digital to transform experiences, enterprises need a diverse skill mix capable of thinking critically, collaboratively, and creatively with a focus on innovative problem solving that goes beyond technology. Companies need to prepare people to be more innovative, creative, and imaginative, all of which requires a broader set of attributes and competencies.

Disciplines such as arts, humanities, and social sciences clearly have a role here. These disciplines help nurture critical thinking, communications, and perspective, and create resilience and curiosity in people. Global organizations require talent with good interpersonal skills, out-of-the box thinking, and the ability to work in diverse cross-cultural environments. Fundamentally, best-in-class experiences are possible when enterprises are able to combine the best of right-brain and left-brain capabilities.

Perceptibly, technology and data will be of prime importance, but companies need to understand the importance of these alternate sources of talent that organizations need to necessarily embrace to succeed in the digital arena.

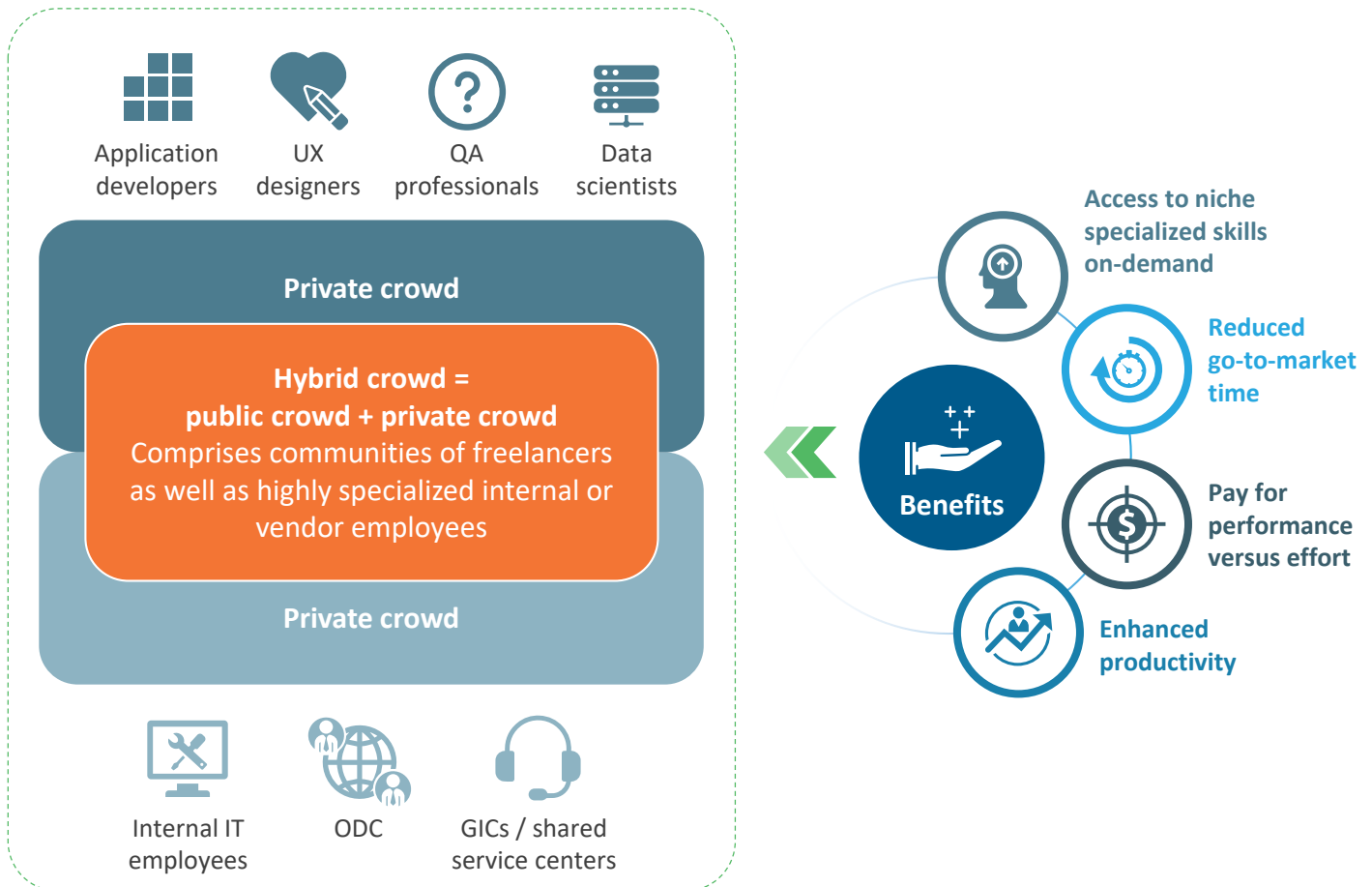### 6. Prepare for alternate talent models – explore the hybrid crowd

