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Workforce of the Future

# Humanizing Work through Digital

by Colin Sloman and Robert J. Thomas

Digital is about cold efficiency and doing away with the human touch. Right? Wrong. Digital is making the work experience—and the workforce—more democratic, more networked, more human.

In the early days of digital, technological advances were associated primarily with efficiency. Taking human intervention out of work and replacing it with automation and changing the very foundations of how work is performed. Now, with advances in collaboration and social media, digital is transforming work again. Breaking down traditional boundaries. Supporting the reorganization of work into open ecosystems to enable greater collaboration. Radically augmenting brain and brawn to enhance

both the cognitive and collaborative side of work as well as the physical possibilities of human beings. Democratizing how work is conducted and forever changing our ideas of how an organization should be run from every level all the way to the top.

In short, this new wave of technology is far from dehumanizing. In fact, it's precisely what will make work radically more human: more tailored to individual strengths, more flexible and portable, more collaborative and more meaningful to employees throughout the organization.

# Reorganizing Work

Hierarchy. Bureaucracy. Functional silos. All are vestiges of the division of labor from the earliest writings of Adam Smith and Alexis de Tocqueville.

Even two centuries ago their drawbacks were duly noted. Alexis de Tocqueville wrote, "Nothing tends to materialize man, and to deprive his work of the faintest trace of mind, more than extreme division of labor."

That's because the very concept of "a job"—and the strict division of work—can effectively kill autonomy, inspiration, innovation and increase monotony, making tasks seem less significant and meaningful. Yet whole HR departments organize nearly every talent practice around the concept of jobs, and managers and employees use the notion of the job to hire, manage and organize teams.

Digital is shaking the foundations of labor management to its core as functional roles and rigid job descriptions give way to people coalescing around joint goals and forming collaborative teams. In fact, recent Accenture research shows that 44 percent of high-growth companies now use temporary teams, and 86 percent leverage the power of collaboration across employees to achieve high performance.<sup>1</sup> These new ways of working open the organization for feedback, ideas and innovation at all levels.



# Boosting Brain and Brawn

New digital advances like virtual sensors, analytics, advanced robotic devices, developments in artificial intelligence, automated virtual assistants, 3D printers, wearable devices, collaboration software, and gaming capabilities promise to reshape work practices like never before.

How much? Preliminary pilots in the utilities industry suggest that plant workers can gain 1.5 hours/day in work time using mobility-enabled, electronic work packages, boosting productivity by up to 25 percent.<sup>2</sup>

And such advances will lead to greater experimentation and empowerment for the employees who use them, enabling them to make more strategic decisions at a local level. They'll also allow employees to collaborate with each other and with the machines to boost productivity and make their jobs ultimately more fulfilling. Boosting both brain and brawn.

On the brain side, the decoupling of the worksite and the machines in the field transforms the nature of work: from the traditional blue-collar to knowledge-based roles with real-time access to data from industrial assets, such as fleets of trains, airplanes, power grids or earth-moving equipment. It also affords a new level of flexibility on where and how work is done.

One example: Rio Tinto. At this mining company's operations center in Perth, Australia, skilled equipment operators now sit in a remote command center and work side-by-side with data analysts and engineers to orchestrate the actions of huge drills, excavators and other machinery across multiple mining sites.<sup>3</sup>

On the brawn side, firefighters, military personnel, surgeons, and nurses can now wear powered exoskeletons to boost their strength and endurance to perform better at work. Chicago firefighters have tested robots as their first line of defense. By using technology, firefighters can go into partially collapsed buildings and other perilous situations with a camera-equipped robot and assess the danger before risking human life. The US space agency NASA is teaming astronauts and robots to handle the difficult and dangerous task of cleaning derelict satellites. Outfitted with advanced analytics algorithms and stereoscopic cameras, robots are analyzing space

junk to quickly map each piece's spin, velocity, trajectory, and center of mass—allowing astronauts to capture it safely, out of harm's way.<sup>4</sup>

In an auto manufacturing trial, a human-robot team assembled the frame of a car 10 times faster than a team of three humans. How? For simple welds, a robot with a video projector would show a human where to place a specific part; then the robot would make perfect welds in five seconds per weld. For more difficult welds, however, the robot would defer to its human partner to perform better. Ultimately the accelerated assembly speed frees up time for workers to focus on trouble-shooting and more challenging (and therefore more rewarding) tasks.<sup>5</sup>



# Redefining the Role of Leadership

Like water, digital technology insinuates itself into every nook and crevice of an organization. Digital breaks down silos and hierarchies and hastens the evolution of organizations into more fluid and networked forms. It connects people across geographies and functions.

