Work, Re-Architected:

Unlocking human potential, productivity and meaning in the future of work
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Introduction

At the height of the pandemic, Deloitte interviewed hundreds of workers across twelve countries to capture their first-hand perspective on work. The most common word respondents used to describe work during this time is “Challenging.”

It is a powerful word, speaking both to the extraordinary disruption brought on by the pandemic and to the increased value and meaning many workers found when the pandemic forced a re-alignment of their work to better match their potential and their motivations. During this time, workers experienced changes to just about every aspect of their work. But many also gained greater clarity as to what they want and need from their jobs: Increases in autonomy, flexibility, a sense of contribution, opportunities to use their enduring human capabilities like creativity, and technology that works for them—and not the other way around—were all factors that respondents said would lead to an increased sense of meaning and productivity.

Workers acted on this experience and deeper understanding of their needs during the Great Resignation, voting with their feet for new jobs where they could feel more valued and contribute more meaningfully. And these challenges will likely continue: Gen Z workers are some of the least satisfied at work, with only 56% of those surveyed satisfied with work-life balance and 59% of the respondents satisfied with their job overall. Leaders should reassess their relationship with the workforce – to re-architect how work gets done.
What more do organizations and workers have in common than the work itself?
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Deloitte’s 2021 Human Capital Trends Special Report examined how the relationship between workers and organizations might evolve. Our research boiled down to one truth: As an organization, if you want workers to make a valuable commitment to your work, you should give them work to do that is of value to them.

This may seem simple enough, even intuitive. Yet it’s perhaps one of the most challenging and elusive objectives that many organizations face. There are several ways organizations can achieve this goal. The organization and the worker can choose to bind together in pursuit of a purpose—working towards common outcomes—both finding meaning in a common cause. Alternatively, the worker and organization can keep the relationship focused simply on creating value in the work, each choosing to find meaning elsewhere and in their own ways.

This is a dialogue, and hopefully an explicit one. But a healthy, productive relationship between organization and worker is possible, as long as both sides perceive it to be beneficial.
Work, Re-Architected | What more do organizations and workers have in common than the work itself?

Out of step
For the organization, prevailing perspectives on what work is and how it is architected are part of the problem. Since the Industrial Revolution, we have described work with words such as task, process, and chain—organized into jobs, lines, and functions. From Scientific Management onwards, a defining assumption has been to see the function of the human worker as an enabler of outputs at best and, in many cases, as a risk to be minimized or replaced.

This mechanistic view of work has persisted even as more of the work has become knowledge based. Differentiation in this old world meant scaling efficiency—winning on being better at the raw equation of physical inputs and outputs.

Now, work is increasingly fluid, resistant to routine, and cognitively complex. More than one path might be taken to achieve a given outcome—and often not the same path twice. The work is accomplished in teams and workgroups. It is defined and subject to the pressures of time, but it is not bound by time zone, place, or geography—indeed, the pandemic and the Great Resignation significantly fastened migration, with workers more willing than ever before to relocate.

Organizations differentiate today based on scalable learning—the speed at which they collectively sense, learn, innovate, and act in service of creating value. And these trends exist in harmony with the skills humans have in abundance. An important strategy for achieving learning at scale is designing the work to fully leverage the collective capacity of each and every worker for empathy, creativity, and collaboration.

In that context, organizations should change how they talk about work—outcomes over outputs, flows over processes, and skills over jobs. They should design work with flexibility, experimentation, and iteration in mind—rather than consistency or adherence to “the way it’s always been done.” Most will need to partner humans and machines together in a way that makes work better, more sustainable for workers, and ultimately more rewarding.

As they adapt and adjust to a post-pandemic world where the Great Reimagination is in full swing, many organizations must re-architect the work they expect their workers to execute to reduce its cost to the humans doing it. This might mean redesigning work to emphasize what humans do best, prioritizing work that celebrates and depends on human capabilities such as creativity and problem-solving and making it clear how the work connects to broader motivations and goals for the worker and the organization.

