

# What can Industry 4.0, IoT and Robotics leaders learn from the XaaS model?



From talk of [US\\$19 trillion market opportunities](#), the rise and fall of Internet of Things (IoT) and robotics businesses large and small, to the impact of ongoing supply chain disruptions, it has been an interesting decade for Industry 4.0. As we speak to leaders across the sector from solution providers to corporations grappling with these new technologies, we are seeing a marked shift. The transformation that was envisioned in the early 2010s is now closer to reality than ever before. Use cases for IoT and robotics are proliferating across industrial, consumer and financial services companies rapidly, and they are generating sustainable growth and profits for the companies for the first time.

While this growth is positive, it has created a leadership and talent challenge because the changes have been part of a broader shift toward subscription based as-a-service or XaaS models. Subscription models are becoming increasingly dominant with recent clients selling smart locks that are monetized via software subscriptions to a human-assist robotics company selling robotics-as-a-service to warehouse operators. [By one account](#), companies who derive the majority of their revenues from subscriptions have outgrown their traditional industry peers by 5x over the past nine years and have seen revenue recover much more quickly during the pandemic.

# What impacts are XaaS and subscription models having on talent at Industry 4.0, IoT and robotics vendors?

## The Industry 4.0 Leadership Landscape

Industry 4.0 is a rapidly growing opportunity that is bringing leaders from the technology and industrial fields together, to transform and digitalize manufacturing.

The industry is attracting incredible talent from all over the board. Larger companies are creating Industry 4.0 branches while more focused, smaller companies are entering the stage.

Heidrick & Struggles looked at 38 leading companies in the Industry 4.0 sector to identify their leaders and understand their profiles. We found that the field reflects the lack of gender diversity in the industry as a whole and that most leaders were long tenured veterans of their companies, reflecting a conservative approach to filling leadership positions.

See key findings below.

Software, and particularly cloud computing, has proven to be a winner takes most markets where scale matters. For most established industrial, consumer, and financial services businesses, this is a fundamentally new market dynamic. There is an interesting parallel to the software industry itself, which went through a rocky transition from On-Prem Software to SaaS. The lesson from the SaaS transformation in software, [summarized in a recent report by EY & Parthenon](#) is that the transition will be more than a pricing change. It will impact every part of the business: sales, product engineering, customer support, finance and accounting, IT, and supply chain. This means that leaders across all functions will be directly impacted as the very nature of their roles change significantly.

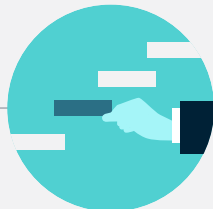
To take one example, SaaS has meaningfully altered the product development and delivery model leading to a continuous product development model and more hands on customer support. Many software companies have launched their own dedicated services units in response. This has led to a need for talent with a significant focus on process and metrics in addition to product vision and sales acumen.

This same need has spilled into the Industry 4.0 space as software and cloud technologies continue to play a greater role in innovation within the industrial sector. We encourage more Industry 4.0 companies to actively recruit talent from outside the industrial sector with SaaS or cloud backgrounds. This must be done while balancing the need for leaders with domain knowledge and transformation leadership with internal recruits to Industry 4.0 business units. Convincing such talent to cross over from the comforts of their well-established industries like cloud will be a difficult task, but will be a first but important step towards the cultural shift that Industry 4.0 needs so badly.

## Industry 4.0 Leadership



**GENDER BREAKDOWN**  
2/3 of all Industry 4.0 leaders were men



**INTERNALLY PLACED VS EXTERNALLY**  
Almost two times as many leaders were internally placed as opposed to externally placed



**TOTAL YEARS OR EXPERIENCE**  
Longest: 51 years  
Shortest: 15 years



**YEARS IN POSITION**  
Longest: 29 years  
Shortest: <1 years



**10 COUNTRIES COVERED IN THE STUDY**

# Gaps in Domain Knowledge and Transformation Leadership

## Supply Chain Leaders: From Producer to Collaborator and Energizer

Nowhere has IoT and robotics had more of an impact than on supply chains. From 3D printing, to AR/VR, automated manufacturing and visual inspecting, supply chain visibility, to last mile delivery, the amount of questions and opportunities facing supply chain leaders is unprecedented. Whereas truly revolutionary technologies like ERP systems and virtual auctions previously came along many years apart, now all of these technologies that each have the potential to be revolutionary in their own right seem to be arriving all at once. This creates the opportunity for companies to completely rethink their supply chains and we are seeing increased demand for supply chain leaders who can do just that.

