

Rethinking how work gets done in the insurance value chain

New technologies, new work options, new opportunities to unlock value

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The digital revolution, with its unprecedented pace of change and innovation, is transforming how work gets done across the insurance value chain from sales and underwriting to claim processing and payments. It is now possible for insurers to deconstruct jobs into component tasks and choose among many emerging options for completing these tasks, including AI and robotics, machine learning and talent on a platform. To capture the opportunities in this new world of work, insurers will need an understanding of the enablers of automation as well as a framework to guide their decision making as they redefine employment relationships and organizational boundaries.

The Fourth Industrial Revolution

We are at the beginning of the Fourth Industrial Revolution, which is characterized by the convergence of technologies blurring the lines between the physical, digital and biological spheres. Its impact is being felt throughout the insurance industry. For example, auto insurers are using telematics to capture data on driving habits in order to better manage risk and set rates. And both P&C and life insurers are starting to employ virtual assistants to enhance customer service and help customers select the right coverage. For instance, Allianz's virtual online assistant "Allie" is available 24/7 to answer questions about insurance products.

Insurers who can navigate the many emerging options for getting work done, including artificial intelligence (AI), robotics and talent on a platform, stand to gain significant competitive advantage.

In addition, common technologies and platforms are bringing global industries closer together and changing the competitive landscape. InsurTech players offer a good example of how companies with expertise in areas ranging from AI and robotics to blockchain and the Internet of Things are disrupting and reshaping the insurance industry.

Two key themes are essential to understanding the Fourth Industrial Revolution:

- **Democratization of work.** Today companies have the ability to deconstruct a job and have component tasks completed anywhere in the world faster, better and cheaper than ever before contemplated. In turn, this trend is leading to new work relationships that are shorter in duration with a greater equality of power between employers and talent.
- **Technological empowerment.** Machine learning, 3-D printing, mobile technology and algorithmic analytics are some of the many innovations that are transforming work, and both replacing and augmenting human capability.

These forces are challenging our traditional notion of jobs and full-time employment, and enabling a paradigm shift in how work is organized.

But before organizations can unlock value from this new work ecosystem, they need to be able to assess their various work options. The following metrics can be helpful in weighing different possibilities:

- **Speed to capability:** How do we develop new capabilities as quickly as possible, recognizing how rapidly competitive advantage can be dissipated?
- **Cost:** How do we acquire new capabilities as efficiently as possible (i.e., with an optimal mix of fixed and variable costs)?
- **Risk:** How do we develop new capabilities without taking on unnecessary risk? This involves two key aspects. As work moves outside the organization, it is critical to mitigate the risks associated with the potential “lack of control” of the workforce (e.g., liability, loss of intellectual property). In addition, as the half-life of skills within the organization continues to shrink, it is essential that an organization insulates itself from the rapidly rising risk of obsolescence.

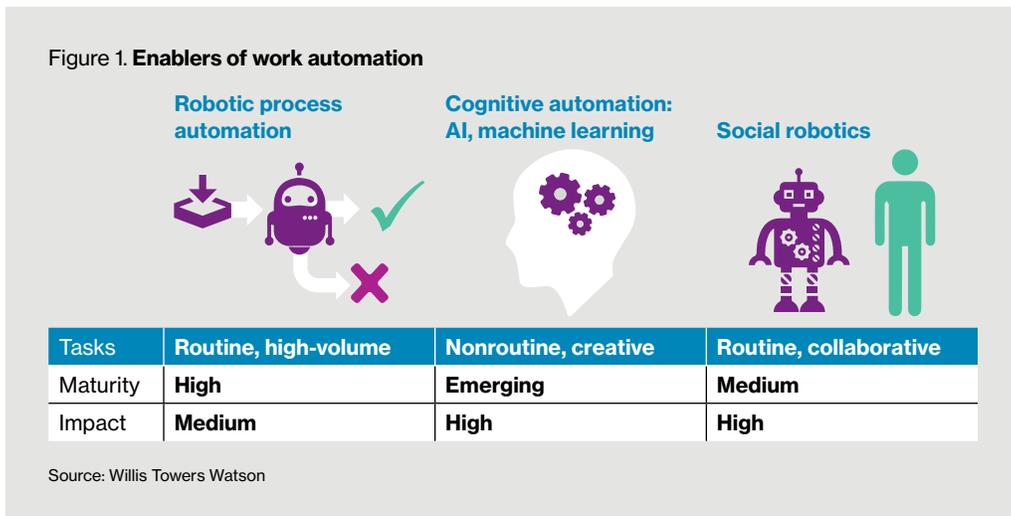
These metrics will guide organizations as they make decisions on how best to accomplish different tasks. Our analysis reveals that companies in many industries, including insurance, that deconstruct jobs and distribute the work using the most efficient and effective means can typically realize savings in the 60% to 80% range. This is a significantly greater savings than the 30% typically achieved through outsourcing.