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What if?
To think about what work could be, we asked workers what they thought. Many reported that the disruptive events of the last few years have opened up more opportunities for them to leverage their uniquely human characteristics: surveyed workers reported spending more time on problem solving (55%), thinking creatively (53%), and learning new skills (49%) than they had in the year prior to the pandemic – all factors that our research found connect to making work more meaningful. While necessity forced organizations to relaunch their ways of working, doing so resulted in more space for innovation and ideas and helped many workers feel they were closer to reaching their full potential.

But these positive shifts don’t need to stop with the disruption of the last few years. They present an opportunity to make changes to reimagine work, and to think creatively about new ways of working. Organizations can start by asking a series of questions that can help unlock the essentially human ingredients that make work more meaningful for workers, while creating more value and growth for the organization:

- What if more of our workforce’s attention could be focused on value-add activities such as solving problems or deepening customer relationships?
- What if we create a real-time ability for workers to sense (internal or external) and to contribute to collective knowledge?
- What if we create moments for every worker to identify opportunities for improvement or innovation?
- What if you could bring workers together across functional silos seamlessly and point-in-time?
- What if work was designed not to depend on any single individual, allowing for all workers to take meaningful time away?
- What if more of the workforce could have a direct, personal connection to our customers, being able to hear customer needs and wants directly?

The benefits of focusing on humans, connection, and meaning can lead to tangible, significant benefits for the organization. At companies that reported they were reimagining work, workers reported feeling more productive and motivated – all while feeling closer to reaching their full potential and being focused on more meaningful work.
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Re-architecting work typically requires two shifts.

The first shift involves moving from focusing strictly on minimizing monetary cost to a broader focus on human cost, value, and meaning. This construct should apply across all key components: the organization, customers, and the workers themselves. (Figure 1)

Deloitte has long focused on the importance of applying cost, value, and meaning to the work that humans do and the manner in which it gets done. However, organizations have typically applied the notions of cost, value and meaning to strategies for themselves and their customers. Re-architecting work moves beyond focusing on just the organization and the customer to seeing the workforce as unique contributor and worthy stakeholder.

Many organizations have not thought about the workforce in this way. The bottom row (i.e., the organization) was paramount, with the workforce existing solely in service of the organizations’ outcomes. However, changes to work necessitated by the pandemic, the Great Resignation and the Great Reimagination have demonstrated that focusing on the needs of the worker will likely impact the organization far more than anticipated. Indeed, Deloitte’s research showed that half (48%) of respondents felt that they grew closer to reaching their full potential of work over the course of the pandemic; while 48% said that work had become more meaningful.
The second shift involves taking a close, detailed look at the work that gets done. Any project, program, or initiative should be broken down into its component parts down to the task level. Leaders and workers can then determine which tasks can be easily automated, or where workers can partner closely with technology. The remaining tasks – activities that require innately human skills such as problem solving, thinking creatively, agility, and learning new skills – are those that workers can focus on (Figure 2). This enables workers to spend their time on higher value, more intrinsically motivating – even more inspiring -- work. Critically, the process of re-architecting work should be done in collaboration with the workforce itself, to ensure that work is not only valuable to the organization, but meaningful for workers and reflective of their skills.

Figure 2: Intrinsically human capabilities and skills that can add value to the organization

<table>
<thead>
<tr>
<th>Breadth of Perspective</th>
<th>Conceptual Thinking</th>
<th>Decisiveness</th>
<th>Risk Taking</th>
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<tbody>
<tr>
<td>Insightful appreciation of any situation</td>
<td>Rapid grasp of complexity</td>
<td>Urgency in decision making</td>
<td>Boldness in the face of ambiguity</td>
</tr>
</tbody>
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<tr>
<th>Experimenting</th>
<th>Challenging</th>
<th>Emotional Intelligence</th>
<th>Social Flexibility</th>
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<tbody>
<tr>
<td>Passion for innovation and change</td>
<td>Fearlessness in speaking out</td>
<td>Attentiveness to others’ feelings</td>
<td>Naturally collaborative</td>
</tr>
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<tr>
<th>Inclusive-ness</th>
<th>Self-Belief</th>
<th>Drive</th>
<th>Resilience</th>
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<tbody>
<tr>
<td>Optimism in the capability of others</td>
<td>Confidence in taking the lead</td>
<td>Relentless desire to excel</td>
<td>Mental toughness in difficult times</td>
</tr>
</tbody>
</table>

