

Gener(AI)ting the future



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GENERATING GROWTH THROUGH AI



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the Co-founder of Workhelix. One of the most cited authors on the economics of information, he was among the first researchers to measure the productivity contributions of IT and the complementary role of organizational capital and other intangibles. He is the author of nine books, including the bestseller *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* (2014) with co-author Andrew McAfee, and *Machine, Platform, Crowd: Harnessing Our Digital Future* (2017).

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How is generative AI transformational?

The biggest driver of productivity growth for businesses and the economy as a whole, is what economists call “general-purpose technologies” or GPT, the same initialism AI researchers now use for “generative pre-trained transformers.” AI – in particular generative AI – is the electricity of our era, increasingly ubiquitous and spawning countless complementary innovations.

Are we ready to harness the full benefits of generative AI?

Unlike some earlier technologies, AI requires significant changes in the economy to realize its full impact, particularly in terms of organization and workforce skills. To prepare the workforce, it is necessary to identify which skills are important, followed by self-learning and training programs. Businesses will need to restructure and adapt to capitalize on new technologies.



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As a global economy, we need to become more dynamic, making it easier for people to transition to new work models, new kinds of jobs, and even new geographies. The government can play a role by making regulatory regimes more sympathetic and flexible.

How should organizations adapt to take full advantage of generative AI?

The value of generative AI comes largely from the insights and knowledge of the workforce, which it can capture and distribute. So, it's important to reward the people who are creating those insights in the first place, requiring new metrics and recognition of where value is created. It is also going to require real flexibility and adaptability of the workforce.

Insight generation, in turn, depends on the quality of data generated. Data is the lifeblood of machine learning (ML), and proprietary data gives a competitive advantage to organizations. This kind of advantage will come from the workforce, operations, better data capture, and making that data available to ML systems. Not all companies have done a good job of capturing and curating data, but the ones who have will find that they are sitting on a goldmine. Companies with better data are going to be the biggest winners in this paradigm.



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Should AI be used to augment or replace human efforts?

I'm not opposed to automation, but too many managers overemphasize automation. While AI is increasingly powerful, in most cases it's more effective to keep humans in charge rather than expect complete automation of new tasks. Most organizations need to strike a better balance.

Executive Conversations

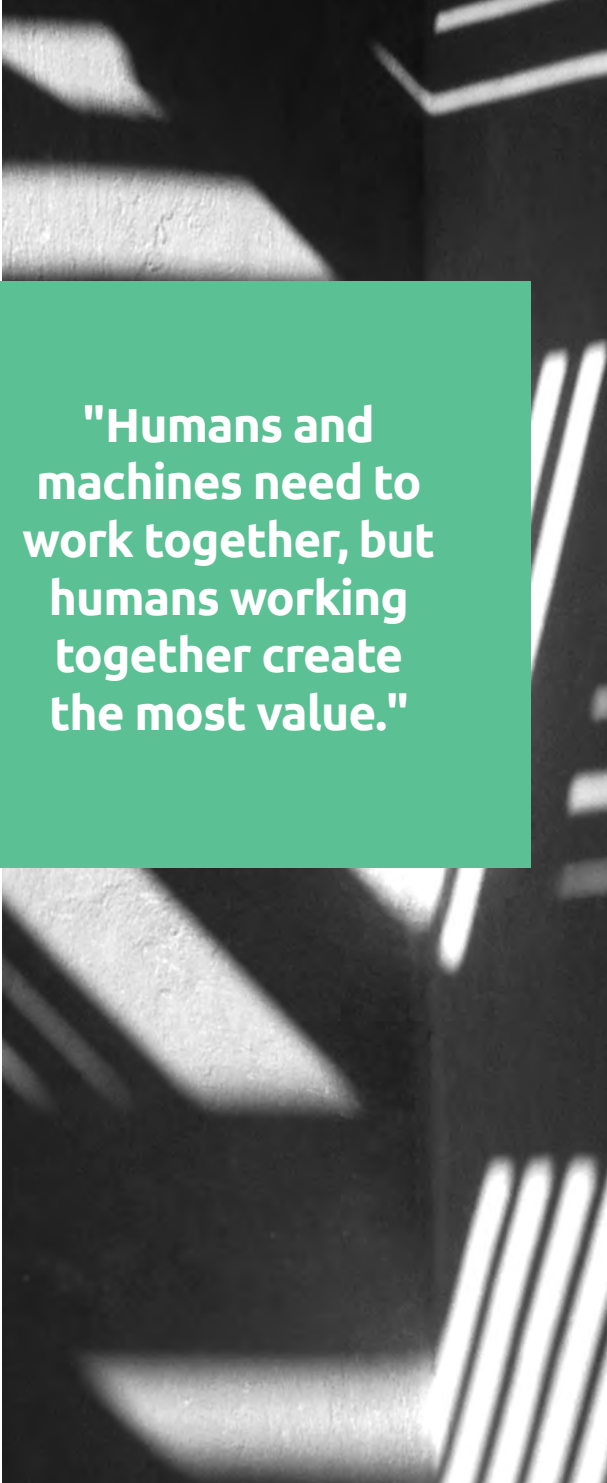
Furthermore, replacing a human with a machine tends to concentrate wealth and power among capital owners. In contrast, if a technology augments human resources, it increases the value of those human contributions, which leads to a more equitably distributed prosperity. This will result not only in a more inclusive kind of society, but also one with more total value creation.

THE COLLABORATION REVOLUTION

What role do you see for collaboration?

Collaboration is key. Humans and machines need to work together, but humans working together create the most value. We should concentrate on building a teamwork ethic through projects and education programs. Businesses that create structures where people can collaborate and share information effectively are really powerful.

The work-from-home revolution has given rise to a whole set of tools, such as Slack and Teams, which enable collaboration across widely distributed geographies. One can draw together the best people for a particular question or a project, regardless of location. Ultimately, we are creating a world where billions of human brains can connect and share information simultaneously. That makes me very optimistic for the future in terms of innovation and progress.



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TECH FOR SUSTAINABILITY

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How do you see organizations balancing their goals of sustainable growth and technological advancements?

One of the exciting benefits of digitalization is its contribution to sustainability. The basic economic fact is that bits are much cheaper to transmit, share, and work with than atoms. So, whenever a traditional activity is replaced or augmented with one based on bits, it usually brings significant energy and environmental benefits. For instance, while data centers may appear to involve heavy energy use, that must be weighed against the alternative of the traditional commute to the office, or the shipping of products to homes.

Executive Conversations

Digitalization improves the efficiency of existing operations. It optimizes truck routes for better organized delivery systems, designs more effective aircraft and locomotive engines, builds heating and cooling systems for more energy-efficient buildings, and more. These are all opportunities to use digitalization to improve sustainability and lighten our impact on the earth.

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