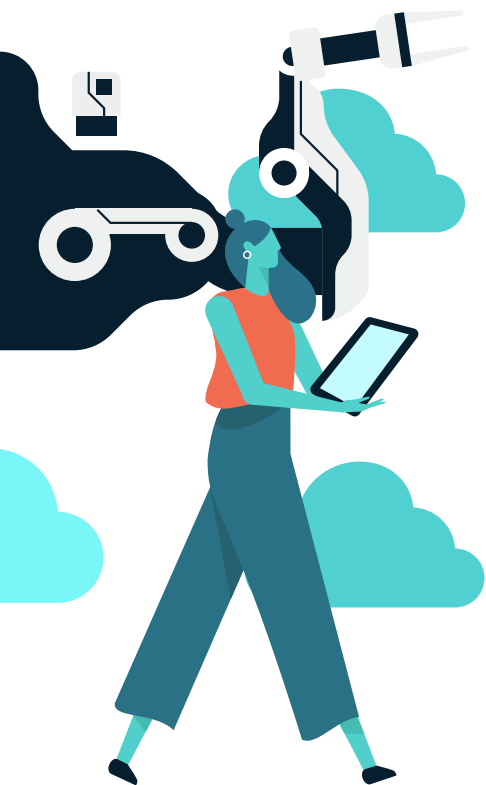
Our [recent report](#) on supply chain leadership styles based on assessments of 4,000 supply chain executives over five years shows an astonishing shift. The dominant leadership styles have shifted in just a few years from 'business as usual' leadership archetypes - Producers, Composers, and Pilots - to more future focused styles: Harmonizers, Collaborators, and Energizers (see [report](#) for leadership style definitions).

At the highest level we foresee this growth exposing two gaps. First, for vendors in IoT and robotics, there is increasing recognition of the need of domain expertise in the areas that the technology is addressing. It is no longer sufficient to have a tech driven team that has come up to speed quickly in an industry where they have discovered a key use case. It's critical to have a deep understanding of the industry you are selling into -- its buying patterns, particular needs, and ecosystem landscape -- to be successful within the time limit of VC funding availability or executive sponsorship's patience.

The second, larger gap is in transformation leaders. For companies adopting these technologies, the challenge has been incorporating them into day-to-day operations and strategic decision making. Because of the range of technologies in play, we are seeing less emphasis on technical depth and more on candidates who focus on culture change management with the ability to set an inspirational vision and follow through on it. As seen in our [recent study](#) of technology leaders in Asia, the best of these leaders bring foresight, resilience, and the ability to inspire. They also use data to drive decisions and operate collaboratively and break down organizational silos. In short, they have some technical knowledge of these fields but are more focused on how technologies impact colleagues, customers, and users.



# Industrial IoT and Industry 4.0



While consumer companies have had more time and experience adapting to service based businesses, the industrial sector is experiencing subscription revenue for the first time. The disruption risk to industrial companies is real, but in this case there are reasons to be optimistic about the prospect of the incumbent industrial businesses.

We spoke above about the 'winner takes most' markets in the technology sector. Think about Amazon's 50% share of the global cloud computing market, or Apple's 75% share of global smartphone profits, despite only accounting for 13% of revenue. The advantage of having access to the most data or the best technology can lead to outsized results in these domains. There is reason to believe that unlike other sectors where companies like Netflix or Amazon have emerged as disruptors, in the industrials sector incumbents may have more of an advantage. Because of the complexity of various operating environments, incumbents with access to the largest volume of data coming from expensive assets in the field with decades of operating history will be poised to win this next round of innovation over new entrants.

While they may have an advantage, our clients are adapting quickly by hiring candidates who can launch new software and service offerings. One client, an industrial technology company with over 110 years in operation, recently recruited a Chief Revenue Officer who came from a market leader in software. The position itself is a relatively rare one within industrial products companies where Industry 4.0 leadership tends to be internally recruited company veterans as seen in the sidebar analysis of Industry 4.0 leadership. The trick for incumbents will be in building the right mix of inside and outside recruits to unlock innovation and break down organizational silos while taking advantage of inherent strengths.

The transition to SaaS in the software sector was not easy. It required wholesale rethinking of role definitions, desired leadership traits, incentive mechanisms, and company cultures. Companies across industries are embarking on a similar transformation. They will need to recruit and develop leaders who operate in different ways, bringing more agility, customer-centricity, vision, and collaboration. It will not be easy but the opportunity and risk is clear – to become a dominant provider in an ecosystem, or be left behind.

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# Specialty Practices

Heidrick & Struggles' Specialty Practices advise our clients on emerging technologies and disruptive innovation. Our search capabilities help the most innovative companies reach their ambitions for growth, scale and brand impact, accelerating their paths to industry disruption.

These practices include:

- Data, Analytics & Artificial Intelligence
- Crypto & Digital Assets
- Cybersecurity
- Industrial Tech

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