

TREND 3:

HUMAN + WORKER

Change the workplace or hinder the workforce

Digital transformations aren't just about technology —they're about people.

Businesses across the healthcare industry are witnessing the rise of a human + machine collaborative workforce where each individual is empowered by their skillsets and knowledge plus a new, constantly growing set of capabilities made possible through technology.

Today's healthcare workers are incorporating technology to perform their current roles in new ways and to adapt for new roles that did not exist in the pre-digital era. However, the workforce is evolving so rapidly with the help of technology, the enterprise supporting the workforce has yet to catch up.

As healthcare organizations continue to innovate and push boundaries, they will need to create new jobs and new roles immersed in technology. They will need to invest in new ways to train and reskill employees for the post-digital age. They will also need to capture institutional knowledge so that it remains in house, rather than in the minds of people who may be transitioning in and out of jobs.

The directive for healthcare? Adapt the technology strategies that successfully created this next-generation workforce to empower them even further. Through mobility, automation, artificial intelligence, extended reality and more, the industry can propel the workforce forward to enable a new era in healthcare.

CREATING THE OPTIMAL WORKFORCE MIX

The healthcare industry is among the most labor-dependent.¹ Technology offers a new opportunity to lift the weight of processes and allow the workforce to operate at a new level of efficiency. The possibilities in healthcare are vast.

Imagine AI helping to scan structured data, such as medical claims; semi-structured data, such as XML; and unstructured data (e.g. medical records, email) in seconds to perform a clinical review which would otherwise require a human to read hundreds to thousands of pages. Extended reality and artificial intelligence can help surgeons with presurgical planning and provide a critical overlay of information during a procedure.

On the payer side, **Sensientia** uses AI to simplify health insurance information. The solution parses structured and unstructured data to answer (with 99+% accuracy) the health insurance questions that members ask call center agents in plain English. This means faster, more accurate information for members and fewer members calling back.



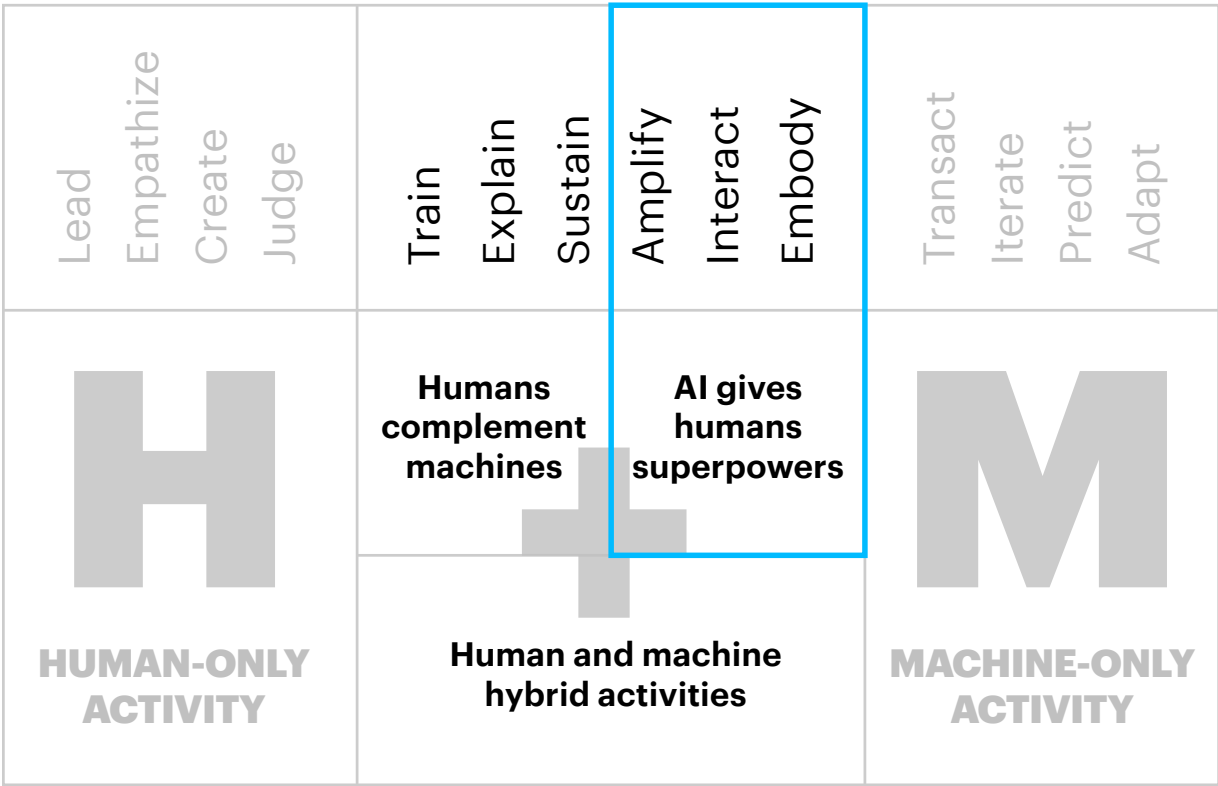
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With Sensientia, **WellCare** has seen customer satisfaction rise due to 30% lower average time to handle a call and 16% fewer repeat calls. Looking ahead, WellCare is exploring using the solution to help its sales organization find the right product for the right person, and to provide a higher level of self-service by improving online and mobile search.