Source: Deloitte analysis
Re-architecting work moves beyond focusing on just the organization and the customer to seeing the workforce as unique contributor and worthy stakeholder.
What does it mean to re-architect work?

Doing so can also make work more efficient and accurate. Due to their repetitive nature, rote tasks can be the perfect breeding ground for mistakes, as workers may find their attention wandering or lose concentration if they are not mentally engaged in the task at hand. Tools such as AI and machine learning can automate rote processes to reduce errors and provide predictive capabilities, enabling humans to focus elsewhere.

Breaking the work down into its component parts and re-architecting how it gets done enables humans and technology to work collaboratively: humans can leverage technology in ways that work for them and augment their skills, rather than against them or in competition with them, while improving accuracy and working more effectively. Further, evidence suggests that re-architecting work to pair humans and technology more effectively may lead to increased job opportunities. The World Economic Forum suggests that 97 million new roles may emerge by 2025 that are more adapted to the new division of labor between humans, machines, and algorithms.17

For example, the financial services industry can use AI tools to automate highly repetitive tasks that require strong attention to detail, such as underwriting, payment processing, claims management, and fraud detection. These AI-driven capabilities can be paired with human workers to enable them to focus more deeply on customer relationships or to leverage broader insights gleaned from analysis to identify new business opportunities.18 In fact, 33% of business leaders surveyed in Deloitte’s 5th State of AI study have already deployed AI to identify non-obvious relationships and unusual characteristics within large data sets, enabling teams to spot anomalies more quickly in large amounts of data.19

Becoming a skills-based organization

Newly re-architected workflows that clearly delineate which tasks are most value-added and which can be paired with technology should serve to clarify what human capabilities and skills are needed now and likely tomorrow. However, organizations will likely need to reframe their focus from a roles-based model to one based on skills. In this skills-based model, leaders should be able to describe the value needed in the work, and what potential unique capabilities workers can provide. As part of this shift, organizations should rethink how they plan for and invest in workforce sourcing and development to be based in this new skills-based frame.

A skills-based organization (or SBO for short) is a fundamentally different operating model for sourcing and developing human capabilities and skills. Becoming a skills-based organization requires recategorizing work based on outcome and the interwoven human and technological capabilities needed—not using traditional, static job descriptions. And it requires assessing workers based on the skills and capabilities they bring, and, by extension, where they can best contribute, bring value, and find meaning—not using traditional, static job titles, resumes, or CVs.

This different set of mental models—and accompanying lingua franca—for work and worker would then require a reinvention of the core talent and workforce processes and programs within an organization and across its ecosystem.20 To learn more about SBOs, see The skills-based organization: A new operating model for work and the workforce.
Properly re-architected, work can make us smarter, more productive, and happier.

**Smarter.** The right amount of complexity, autonomy, and feedback encourages workers to explore, think, and learn. There are two key types of human cognition, both of which can be crucial for worker performance: crystallized knowledge and fluid cognitive abilities. Research from MIT Sloan Management Review suggests that work design can both improve workers’ thinking and ongoing learning. They identified the following five aspects of work design as important for cognition:

a. **Job autonomy**, or job control,
b. **Feedback**,
c. **Job complexity**, 
d. **Relational aspects** of work,
e. **Psychosocial job demands.**

Well-designed work can motivate and empower workers, in turn fostering engagement and learning. In this regard, technology can be used to help workers get smarter about their roles in a way that also builds transparency and trust. One technology firm created personalized dashboards visible only to the worker – not to management – to show them stats about how they spent their time each day, with suggestions about network-building or other ways to spend their time. Because the dashboards were meant only for the user, workers did not need to worry that they were being monitored or judged by their leaders; they could simply use the data to improve their performance.

