Scaling a transformative culture through a digital factory

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Building a digital culture might be the most difficult issue companies face. Using a "digital factory" is one way to get there.

In many large companies, using digitization to improve how things get done—whether it's a customer experience or an internal-facing process—has boosted revenue, increased customer loyalty, and removed big chunks of internal costs. The best companies, however, do more than just improve these journeys, they systematically reinvent them.

As many are experiencing, going beyond one or two pilot projects requires a concerted effort to scale a new way of working. One approach that consistently works is to establish what we call a digital factory.

Like its bricks-and-mortar counterpart, a digital factory brings together the skills, processes, and inputs required to produce high-quality outputs. These outputs are generally journeys, a series of interactions to complete a task. They might include a new way to help customers resolve service issues or a new process for applying for a mortgage. The factory models a new way of working to develop new products, which are then introduced and integrated into the broader business. It uses

advanced methodologies such as design thinking, zero-based process reengineering, and agile software development.

The way the factory works is defined by a set of standard operating guidelines and methodologies that lay out the required deliverables, governance steps, and working processes—such as which decisions can be made by factory leaders and which require escalation. The goal is a balance between the structured predictability required to transform a large organization and the flexibility and agility required for a rapidly changing digital world.

This approach enables large organizations to incubate a new digital culture and operating model while allowing the broader business to touch and feel the change and see the power of a new way of working. The process of introducing a new way of working and actively integrating new products into the existing business—which in turn requires people to adopt new ways of working to work with the new product—is a conscious effort to shift the culture of the entire organization.

When executed well, the digital factory provides a blueprint for the future of work that energizes the business and excites employees. It creates a vortex for innovation and creativity that attracts the best talent from inside and outside the organization. And it delivers results. The best digital factories can put a new product or customer experience into production in as little as ten weeks. The innovation can then be introduced and scaled up across the business in eight to 12 months.

Companies adopting this approach need to put in place both a culture that embodies the new way of working and the management practices to support it.

A new culture

We have identified several must-haves for the culture of a successful digital factory.

Act like venture capitalists. Taking a venture capitalist's approach to the digital factory means fast decision making driven by clear objectives and criteria. If the business case for funding each journey takes months to approve, the digital factory isn't going to work. Initial funding for a product (a customer journey or process, for example) should be based on a good idea and a basic case—not endless rounds of analysis. But then the project team needs to show progress at agreed-on milestones in order to get further funding.

The head of the digital factory and the business owner jointly track projects based on set KPIs, working with the team to evaluate and adjust the program in line with real results. If the program makes it through the process, it's transitioned to the business, and factory leaders redirect funding to new products. If, on the other hand, the new journey or process can't achieve its goals by a given milestone, then the leadership team kills it.

At one leading North American financial institution, initial funding goes toward a "scoping sprint"—a one-week process to define KPIs and business objectives and build the case for

investing in a journey. If funding is approved, a minimum viable product (MVP) must be built within four months. If that proves successful, the business for which the product is being developed provides further funding.

Get creative to attract top talent. Digital factories require skills that are in high demand and often in short supply at large established businesses, such as customer-experience design, mobile-app design, agile-development coaching, analytics capabilities, and more. And technical capabilities are not the only requirement; digital factories also need to foster a shift in mind-set toward a more experimental and collaborative way of working.

Attracting people with these attributes can be difficult. You may have to overpay to create initial critical mass. You will have to build a consistent value proposition and show new hires that they will work in a creative, fast-paced entrepreneurial environment that's very different from that of legacy IT. Some companies recruit influential "anchor hires" whose standing in the digital community will convince others that working in a bank, say, can be cool. Investing in internal talent is also important, of course. Rotating employees to work with talent in the digital factory and appointing senior people to lead training programs will go a long way toward raising capabilities. But it will require companies to invest in training their employees in these areas and will need to be supplemented with external talent.

To address this issue, one international financial institution set up a hiring "war room." Realizing that it needed to attract new talent, it adopted unconventional approaches: recruiting under the digital factory's brand instead of its own; hosting events in the technology community; using new hires' networks to find other talent; and using LinkedIn to locate the right kind of talent. In addition, the institution tracked the talent funnel for each critical role to understand how many people were being identified, interviewed, and offered a position, and how many of them accepted. It identified low-performing areas of the talent funnel and constantly reworked practices to improve its hiring performance.

Build 'squads' of working teams. Success in a digital factory relies on the ability to staff a small group of people (generally 8 to 12) with the right set of complementary skills to work on a given project. Sometimes called squads, these teams often include user-experience designers, developers, IT architects, and "scrum masters" who manage the team. Depending on the project, such teams can be supplemented with other specialists such as analytics experts, lawyers, and compliance experts. Whatever the composition of the team, it needs to have clear lines of communication with other groups throughout the organization and speedy processes to access them. For example, buying a vendor's product often requires a procurement review and legal approval, which can sometimes take a long time to resolve and slow a team's progress. The core squad members belong to the digital factory but work with the business owners for the duration of the project. They should also connect frequently with other squads working on related projects to coordinate and account for the necessary handoffs.

Model collaboration in your workspace. The space a business devotes to a digital factory matters. The company must create an environment that signals that the work done there will break

new ground. Such a focus can be crucial in attracting talent. Above all, the space must foster collaboration among team members by providing spaces where people can gather to have the spontaneous cross-disciplinary conversations that foster creativity. That means couches and coffee areas that create a start-up or garage-style experience. You can't tell people they are going to reinvent your organization if they work in a place that shouts "business as usual."

One leading European bank devoted a full floor of its new office building to its digital factory and invested in creating a collaborative environment. Architects eliminated cabinets between work tables, adding movable panels that act as dividers between different teams and make it easy to introduce and access visual aids such as flowcharts and storyboards. They also created informal areas with couches, ping-pong tables, and eating spaces, all laid out to make it easy for people to relax, catch up with each other, and exchange information. The bank credits this approach with helping to build and reinforce a new culture of continuous active collaboration.