It makes work processes more transparent and encourages the intersection of people and ideas that can lead to breathtaking innovation. It helps grow complex ecosystems of vendors and alliance partners by dramatically reducing the cost of collaboration.

In the process, digital gives greater prominence to the practice of “horizontal leadership”—that is, the ability to exercise influence without formal authority. Horizontal leadership encourages collaboration and decentralized decision-making—vital elements of the digital enterprise.

Indeed, skill in horizontal leadership is what enables executives to “let go” and trust that effective work can be conducted by teams and that effective decision-making can be carried out at the edges of the organization. The shift to horizontal leadership is evident in Accenture research results: 48 percent of high-growth companies say their leadership team has worked to incorporate a broader range of perspectives and skills.<sup>6</sup> What’s more, high-performing companies have invested in collaborative tools like interactive portals, social networking, SharePoint and wikis and have found them to be 80 percent effective at improving productivity.<sup>7</sup>

Horizontal leadership is a critical element of management in the digital age, but it is not the only one. Thanks to the ubiquity of digital applications like instant messaging, web cams and social media channels, leaders have never been more visible to their people. In fact, Accenture research found that 58 percent of executives felt technology improved communications by allowing them to connect with a team, or the broader organization, easily and quickly.<sup>8</sup> Couple this with increasingly flat organizations, and the old command and control style of management is rendered more and more old fashioned. Instead, leaders communicate their priorities, goals and expectations directly to employees who have more opportunities to engage directly with them through social and collaboration platforms. This can encourage meritocracy by tapping employees throughout the organization for the best ideas.



# Three Fundamental Changes

To become more agile, accommodate changing worker demands, and harness the new open talent economy, organizations will increasingly change in three fundamental ways:

## Break the hierarchies

Instead of hierarchical command and control units, companies should resemble interconnected networks. Ecosystems of companies, third-party suppliers and independent agents that hold specialized skills and workers who define their own jobs.

## Enter the digital race

Robotics, automation, technological augmentation, and collaboration tools are here to stay. Embrace them proactively instead of playing catch up to competitors that have already improved the work experience through digital. And gained the advantages.

## Enable the multi-skilled worker

Coach and enable employees to constantly develop new skills that are needed by the organization and seek out new opportunities to create value for their organizations. And have them focus on human skills that will reign in the age of the machine—developing capabilities machines won't likely take over: ideation, communication, analysis, experimentation, and the ability to make sense of data.

## Paradoxical leadership in the age of digital

Leaders need to manage paradox in the digital age by:

- Guarding core values and shared purpose across the ecosystem and throughout contingent labor while experimenting with products, services and organizational structure
- Letting go of tight control in order to free up employee creativity
- Mastering complexity but guiding through simple rules
- Exercising judgment in the face of an unprecedented volume of information



## The "Human" in "Human Capital"

We are shifting to a world where the innately human characteristics of collaboration, coaching, entrepreneurialism and fluid temporary teams are fast replacing hierarchy, bureaucracy, functional silos and traditional notions of the job.

New digital technologies are driving that change through more bespoke roles and rewards, and a more democratized workplace. You could say digital is putting the "human" back in "human capital."

Through digital, people can co-create highly personalized work experiences and lead and manage in ways that free employees to exercise judgment and unleash their creativity at all levels of the organization. Leaders will need to loosen the old school "command and control" grip on hierarchies and instead manage networks of employees and external talent pools, often at the far ends or outside the organization.

Digital isn't a panacea. Just having the technology won't instantly imbue an organization with a greater sense of human touch. Humanizing the workforce through digital takes a conscious effort. Organizations that embrace these changes from leaders down to front line workers will be able to enjoy more engaged, satisfied employees, improve workforce productivity and effectiveness, and achieve new levels of meaning, innovation, agility, and operational excellence.



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