Indeed, technology provides multiple ways to partner with humans to make them smarter at work. In Deloitte’s 5th State of AI study, 72% of surveyed leaders stated that their organizations had either deployed (37%) or were developing (35%) intelligent automation capabilities to route information or otherwise optimize decision-making within the scope of a complex process, freeing up workers to make smarter, more considered choices. At the same time, 59% of leaders reportedly either planning (25%) or developing (34%) tools such as digital twins to digitally replicate physical systems, enabling workers to test, experiment, and more rapidly iterate on new ideas or potential real-world scenarios.
More productive. Technological collaboration can reduce stressful, dangerous, or monotonous work and increase opportunities to use human capabilities and build human relationships. Tech has the potential to replace as much as 69% of the tasks historically done by managers, such as assigning work and nudging workers to act.26

In one example, edge computing and AI can be used by energy, resources, and industrials organizations to enable faster decision making around where to place physical plant locations by aggregating and analyzing historical data, sensor data gathered in real time, and models of geographical locations, among other information. By bringing together large datasets and analyzing them quickly, AI empowers humans to make complex decisions based on much timelier data in a fraction of the time. Further, use of edge computing and AI can help workers avoid unplanned downtime due to mechanical malfunctions, driving cost savings as well as increased productivity.27 Fully 84% of leaders in Deloitte’s 5th State of AI study agreed (39%) or strongly agreed (45%) that AI empowers people at their organizations to make better decisions.28
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Happier. Research shows that people are happiest when they are in a state of flow, absorbed with the activity at hand. This state typically comes when there is challenge-skill balance, merging of action and awareness, clarity of goals, immediate and unambiguous feedback, concentration on the task at hand, and the experience of doing work that is intrinsically rewarding. Designing work for employee satisfaction to be more personally rewarding can have additional benefits beyond wellness; it can also increase retention.

Creating flow requires demanding greater skills and attention from workers. Yet all too often in these scenarios, technology can work against workers, rather than for them. For example, a UK-based study found that email interruptions increased employee time on tasks by one-third; additionally, mental blocks caused by multitasking – a frustrating byproduct of constant floods of information from technology tools, and one that prevents the concentration needed to reach a state of flow -- can cost as much as 40% of productive time.

At the same time, however, technological tools can work with humans to improve flow and happiness; 82% of executives in Deloitte’s 5th State of AI study agreed (41%) or strongly agreed (41%) that employees in their organization believe that working with AI technologies will enhance their performance and job satisfaction.

These are just a few of the possible benefits of re-architecting work to capitalize on what humans can accomplish when work is designed around their strengths and paired with technology to unlock greater value. Let’s look at how we can do it.
Work re-architected, in four phases
Work re-architected, in four phases

Focus on the why
Focus on the why
Anchor to human potential by investing in enduring skills and capabilities
Map technology capabilities to human capabilities
Deploy and refine—continuously

Focus on the why
It’s always a good idea to design with the end in mind, but it is not enough to just clarify measures of success or key performance indicators. Organizations should focus effort and attention on why the work is being done and what the ultimate, overarching desired outcomes are beyond incremental activities and processes along the way. This can help workers see the bigger picture, place into context why their work matters, and understand the effects of their specific efforts on the organization’s overall strategy. In this way, workers can see the value they bring beyond simply “cost reduction” or “increased productivity,” the deeper impact they are making, and derive more meaning from their contributions.
Anchor to human potential by investing in enduring skills and capabilities

Shifting to a model that focuses on outcomes over outputs, flows over processes, and skills over jobs means redefining expectations for performance and what success looks like. Desired outcomes should be clearly articulated and understood, and the approach to measuring success should reflect a reimagined work environment in which human and technological capabilities function together in new ways. But they should ultimately be anchored to human potential, skills, and capabilities.

