Attracting and Retaining Engineering Talent in a Hyper Competitive Talent Landscape

After a decade of digital transformation conversations, "every company is now a software company",[1] but it has been the exponentially transformative pace of the last few years that has brought this idea to life. The pandemic has accelerated a shift towards technology, and demarcations between the technology sector and other industry verticals are breaking down faster than ever before. Retailers are now ecommerce platforms, traditional automotive companies are toying with autonomous vehicles and telematics, bank accounts have transitioned onto mobile and digital platforms, and physicians are advancing in telehealth, a mere Zoom call away.

Over the last eighteen months, there has been a bifurcation in the market, with technology and digitally-advanced companies rising above the rest. Market-leading organizations such as Amazon, Nike, Tesco, and Wayfair have demonstrated how crucial it is to embed digital capabilities and technological innovations within the business (see Figure 1). These companies have been effectively pandemic-proof, and have seen large increases in customer bases and profitability, grabbing market share and delighting otherwise frustrated customers. Given that online spending is expected to top $1 trillion in 2022, conventional corporate organizations are prioritizing a pivot to technology and digital offerings.

Figure 1. Bracing against the pandemic by embedding digital and tech into the business

amazon

43.7%

increase in net sales from Q1 2020 to Q1 2021

27.6%

annual global ecommerce sales growth (2020 YoY)

NIKE

84%

increase in digital sales

32%

increase in direct-to-consumer sales

TESCO

77%

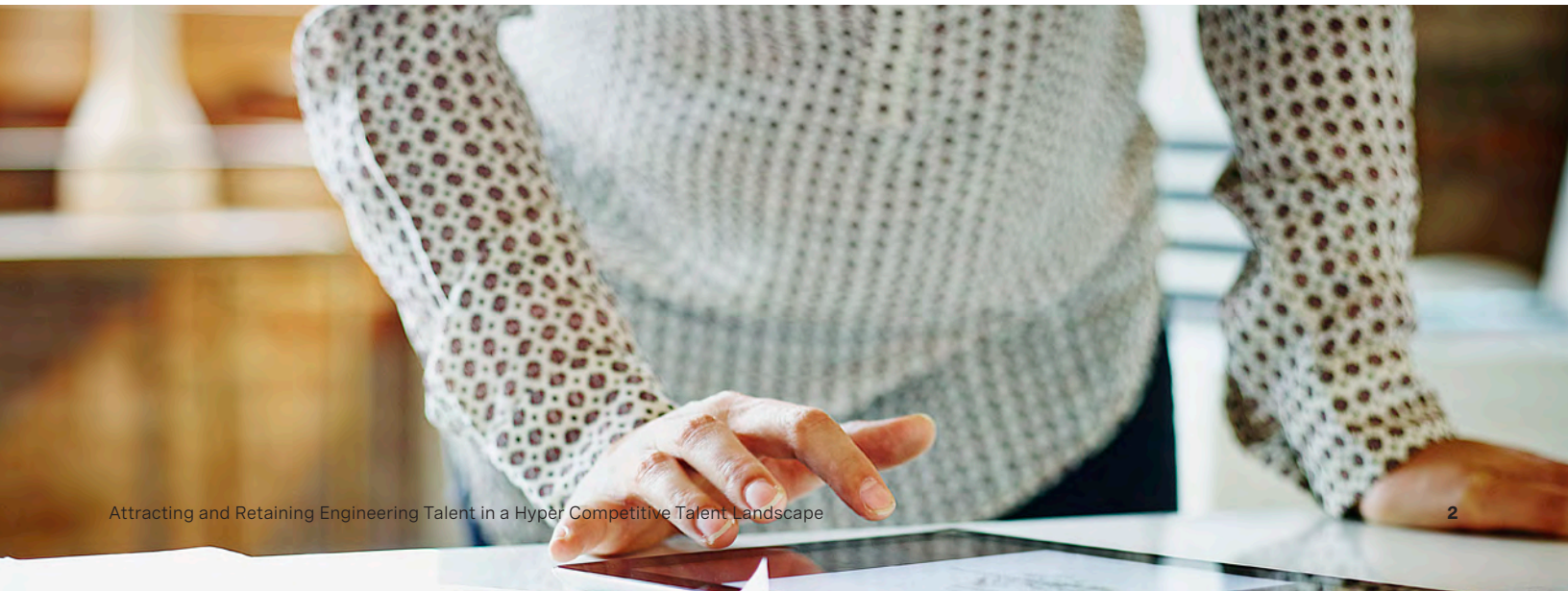
increase in online sales from 2019 to 2020a