Voice-assisted technology can answer questions and provide advice² to caregivers looking after family members in a home care setting. Human resources managers can use natural language processing to identify potential candidates online or use analytics to better understand skills gaps among employees.

It’s not about technology doing the work, it’s about technology augmenting the work of people. **Humans plus machines yields a better result**³ than either one alone. For instance, **humans are less consistent, fast and reliable**.⁴ Machine learning allows the brain of the system to continuously learn by all of the data it absorbs—volumes of data no human could ever retain or process. Humans can validate the results that technology provides and spend more time on tasks that require problem solving and critical thinking.

Together, humans + machines produce better results



Source: “Human + Machine: Reimagining Work in the Age of AI,” Harvard Business Review Press,
<https://www.accenture.com/us-en/insight-human-machine-ai>

LET KNOWLEDGE FLOW

Quick access to information is essential to an agile and efficient healthcare enterprise. But as human+ workers are more flexible and fluid, this leads to increasingly distributed knowledge. Workers will no longer bring 20 years of institutional knowledge to an organization or role; they will float across a variety of virtual and in-person care settings and be working side-by-side technology that can close any knowledge gaps.

Knowledge can no longer travel with the people; it has to live within the organization. This will require technology strategies that bring knowledge management into the human+ era. With the right approach, healthcare organizations can redefine the phrase “institutional knowledge,” making it a true responsibility of the organization itself.

SUPPORTING AND ENGAGING THE WORKFORCE

Workers across industries are shifting jobs. [The median years of tenure with a US wage or salary worker's current employer dropped](#) from 4.6 in 2012 to 4.2 in 2016. Among those between the ages of 25 and 34, the median tenure with one company is now less than three years.⁵ In this era of employee velocity and constantly shifting skills needs, employee training and continuous learning are more important than ever. Seventy-nine percent of healthcare executives believe that the speed at which members of the workforce move between roles and organizations has increased the need for reskilling in their organization.

Investing in the healthcare workforce through learning and reskilling strategies will prepare employees for changing roles. For instance, Accenture developed a chatbot, Ashley, that provides just-in-time knowledge during training sessions to augment the experience and bring a substantial improvement to a learner's engagement and adoption. Such chatbots can reduce query search time by 70-80%, use natural language processing to enable human-like conversations and have the scale to train thousands of employees at the same time.

77%

of healthcare executives agree their employees are more digitally mature than their organization, resulting in a workforce “waiting” for the organization to catch up.

68%

of healthcare executives agree that within the next three years, every employee in their organization will have access to a team of bots to accomplish their work.

EXPERT ADVICE IN REAL TIME

The Mayo Clinic is using a combination of natural language processing and analysis of structured and unstructured data to rapidly process historical clinical notes, radiology notes and other resources to deliver real-time, personalized clinical care recommendations. MayoExpertAdvisor supports clinicians by integrating a wide variety of important information—from lab tests, procedures and medications—to provide patient context and unmatched insight at the point of care to improve patient care.⁶

Related

[Leading Change at the Forefront of Healthcare, David Jones, Stanford Health Care](#)

[Help Wanted? Addressing Healthcare’s Talent Gap](#)

[Injecting Intelligence into Healthcare](#)

Sources

¹“Rethinking Health Care Labor;” New England Journal of Medicine, October 13, 2011; <https://www.nejm.org/doi/pdf/10.1056/NEJMp1109649?articleTools=>

²“Nuance Unveils AI-Powered Virtual Assistant Solution Designed for Healthcare Providers;” Nuance news release, September 27, 2017; <https://www.nuance.com/about-us/newsroom/press-releases/nuance-unveils-virtual-assistant-for-healthcare.html>

³“Human + Machine: Reimagining Work in the Age of AI;” Harvard Business Review Press, March 20, 2018; <https://www.accenture.com/us-en/insight-human-machine-ai>

⁴“AI Proves to Be 10% Faster and More Accurate Than Top Human Lawyers;” Interesting Engineering, February 27, 2018; <https://interestingengineering.com/ai-proves-to-be-10-faster-and-more-accurate-than-top-human-lawyers>

⁵Median Years of Tenure with Current Employer for Employed Wage and Salary Workers by Age and Sex, Selected Years, 2006-16, Bureau of Labor Statistics, September 22, 2016; <https://www.bls.gov/news.release/tenure.nr0.htm>

⁶“Toward a Learning Health-care System – Knowledge Delivery at the Point of Care Empowered by Big Data and NLP;” June 23, 2016; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4920204>

For more information:



KAVEH SAFAVI, M.D., J.D.

kaveh.t.safavi@accenture.com



BRIAN KALIS

brian.p.kalis@accenture.com



ANDREW THOMPSON

andrew.j.thompson@accenture.com

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About Accenture 2019 Technology Vision Survey

Accenture conducted a global survey of thousands of business and IT executives to understand their perspectives on the impact of technology on their organizations, and to identify their priority technology investments over the next few years. More than 6,600 executives from 27 countries responded to the survey, including 221 US and Canadian healthcare executives. The survey was fielded from October 2018 through December 2018.

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