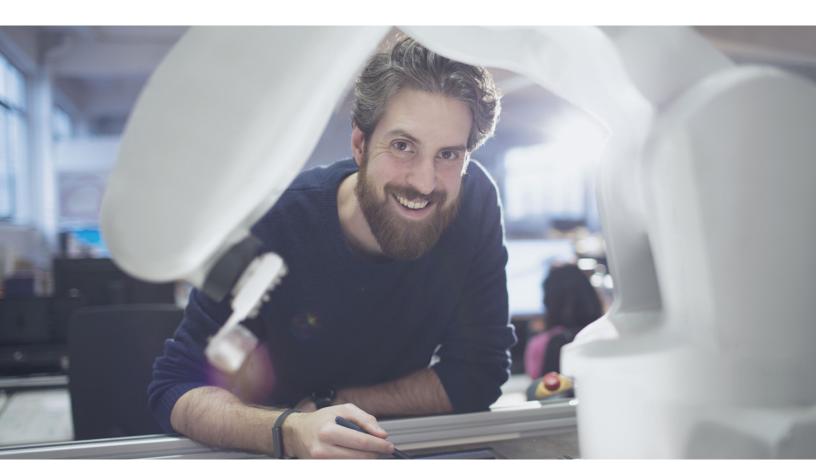
McKinsey Design

Winning in automation requires a focus on humans

While organizations are often tempted to use automation to eliminate work, looking at the customer experience for growth opportunities can maximize returns on automation investments.

by Michael Coyne, John Larson, Jessica Shieh, and Hyo Yeon



Although corporate adoption of automation technology is becoming more widespread, success remains elusive. Three-quarters of respondents in a 2018 McKinsey global survey say their companies have begun to automate some business processes or plan to do so within the next year. Yet many find total returns have fallen short of their expected target.

Our client work indicates there are two main reasons for this. First, too many organizations fail to consider how automating certain steps in a business or customer-facing process will affect upstream or downstream handoffs and connections, which can introduce new inefficiencies, capping the value delivered by automation. Second, companies often limit the scope of automation to point solutions aimed at eliminating work. These solutions tend to deliver only an incremental, and often temporary, cost-savings advantage, given that most companies are working to make the same basic efficiency improvements.

To improve results, organizations need to approach automation differently. Unlike isolated fixes that are easy for competitors to mimic, companies that use automation to provide richer engagement and streamlined service can create more durable forms of differentiation that allow investment dollars to work harder and stretch further. Achieving those gains requires systems thinking. Instead of narrowly focusing on cost reduction, systems thinking focuses on growth and forces teams to consider the customer experience end to end. This broader view allows companies to see where automation should be employed, what technologies make the most sense for different activities, and what processes need to be redesigned. It's an approach that we call automation experience design (AXD), and it has been proven to help companies capture a much larger share of the total benefit from automation.

Adopting a growth mind-set can boost returns and lower risks

Our research finds that most early automation efforts focus on repetitive, predictable, low-value

tasks in an effort to gain quick wins from labor reduction, cost savings, and productivity. But while simple process fixes seem expedient, they often take longer to achieve than planned. Addressing poor quality data, multiple customer or business-line variations, and a complex array of technologies are among the challenges that can add cost and time to automation efforts.

Another complicating factor is that not all activities lend themselves to automation. McKinsey research shows that about 50 percent of tasks are automatable with the technology available today.² That leaves 50 percent that are nonautomatable—the decision-making steps, interactions, and handoffs that analytics and other technologies can improve but not entirely put on autopilot. Often, these nonautomatable elements come to light only when organizations break a process down and unpack the component parts.

This is why successful automation adopters assume a mind-set that focuses on growth. When we assessed the automation programs of more than 35 companies, we found that those seeing the greatest returns from their automation investments are significantly more likely to have a bold aspiration oriented toward long-term growth. And McKinsey research shows that organizations that meet automation goals are far less likely to view automation as a means to reducing costs and more likely to see it as a strategic lever.³

Because growth-minded organizations focus on maximizing total returns and not just cost savings, they are also far more likely to take an end-to-end ecosystem view. That view lets them anticipate dependencies and handoffs early on, sparing them the costly rework that impedes many other organizations and helping them to avoid painful transformation missteps.

Similarly, because they are interested in wringing top-line value from their investments, these organizations are more likely to consider how automation could be used to support customer goals. For example, a customer-care agent, relieved

¹ See "The automation imperative," September 2018, McKinsey.com.

² See "Harnessing automation for a future that works," McKinsey Global Institute, January 2017, on McKinsey.com.

³ See "The automation imperative," September 2018, McKinsey.com.

from having to take down basic name and address information, could be retrained to solve specific customer problems as well as upsell and crosssell using analytics gleaned from dashboards and other tools—providing more responsive service and easing workloads elsewhere in the company.

Four keys to AXD

To truly understand the pain points that automation can address and those places where human engagement is crucial, businesses must consider the sequence of interactions required to complete a task or customer journey end to end. Managing that choreography efficiently requires systems thinking. This is where AXD comes into play.