wayfair

1056%

increase in share price (from its lowest point to a pandemic high)

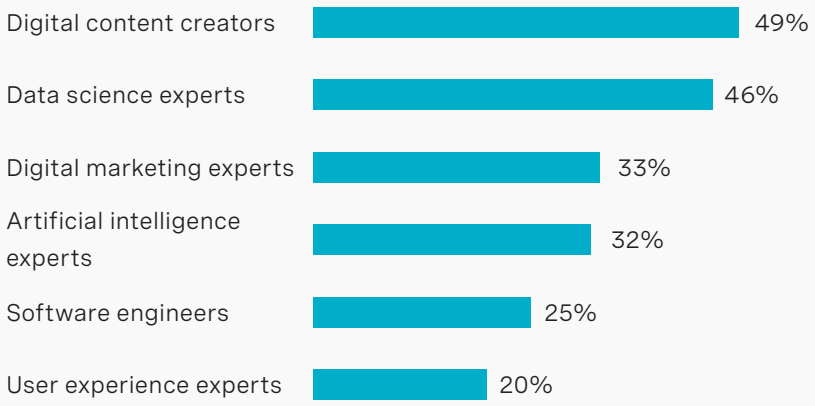
Source: Global retail e-commerce sales growth | Statista; Forbes: Pandemic-Proof Nike Delivers Another Strong Quarter With 9% Sales Increase (forbes.com); Tesco reports online sales surge, advances digital platform (computerweekly.com); These 3 stocks have surged more than 1,000% since the COVID-19 pandemic low (OSTK, W, NVAX) | Markets Insider (businessinsider.com)



Talent is the backbone of tech-led growth

To support this rapid growth and necessary transformation, organizations are competing fiercely for software engineering talent. A LinkedIn analysis of 2020 hiring trends showed a 25% hiring increase for software engineers (see Figure 2). Availability of key talent and/or skills, changes in consumer behavior, and technological change were among the five biggest factors impacting organizations across all sectors, according to Russell Reynold's 2021 Global Leadership Monitor.[2] Strikingly, the technology sector was the most concerned around talent skills shortage, with 69% of technology executives stating this was in the top five risks, and only 46% of technology executives agreeing that leadership is prepared to address this talent issue.

Figure 2. Digital roles that are rising in demand



Source: 15 opportunities that are in demand and hiring now, LinkedIn, 2020

This same demand is seen in executive leadership. In 2020, one in four respondents to a McKinsey Global Survey anticipated a struggle in finding executive management technology talent.[3]

To better understand the executive engineering talent landscape, Russell Reynolds analyzed 138 chief technology officers and senior executive engineering leaders across prominent organizations based in Europe and North America. These leaders represent a broad swath of talent, responsible for technology platform businesses and non-digital businesses across industry sectors. This analysis highlights the fact that engineering executives change roles roughly every three years - opportunities are boundless and companies across the spectrum, from start-ups to corporations, from technology platforms to legacy businesses, are competing for talent.