Enablers of automation

In this new world of work, it is critical for employers to understand which tasks might best be completed using intelligent automation versus other options. Three key automation technologies are of particular importance (*Figure 1*):

- **Robotic process automation (RPA):** Organizations use RPA to automate high-volume, low-complexity, routine business processes. RPA is especially effective in compliance work and claim processing where data need to be updated and/or transferred from one software program to another, such as from a spreadsheet to a client relationship management or enterprise resource planning system. Today teams of software robots, or bots, can perform these tasks, freeing up employees to focus on customer-facing tasks and other activities requiring creativity or empathy.
- **Cognitive automation:** The emerging area of cognitive automation, which includes AI and machine learning, is used to supplement or replace humans in nonroutine complex tasks. Because cognitive systems have the ability not only to quickly sift through massive amounts of data but also to reason and form hypotheses, their expertise in different areas improves over time and adds to an organization's knowledge base.

Cognitive automation offers insurers many opportunities to deconstruct jobs. For example, auto insurers are already using the power of AI and big data to disaggregate the job of human agents and transform the claim handling process. Instead of having an agent assess the damage to a vehicle following an accident, photos of damaged parts taken with a cell phone camera can now be submitted to the insurer's database. AI powered by massive volumes of data then recognizes the damaged part, assesses the damage, looks up what was paid out on similar claims in the past and makes a determination as to the payout, which is then sent to a human agent for approval. This process improves the accuracy of the claims process and reduces the claim handling time, thereby improving the overall customer experience. And this streamlined process also dramatically reduces the cost of processing claims.



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Case in point: Using regtech to automate compliance

Because regulatory compliance is often a labor-intensive, costly and error-prone process, many companies are exploring new ways of completing compliance-related tasks. We recently helped a life insurance company that was facing compliance pressures deconstruct its compliance jobs and automate the process.

This insurer relied heavily on manual processes that increased the risk of inaccuracies and the potential for incurring fines. In addition, as regulations increased, more employees were needed to handle compliance-related tasks, which further pushed up costs.

To address its compliance challenges, this insurer turned to regtech, that is, automation solutions especially designed to streamline regulatory compliance. Combining RPA and machine learning, regtech automates the compliance process. In assessing a potential solution, the life insurer determined that regtech offered many advantages over its current system from a speed-to-capability, risk and cost perspective.

First, regtech would improve its productivity, as it took 10 days on average to contract and engage with a regtech vendor as opposed to the average 60-plus days required to hire a compliance analyst. In addition, regtech was a relatively low-risk solution as most of the risk would be borne by the regtech vendor. And the insurer would not be facing the turnover risk associated with hiring new compliance analysts, nor would it face the risk of analysts' skills becoming obsolete.

Moreover, an AI-based regtech solution would dramatically improve the accuracy of the compliance process, and because of its self-learning capabilities, would add to the life insurer's knowledge base. Consequently, the insurer could avoid the many costly fines due to employee errors. Lastly, the cost of implementing a regtech solution, which was estimated at \$20,000 annually, would be far less than that of hiring a compliance analyst whose compensation and rewards could cost the life insurer approximately \$120,000 per year.

As a result of implementing a regtech solution, this life insurer was able to transform its compliance process, making it faster and cheaper, and reducing the risk of errors.

Cognitive automation can transform many different processes, creating greater efficiencies and enabling employees to focus on higher-value activities. For example, some property insurers are using drones with cameras to inspect structural damage after major weather events, thereby reducing the claim processing time by over 80%. Allstate and Farmers Insurance used drones for this purpose following Hurricane Harvey. In addition, auto insurers are providing clients with various mobile apps that enable customers to perform a range of tasks, from paying bills to submitting claims, to getting roadside assistance. The use of these apps significantly reduces the burden on agents.

- **Social robotics:** Social robotics involves the combination of physical equipment, AI and sensors, resulting in machines that interact with humans. The classic example is a driverless car or truck. While the insurance implications are just emerging, it is clear that autonomous vehicles could have the ability to radically transform insurance from shifting the very basis of risk (from the driver to the asset) to enabling greater micro-pricing of risk.

Overall, automation can help insurers get work done more efficiently and improve the customer experience as well as the utilization of talent.