AXD is a design and orchestration framework that helps companies keep their automation efforts on track. It looks across the entire customer journey to key in on important moments and then peels back the operational layers before determining which types of automation technologies to employ and how to optimize processes, handoffs, and interactions. This holistic approach helps companies realize significantly greater returns from their automation investment—and because users and stakeholders are closely involved in the design project, the changes are more likely to stick. Following are the four key elements of the framework.

Map the customer journey end to end

A customer journey describes the series of steps a customer or user takes to complete a given task, including the channels and touchpoints they interact with and the needs and questions they have at each stage. For most businesses, mapping these journeys can be eye-opening. Charting what it takes for a customer to return a pair of shoes, settle a billing dispute, open a bank account, or another journey can reveal moments that work well and others that result in frustration. Customer research, interviews, and analysis can shine a light on process bottlenecks—such as fragmented data systems that make it hard to view a customer's complete transaction history or process basic form-filling tasks. The research can also surface

opportunities to delight the customer. For instance, knowing what percentage of a given segment prefers to interact by telephone versus email, app, or in person can help companies figure out where to focus their efforts and where to pull back. Likewise, a combination of humans and machine, such as a timely callback from an account representative or a helpful artificial-intelligence-powered "concierge" to guide customers through an account-opening process, can inject new value and allow the business to create more cohesive experiences.

Draft the operational blueprint

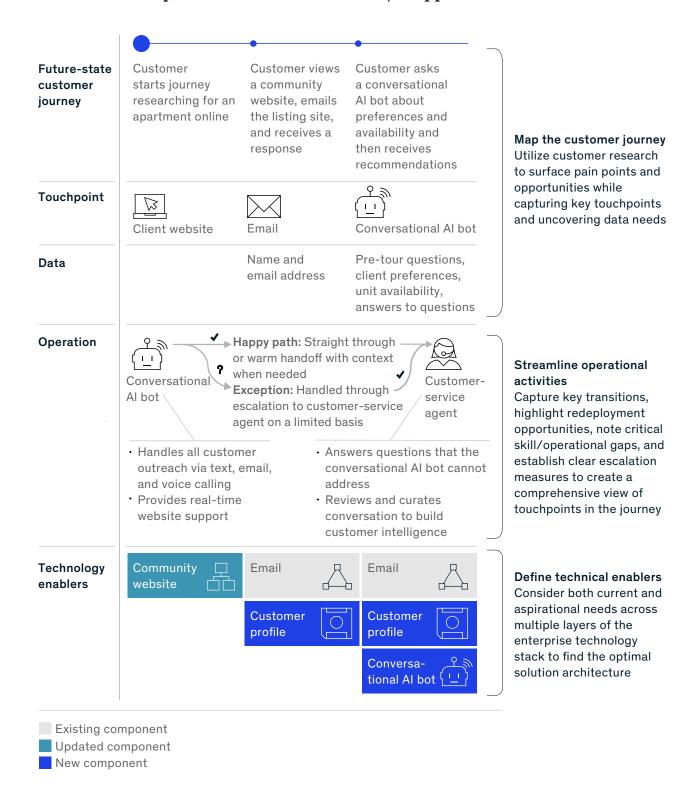
The operational blueprint captures key transitions and handoffs, notes critical skills (and gaps), and establishes clear escalation measures. It creates a comprehensive view of the various customer, employee, and technology touchpoints involved in the journey (exhibit). Given the many interrelated parts, getting upstream, downstream, and executive-level perspectives is crucial. Rather than having the core team develop plans in a silo and then shop them around to different stakeholders—an approach that often takes weeks—organizations get better results by bringing key stakeholders together at the outset. In a workshop setting, teams can examine ways to streamline connections, determine the reskilling required to resolve pain points, and identify the data and digital enablers needed. Similarly, the blueprint can highlight opportunities to redeploy capacity or manage existing tasks more effectively. Shifting transactional steps to bots, for instance, can help frontline personnel spend more time in relationshipbuilding activities. Likewise, adopting better data and analytics can help call-center agents sound less scripted and allow sales reps to tailor their pitches based on evidence-backed recommendations. Processes can then be redesigned using lean techniques that optimize for efficiency and impact.

Assess technology needs across multiple layers of the enterprise

While robotic process automation (RPA) is often the first tool people think of when it comes to automation, the most successful automation efforts employ a suite of automation and artificial intelligence (AI) technologies. A methodical approach that considers both basic and aspirational needs across the three

Exhibit

In automation experience design, key moments of the customer journey are identified and operational activities are fully mapped.



main layers of the enterprise technology stack is a good place to start. The first layer includes platforms, data lakes, application programming interfaces (APIs), and services. The second is the core automation layer, such as RPA, optical character recognition (OCR), and natural language processing (NLP). And the third is cognitivebased technology, such as virtual agents, machine learning, and Al. Examining each of these layers can be a helpful way to identify gaps and the most appropriate solutions to address them. While custom builds can accelerate deployment in some cases, pure-play platforms and cloudbased products often make next-generation AI and automation technology cheaper and easier to access. Rapid test-and-learn cycles can help organizations gauge the feasibility and reliability of different solutions along with the expected business benefits and the associated technology and operational costs.