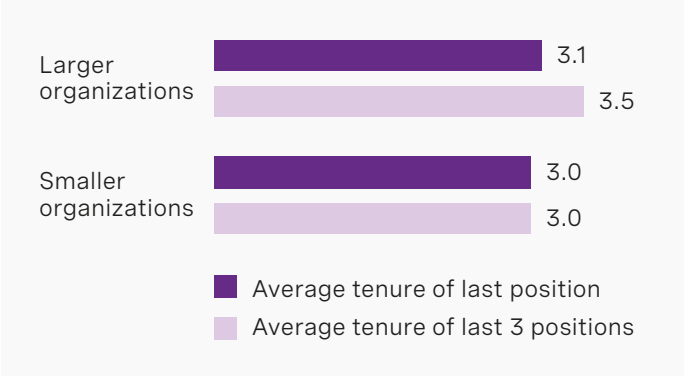
Navigating the chief technology officer and software engineering leadership landscape

Engineering talent moves around - a lot!

Engineering talent changes position every three years, with women moving slightly more often than men. These leaders are mainly moving into an external opportunity, in a more senior position. Size and scale of the company did not seem to be a significant consideration to the candidate.

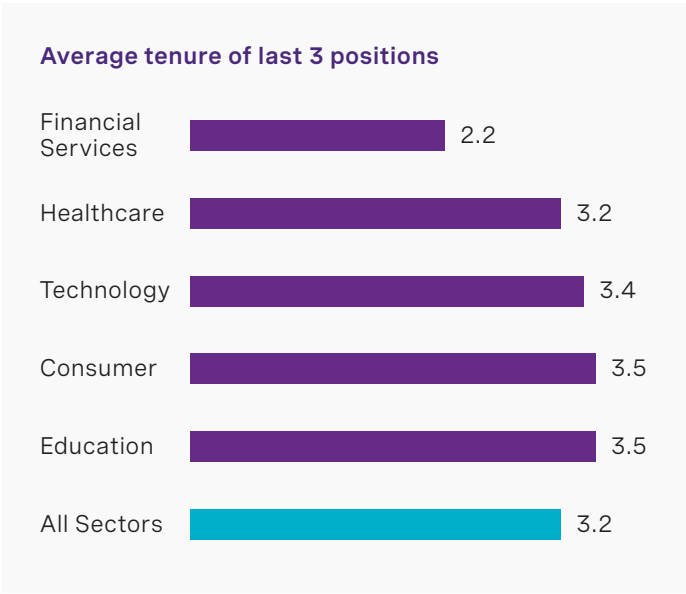
Larger organizations are more susceptible to turnover.

The average tenure of a leader at a large organization was a little over three years, a slightly drop from the average of their last three positions.



Tech talent in financial services is especially jumpy.

Healthcare, technology, and consumer sectors had similar average tenures for tech leaders, at around 3.5 years, but tech tenure in financial services was noticeably lower at 2.2 years. This held true for all previous roles, suggesting an extremely tight war for talent in financial services.



Most talent is found externally, based in North America.

Across all sectors, about a third (32%) of the leaders were promoted internally, with the majority (68%) from external appointments. There was a significant difference between external appointments across regions - 52% of European hires are external, compared to 77% of North American hires. Although the talent pool for digital transformation sits predomly in North America today, there is an expectation that this talent landscape will change in the next two to three years.

Engineering leaders are overwhelmingly male.

In 2018, a Zippia survey found that 88% of US chief technology officers and tech founders were male.[4] Today, based on Russell Reynold's analysis, 94% of the leaders are male, showing a distinct lack of progress.

Most talent is poached from the tech sector.

The majority (64%) of engineering leaders, across sectors, originate from the technology sector. Removing pure-technology leaders from this analysis did not make a difference - 60% of engineering leaders, across healthcare, consumer, financial services, and industrials, came from the technology sector.

Founders appear to enjoy the start-up life.

All founders who are no longer at their initial businesses have transitioned into leadership positions at other small software/digital companies, organizations below the median revenue, instead of pursuing a career at a large tech company.

Spotlight on FAANG

FAANG organizations have excellent retention power. Leaders at FAANG organizations have an average tenure of 4 years, compared to their counterparts at non-FAANG organizations with an average of 3 years.