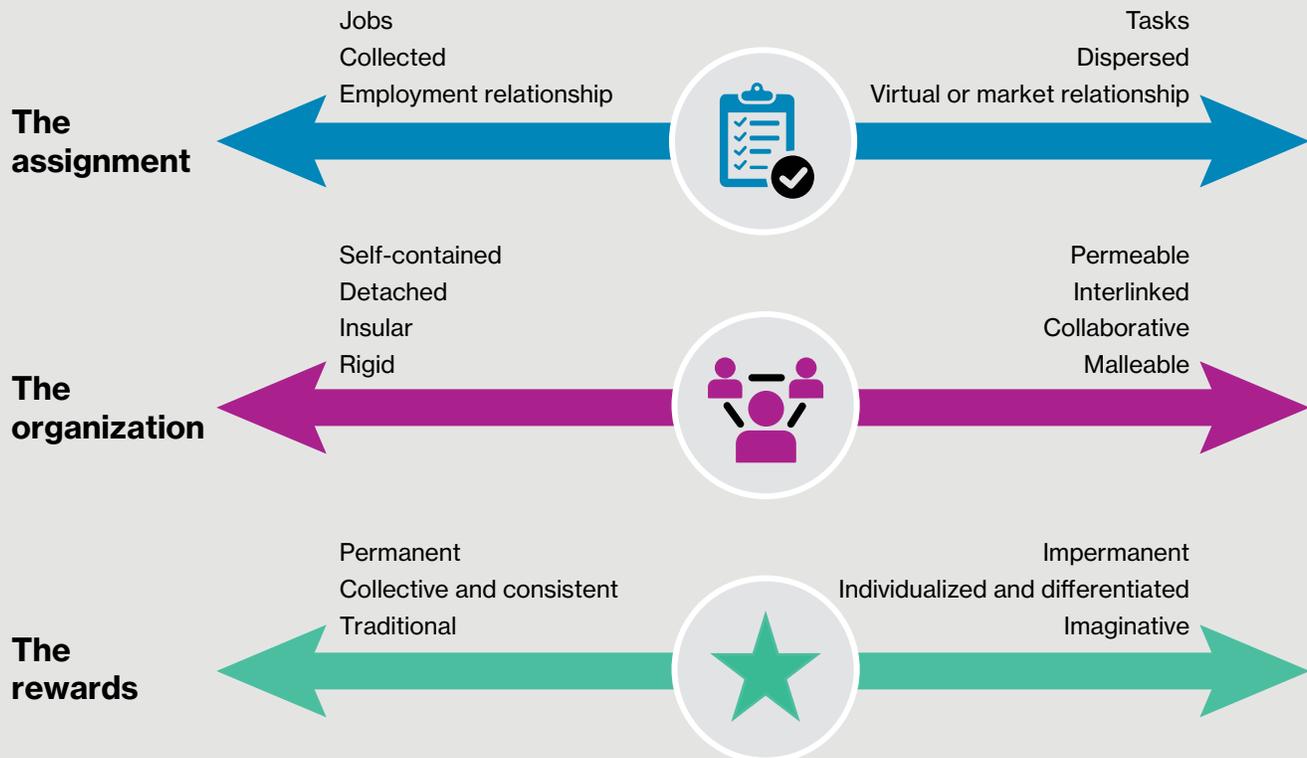
A decision-making framework

But to capture the opportunities, organizations also need to think about work differently. In particular, it is important to understand the key decisions that need to be made in three areas, as illustrated by the continuums of choice below (*Figure 2*, next page):

On the left, we see traditional employment. Work is “constructed” into jobs, collected at a point and space in time, and executed through an employment relationship. The organization is self-contained, detached, insular and protective, and has a rigid shape. The reward package is permanent, collectively consistent and uses traditional elements (e.g., money, hours, working conditions).

On the right, we see a world beyond employment. Work is deconstructed into tasks, dispersed in time and space, and executed through many virtual and market relationships other than traditional employment. The organization is permeable, interconnected and collaborative, and can change in shape. The rewards are impermanent and individually defined, and use imaginative elements (e.g., game points, reputation, mission).

Figure 2. **The opportunity: lead the work**



Source: *Lead the Work: Navigating a World Beyond Employment*, John W. Boudreau, Ravin Jesuthasan, David Creelman, Wiley, 2015

Start experimenting

To get started on this journey, insurers should experiment by selecting a few jobs to deconstruct.

First, you might want to identify jobs in areas where your organization is having difficulties attracting talent. For instance, the ability to compete in emerging areas, like advanced analytics, often hinges on getting the right data science talent. This type of critical talent can be difficult for insurers to attract and costly to hire, so you may decide to deconstruct several key analytical jobs. Once these jobs are deconstructed into tasks, evaluate the speed-to-capability, risk and cost implications of different work options. You might find that your best option is to access world-class talent via a talent platform for tasks requiring highly sought-after skills.

Alternatively, identify areas where work has been done in the same way for a long time and where you suspect that the work might be done faster or cheaper. For example, an organization might decide to deconstruct a claim processing job that's been done the same way for 20 years and use RPA to complete some of the routine tasks and hire someone on a talent platform to tackle the nonroutine tasks.

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It's essential to communicate your plans to all stakeholders – leaders, managers and employees – who will need to understand this new way of getting work done. Finally, share the lessons learned as you go along and stay current with how other organizations, including those outside of your industry, are approaching the future of work.

Being able to deconstruct jobs and make decisions as to how best to complete the work using resources inside and outside of the organization can confer significant competitive advantage to insurers.

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