Invest in change management from the start

Achieving sustained impact from automation requires change-management discipline.

Companies need to identify impacted employees, processes, and customers during the planning stages and collaborate with line leaders to support key business stakeholders from inception, not after the automation has been developed. Our research has shown that nearly 90 percent of companies who engaged in successful scaling of Al invested more than half their budgets in change management.⁴

Automation is a cross-functional team effort

While multidisciplinary collaboration is often mentioned as a helpful element of many transformation efforts, it's a must have with AXD—not just to access critical expertise, but because key roles can inject a healthy tension into the planning program. By serving as the voice of their respective group or discipline, product, design, IT, and agile leaders can help raise important questions, nudge others to expand their own thinking, and help course-correct if the automation effort seems to be steering too narrowly and leaving other attainable

value on the table. Based on our client experience, following are the most critical roles to include:

The product owner. AXD encourages organizations to take a user-centric approach, but the executive sponsoring the automation program often has a specific business outcome in mind that must also be satisfied. Involving the product owner in the planning process can ensure that the goals of the executive sponsor are successfully met. In addition, because the product owner is familiar with how the company works from an operational and customer perspective, he or she can help the design team factor in needed inputs and outputs, flag potential trouble spots, and identify areas where cultural and behavioral changes may be needed.

The designer. This individual serves as the voice of the user. Designer perspectives are especially important in Al and automation because success depends on user and customer acceptance and not simply creating functional systems. With diverse skills that can include strategic innovation, behavioral science, digital transformation, and customer analytics, designers ensure that desired business outcomes do not overshadow parallel benefits such as customer satisfaction and revenue uplift and that both human and technology elements are fully considered.

The AI and automation solution architect. As an expert in AI and automation, the solution architect can help the AXD team determine which technologies make the most sense to use given cost, functionality, and the existing enterprise IT architecture. In addition to helping with the overall integration, the solution architect can also identify needed data and analytics, as well as opportunities to help the company modernize its infrastructure and access new functionality through the cloud.

Operations lead. The operations lead is the bridge between the automation design and the impacted processes and employees, ensuring that the right groups of frontline and employee managers are brought in to influence development and design. He or she is also a critical link for engaging with the

⁴ See Tim Fountaine, Brian McCarthy, and Tamim Saleh, "Building the Al-powered organization," *Harvard Business Review*, July—August 2019, hbr.org.

broader frontline team to build a feedback loop during product testing.

The agile leader. The agile leader guides collaboration, builds capabilities within the team, and coaches the organization to work in an agile fashion to deliver on the proposed journey redesign. Agile is the natural choice in AXD because the rapid test and iteration cycles that are core to agile development help build organizational trust in technologies and practices that can still feel new and unproven.

How a real estate company put AXD into practice

A leading North American owner and operator of multifamily rental properties used AXD to reduce operating expenses and improve the rental experience for its customers. The project team began by mapping the end-to-end rentalapartment customer journey, including all the steps that a typical customer goes through when deciding on an apartment to lease-from researching potential properties to booking a tour to signing a lease and moving in. In parallel, they developed the operational blueprint for the current sales process, including the human and technology touchpoints that helped customers research apartments, schedule tours, and ask questions. The diagnostic identified a number of areas where the rental experience could be improved. These included delayed responses to customer inquiries during peak season, high no-show rates for apartment tours, static staffing of employees that did not flex to meet customer demands, and knowledge gaps that prevented employees from responding effectively to prospect inquiries.

From this fact base, a cross-functional team that included frontline employees, technology leaders, residents, and prospects collectively

designed an improved future-state customer and employee experience. This future-state experience incorporated automation not as a silver bullet but as an element in the broader redesign. As part of that effort, an AXD team, including a product owner, designer, Al expert, and agile coach, created an automated chatbot capable of providing faster and more accurate responses to customer questions as well as greater customer self-service in scheduling, changing, or canceling apartment tours. In fleshing out the operational blueprint, the crossfunctional team realized that while the chatbot would eliminate some processes, it needed to be integrated into other ones. The AXD operations lead worked with the front line to understand how employees would be impacted, with some roles no longer needed and other ones added. Factoring in these changes early on led to improved sales tools and cross-training for employees. Other changes included setting flexible hours for service personnel that better aligned with seasonality and customer demand. Collectively, the changes resulted in significant savings in frontline office labor, a 25 percent improvement in lead conversion, and a 5 percent lift in customer satisfaction. The success of this effort prompted the company to redesign other journeys to improve other aspects of the sales and resident experience.

By designing automation in the context of experiences, businesses can unearth hidden opportunities to carve out differentiation, remove points of friction, and gain multiple wins in the form of superior experience, cost and value, and engagement. AXD is systems thinking at its best. Because it considers how automation technology fits into the broader organizational and operational ecosystem, it can help organizations achieve greater and more sustainable returns.

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