FAANG talent has a strong preference for consumer-digital businesses. FAANG talent is more likely to move into the consumer sector or a digital platform business, than to a legacy organization undergoing digital transformation. Almost a fifth (19.2%) of chief technology officers at digital platforms bring a FAANG background, compared to 7.7% of chief technology officer at non-digital businesses.

FAANG talent is valued in early stage companies. The majority (88%) of FAANG talent who leave their company transition to working for a unicorn.

Understanding what is top-of-mind for engineering leaders

Brand/reputation and compensation are the most indicative considerations for engineering leaders.

It is an irrefutable fact that large, prominent brands have pulling power. FAANG talent, sitting at the top of the talent pyramid, are most interested in moving into large consumer companies such as Airbnb, Spotify, and Twitter, or to new and innovative tech-led platforms. Those with FAANG backgrounds are almost three times more likely to work for a digital platform company than for a non-digital legacy organization. In addition, specific sectors bring more appeal and promise - typically technology and B2C industries have been the most attractive, but the pandemic has also raised the profile of working in healthcare.

Organizations looking to improve their image in the engineering and tech communities can begin by:

- Presenting at engineering leadership events and roundtables.
- Sponsoring hackathons, symposiums, and open forums that encourage technological solutions to its industry's challenges.
- Streamlining the hiring process - anecdotes of poor experiences travel quickly through the tech community.
- Emphasizing its strengths. Small organizations have the advantage of providing agility and growth opportunities; engineering talent is turned off by the heavy bureaucracy and reporting duties of public companies. Large, public companies have the advantage of providing visibility, breadth of scope, and wide-reaching impact; engineering talent also bring a sense of purpose and focus on societal good for consumers.

Engineering leaders are currently enjoying a meteoric rise in salary, similar to previous trends seen by cyber security leaders, product leaders, and sustainability and diversity leaders. Compensation considerations differ by location, with the highest salaries in the West Coast, followed by other US regions, Canada, and Europe. The best compensation packages balance short-term and long-term opportunity. Top global jobs often come with long-term incentive plans that can take the overall package anywhere above $10 million; however, this should not be in substitute of base, bonus, or stock options, as appropriate. Other common perks include sign-on bonuses, additional holidays, family health insurance plans , car and/or housing benefits, and remote working opportunities. Each candidate's needs are unique, and a competitive package will look different across sectors.

Organizations can begin a candid conversation with candidates and key stakeholders with the following considerations:

- **Remote working:** Hybrid working has become the favored option, providing the convenience to work remotely from any location, and the opportunity to meet with the team to further ideation, innovation, and team dynamics. It will be important to complement the candidate's needs and the goals of the team.
- **Development:** Understand how to build out both the team and the individual, in order to balance trade-offs between desired competencies and compensation. Any one leader may not bring all the desired competencies, but can always be bolstered with talent reporting into them. Similarly, the organization may also prefer to develop rising talent - the initial compensation can be lower, and the risks of stepping up can be mitigated by assessments, onboarding, and development plans.
- **Cultural transition:** It is important to honestly appraise whether the organization will "tissue reject" tech and engineering talent - a common phenomenon particularly in non-digital legacy organizations. It may be better for organization to hire a more tech-forward leader from an adjacent industry, rather than the innovative technology wizard from Google. To accommodate external tech talent, the organization will need to consider how to lessen hierarchical relationships, micromanagement, and any dynamics that lean towards a lack of ownership and accountability.

How to attract and retain engineering talent

Despite the fact that brand/reputation and compensation are priorities, tech leaders also value other important factors such as mission, purpose, and impact; the ability to build, learn, and grow; the responsibility of owning a technology or service line; internal and market visibility; and developing leadership skills in proximity to the chief executive officer. These are elements that can be leveraged when designing a role, and will have serious impact on the quality of talent the organization is able to attract. Russell Reynolds' proprietary framework for attracting and retaining engineering talent is based on five core components: Position, Plan, Progress, Purpose, and Process.

Position

How can the role be more attractive?