Management practices

A culture cannot be established and thrive on its own. Specific management practices need to be instituted to support them. Here are the ones we've seen to be most effective:

Build with clear purpose. Enterprises are made up of multiple functions. When a company embarks on transforming its internal processes and customer journeys, it first needs to decide whether its primary goal is to reduce costs, increase revenue, drive customer satisfaction to beat the competition, or something else. By aligning on the target, management can prioritize the work that gets done. Any large company will have many digital-transformation projects on its to-do list, so it's vital for top managers to agree on what comes first. Without that alignment, the journey becomes unmanageable.

A team at one leading European bank developed a set of initial priorities and repeatedly iterated them with top management. At the end of the process, management agreed to a roadmap of 40 core customer journeys that were prioritized in line with their potential impact both on the bank's business (such as P&L) and on its digital capabilities (such as automation). Flexibility was built into the process itself as well. The roadmap is refreshed every six months to account for changes in business priorities.

Invest enough for impact. The speed at which a company can digitize and scale its key journeys will depend largely on how much it is willing to spend. Investment levels below a certain threshold won't allow a business to capture the full value of the digital factory at a speed that matches changing markets. What that threshold is depends on numerous factors, but whatever the case, we have found that digital leaders make significant investments in digital. One bank going through a digital transformation is investing between 1 and 3 percent of its annual revenue.

Determining how much to invest in a digital factory depends on a company's aspiration and its level of technological maturity. A diagnostic to evaluate what's in place and what's needed is a good first step.

What does it mean to have an agile culture?

To compete today, the entire company must be agile, which includes cross-functional collaboration, quick decision making, focus on end-users, and a willingness to experiment and take low-stakes risks. That approach needs to be developed and nurtured in the digital factory specifically. But for incumbents to become agile, they need to change their corporate DNA—the values and beliefs that shape how their people behave and create the company's culture. We see three crucial shifts:

- From senior executives driving decisions to autonomous teams empowered to make them. Top-down structures stand in the way of agility because they restrict the pace of decision making. Companies with agile cultures empower on-the-ground teams to make most decisions based on clear principles set at the top of the organization. This is difficult for executives, since they must let go of control even if they don't like all the decisions being made beneath them. Letting go requires the humility to acknowledge that junior employees are actually better equipped to make the right decisions.

- From multiyear projects based on extensive up-front analysis to continuous experimentation and learning that embraces a fast-failure mind-set. Traditional corporate cultures value a complete fact base before any new product or process "goes live." Agile cultures, in contrast, are built on the belief that it is impossible to predict or detail the most impactful solution up-front—you cannot anticipate what customers actually think until you ask them, or even better, observe their behavior. This cultural shift demands that senior management let go of a grand illusion: that through extensive market research and analysis, they can divine market needs and control customer reactions.

- From strict hierarchy with narrowly defined roles, to a flat structure with fluid roles that combine oversight with execution. In traditional companies, employees rarely talk to those above the level of their boss. In agile cultures, employees often sit down with the CEO every week to collectively solve problems. There is no need for vast numbers of middle managers. This means executives have to get their hands dirty, learn, and pitch in. It also means lower-level employees must step up and become owners who take on more responsibility than before.

Develop a change-management plan to incorporate the new product into the business.
One of the trickiest phases of a transformation is the process of integrating a newly developed product into the business. No matter how good a new solution is, people need to want to use it, as well as know how. In effect, this becomes a change-management challenge.

To tackle it, businesses leaders and the IT organization need to be involved from the very beginning. IT must know what's coming down the digital-factory line so it can set up and configure systems to support the new journeys and processes. Meanwhile business leaders need not only

to support the program with funding but also to staff it with people from their functional areas so that they are invested in the solution.

The most successful transfer process begins with launching and testing an MVP (minimum viable product) to collect feedback from business owners and demonstrate impact. The gradual deployment of the product requires clear and continual communications as well as a detailed training plan to make sure all those involved know what's expected of them. As people learn by doing, on-the-job training is important, along with a readiness to keep iterating based on feedback. Crucially, the business owner needs to put in place incentives to reward new behavior based on criteria such as collaboration, product success, and internal product satisfaction.

Measure the change. If an organization is to systematically change its way of working and keep track of what's happening, its management systems will need to evolve, starting with KPIs. Nontraditional metrics focused on digital adoption—such as new customer registrations on digital channels or digital-engagement levels for a particular product or service line—are often more useful than traditional metrics like return on investment in tracking the progress of a digital transformation.

The best companies are using their management systems to harvest the surfeit of data generated by employees and processes to create user-friendly dashboards and reports to measure progress, often in real time. When it comes to performance-management systems, the goal is not so much to inform appraisals as to provide employees with feedback that guides their actions and leads to better outcomes. Whatever the metrics may be, leaders need to agree on them early so as to manage the development of new journeys and quickly identify areas requiring management decisions.

Find leaders with the right combination of skills. The executives who run the digital factory must be seen as credible by other organization leaders. They must have in-depth knowledge of the business, its products and processes, and the systems that support them. Some digital factories have two leaders, one who deeply understands the business and another who knows about its technologies and the inner workings of its information systems. These leaders must also have strong support from above—the CEO, CFO, CIO, COO, and business-unit heads. These executives must be prepared to move mountains for the leaders of the digital factory and to resolve challenges along the way.

These dimensions are key to understanding what a digital culture should look like in action, and how to cultivate it so that it takes root in the wider organization beyond the digital factory. How well a business implements these dimensions can make the difference between basic improvements and true reinvention.

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