Metrics are important to understanding success in achieving stated outcomes: measuring cost, value, and/or meaning as well as traditional figures. However, these metrics should focus on broader, sometimes difficult-to-measure criteria, such as the ways that work does more for all involved and the greater value that is created. Put simply, the lens of ‘productivity’ should evolve beyond cost optimization to encompass broader outcomes with lasting value and meaning for all stakeholders. (Figure 3)

Figure 3: Anchoring to human potential means shifting the ways organizations typically think about value creation and success

Here, organizations can ask themselves several questions to help ensure they can tap into the skills of their workforce and sustain productivity and motivation: How can we best identify and address new problems and opportunities? How can we think beyond cost savings and customers to consider value creation for all stakeholders - including workers? How can we cultivate human capabilities and augment them with technology to help humans reach their fullest potential? Answering these questions should help guide a leader not only to transform the way an organization, team, and/or individuals work to create value, but how that value is connected to humans and how it is assessed.

Source: Deloitte analysis
Workers can see the value they bring beyond simply “cost reduction” or “increased productivity,” the deeper impact they are making, and derive more meaning from their contributions.
Map technology capabilities to human capabilities

Once desired outcomes are negotiated and stated, the organization should look to prioritize them and then map them first to the human capabilities and then the technological capabilities necessary to support the people.

Looking closely at the targeted outcomes and available (or desired) human resources, leaders should ask: Who are the people doing the work? How do they spend their time? With whom do they typically interact? Where are they located? And where are likeliest opportunities for reimagining their work? Most important, what are their fundamentally human contributions that cannot be accomplished by any other means?

This is where technology comes into the picture to augment workers. Rather than looking at the influx of technology and using its power to simply substitute human work, we should focus on optimizing it – on humanizing it. We should be moving from a focus on technology to a focus on humans supported and enabled by technology. Instead of humans adapting to technology, it is about technology enabling humans.

Technology may be secondary to human capabilities in re-architecting work, but it’s critical. Organizations should ask: What technological capabilities are used in everyday work? Where are the most likely opportunities for weaving together a better—more effective and more rewarding—work experience? How can we make sure that tech systems are configured so that they not only augment human skills, but also provide what the worker needs without the burden of intervention? Most important, how can we use technology to enable a more human way of working?

However, changing focus from technology to capability is not about adding more systems—and it’s not just about a better experience or improved efficiency. It can simply be about bringing teams together. For example, 75% of business leaders in our 5th State of AI study reported leveraging AI to improve collaboration across the organization to a high degree (34%) or some degree (41%)—a critical capability for organizations seeking to foster human connection and idea sharing, improve efficiency, and help ensure that the workforce has the information it needs at the right place at the right time to create the greatest impact.
Deploy and refine -- continuously

Re-Architecting work is not a simple, one-time fix, nor does it involve simply changing one or two areas of the organization. It requires constant sensing, re-evaluation, and revising of aspirations and target outcomes. Thus, the capability to constantly re-architect work in the face of future, often unpredictable disruptions is important.

To optimize human potential in this sort of environment, organizations must embrace an agile approach to talent, skills, and technology and incorporate continuous disruption into their organizational DNA, making adaptation both an organizational capability and a necessary skill for workers. Likewise, technology must be able to evolve right alongside human workers, leveraging tools such as predictive analytics to help guide teams toward more informed, data-driven decisions.

To accomplish this, the relationship an organization has with its workforce is critical, based on skills, human potential, and creating meaning and value in work. Indeed, it is important for organizations to involve the workforce itself in its efforts to re-architect work, to ensure the work is not only valuable, but meaningful for those doing it. Like any relationship, it requires investments of time and attention on both sides to be healthy, vital, and enduring.
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