Plan

How can the vision be best communicated?

Progress

How will talent be developed?

Purpose

What is the social impact?

Process

How can candidate care be improved?

Position: How can the role be more attractive?

Engineers like to build, especially guided by a strong sense of mission, and tend to lift their heads in consideration of new roles when a project is complete or nearing completion. These leaders look for autonomy, full ownership of a product or solution, or a strategic seat at the leadership table, which may be less likely to happen at larger organizations. Hiring an engineering chief technology officer who does not sit on the executive committee and reports to the chief financial officer will be challenging, and may not enable the long-term business impact.

> "A bigger role, but lower in the hierarchy, would be less appealing than a smaller role at the top of the chain."
>
> **Sam Smith, co-leader of RRA Engineering Practice**

Questions to consider:

- Does this role sit on the executive committee? Will this role be a direct report to the chief executive officer?
- Does this role own a product or solution? If not, how does it interact with the leader who does (chief product officer, chief solution officer)?
- Does this role own the end-to-end lifecycle of technology, from engineering to security to data and analytics?
- How much is being built internally, as opposed to using third party providers?
- How will this role lead a transformation journey for the organization?
- What personal impact will this role have in enabling or achieving strategic goals?

Plan: How can the vision be best communicated?

No candidate is awaiting the perfect combination of start-up growth, innovation, and social impact rolled into a technology platform, but they will be expecting passion, strategy, and a roadmap. Be transparent with the candidate about the anticipated challenges and the direction of the business in the next few years.

Questions to consider:

- What is the aim of the organization, and how does this role fit? What is the team solving for?
- What are the cultural, structural, timeline, or investment challenges the role will have to overcome?
- What metrics and benchmarks will define success for the role?
- What are the organization's differentiators?
- What is the next key inflection point for the organization?

Progress: How will talent be developed?

Developmental budgets for education and training are table stakes for technology and engineering talent - the real differentiators are investments that help talent build a reputation in the wider tech community.

Questions to consider:

- How visible is the role externally in the market? How can this role's public platform be further developed?
- What are the forward opportunities for this role in the organization?
- Who will mentor or sponsor this role? Is there a "honeybee" tech talent magnet?
- What are the components of the learning and development program and budget? Is this competitive with the market?

Purpose: What is the social impact?

Perhaps sparked by the introspection of lockdown or the desire to live in a more equitable world, technology, engineering, and product leaders are looking to use their platform and skills to develop responsible, trustworthy, and purposeful technology. Engineering talent will be interested to know what social impact the organization has, and what impact they can personally achieve. Work life balance, and whether they will be able to pursue passion projects, will also be important deliberations.

Questions to consider:

- What are the organization's sustainability goals? How will this role enable them?
- Who is responsible for ethics around technology and artificial intelligence in the organization?
- What does work life balance look like for the role, and within the team?
- What opportunities will the role have for side projects and passion projects?

Process: How can candidate care be improved?

Be sure to move at pace; technology talent is repelled by cumbersome and slow internal processes. Giving thoughtful feedback and timely updates on next steps will demonstrate that the organization respects the candidate's time and efforts, particularly given high market competition. Ensure that the hiring team reflects a wide range of diverse talent and demonstrates representation for the candidate.

Questions to consider:

- Who on the team, or the organization, will be the best person to connect with the candidate and share about the organization's culture and social impact aspirations?
- Does the candidate leave with a deeper understanding of the role and the impact they will be able to have?
- How else can the organization demonstrate its commitment to the candidate?
- Are there logistics that could be better streamlined?

By investing into brand/reputation and compensation strategies and crystallizing on Position, Plan, Progress, Purpose, and Process, organizations will be able to differentiate themselves and attract best-in-class engineering leadership to advance their technology transformation.

Authors

Bartek Zachara co-leads Russell Reynolds Associates' Engineering Practice. He is based in Warsaw.

Sam Smith co-leads Russell Reynolds Associates' Engineering Practice. He based in Chicago.