The growth of the gig economy and increase in freelance talent is forcing enterprises to challenge conventional wisdom on the usage of crowdsourcing platforms. While this avenue currently represents less than 5 percent of IT development efforts, adoption is expected to increase. In fact, contrary to popular belief, enterprise-grade crowdsourcing efforts are gaining adoption even in regulated industries such as defense, banking.

Enterprises need to start building policies and mechanisms to embrace crowdsourced talent, while also putting in place platforms to match available talent to demand. The future of talent assumes a hybrid crowd model as, outlined in Exhibit 7, with the participation of specialized communities as well as internal and outsourced talent to accelerate staffing, improve utilization, and reduce costs of external hiring and training.

EXHIBIT 7

Emerging crowd sourcing
models for the gig economy

Source: Everest Group (2019)

Application developers   UX designers   QA professionals   Data scientists

Private crowd

**Hybrid crowd =
public crowd + private crowd**
Comprises communities of freelancers
as well as highly specialized internal or
vendor employees

Private crowd

Internal IT employees   ODC   GICs / shared service centers

Benefits

Access to niche specialized skills on-demand

Reduced go-to-market time

Pay for performance versus effort

Enhanced productivity

7. Drive relentless focus on talent retention

The task of identifying, attracting, and retaining talent is in many ways like a consumer-facing aspect of the business. Employers have to provide employees with an incredible, consumer-like experience to retain them. However, maintaining that experience over time can be a challenge—especially for coveted market skills and experience.

In the coming years, enterprises will need to adopt a more intentional approach to identifying and investing in resources they want to retain.

Non-monetary methods of employee retention:

- **Upskilling and learning rewards:** Encourage resources to undertake certification courses that help them upskill backed by reimbursing for related fees. Consider different career paths for employees who pursue and successfully complete such courses
- **Work life balance:** Provide a holistic work environment that includes flexible working hours and other perks that promote well being and help drive motivation
- **Predictive analytics and technology:** Invest in tools that help identify best-fit resources. These tools help create personalized interventions when employees are deemed high risk for attrition

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8. Enable a Gen Z-ready culture

Generation Z encompasses more than 25% of the U.S. population, making this cohort larger than Generation X or millennials. They are entering the workplace in waves, and they have their own set of values, preferences, and abilities. Businesses that want to remain competitive and recruit talent of all ages need to consider adopting a culture that appeals to Gen Z in addition to existing efforts catering to other generations.

To make this transition, the workplace of the future needs to provide a holistic environment that emphasizes aspects such as inclusiveness, entrepreneurship, technology, and flexibility. Some key themes that appeal to Gen Z include:

- Celebrate technology and social media savvy
- Provide avenues that enable a focus on purpose beyond profit
- Promote entrepreneurial and intrapreneurial desires
- Embrace true diversity
- Provide alternative and continuing education
- Put experience and engagement at the core of performance management

While many organizations continue to grapple with the implications of the millennial population, forward-leaning enterprises are already putting in place models to effectively engage Gen Z.

Conclusion

As with any transformation, digital is a journey – and one that most enterprises will engage with for the foreseeable future. This is a journey that fundamentally changes the way IT is consumed and delivered, and, as a result, talent will be a key determinant of the speed with which enterprises are able to navigate to their destination.

The good news is that it is early days for most enterprises, and still relatively easy to plot a course or even course correct. With the right set of actions, enterprises can adapt their talent models, making themselves ready to meet future demand.

As the old saying goes, "A journey of a thousand miles begins with a single step." Good luck on the journey!

Recap of key insights:

1	Develop business-aligned skill roadmaps; make demand management a science
2	Leverage a multi-location, multi-specialty strategy
3	Establish a scaled, always-on learning platform
4	Embrace the ecosystem – academia, government, start-ups
5	Look beyond STEM – embrace the arts, humanities, and social sciences
6	Prepare for alternate talent pools – explore the hybrid crowd
7	Drive relentless focus on talent retention
8	Enable a culture that is Gen Z-ready

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