George Head leads Russell Reynolds Associates' Technology Officers knowledge team. He is based in London.

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About Russell Reynolds Associates

Russell Reynolds Associates is a global leadership advisory and search firm. Our 470+ consultants in 46 offices work with public, private and nonprofit organizations across all industries and regions. We help our clients build teams of transformational leaders who can meet today's challenges and anticipate the digital, economic and political trends that are reshaping the global business environment. From helping boards with their structure, culture and effectiveness to identifying, assessing and defining the best leadership for organizations, our teams bring their decades of expertise to help clients address their most complex leadership issues. We exist to improve the way the world is led.

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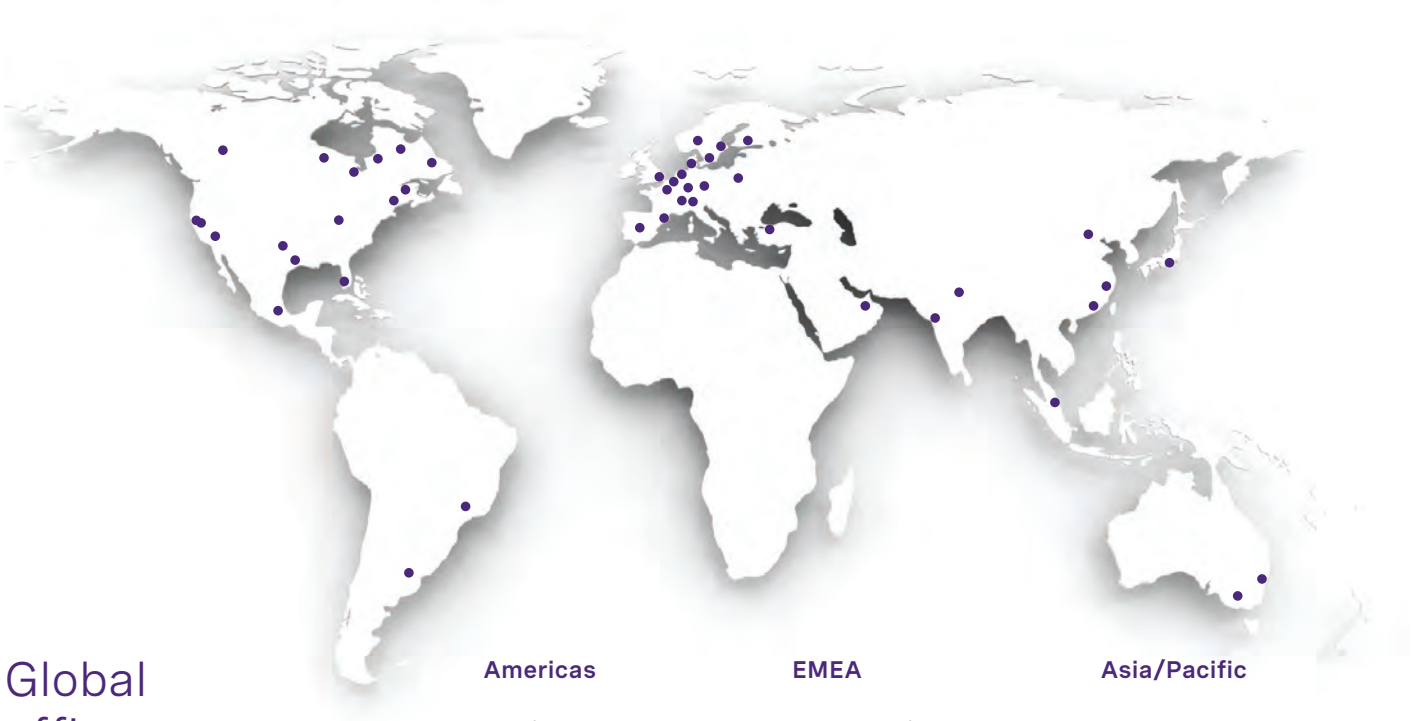

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