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Enhancing Desirability: Five Considerations for Winning Digital Initiatives

To be a modern digital business in the post-COVID era, organizations must be fanatical about the experiences they deliver to an increasingly savvy and expectant user community. Getting there requires a mastery of human-design thinking, compelling user interface and interaction design, and a focus on functional and nonfunctional capabilities that drive business differentiation and results.

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Executive Summary

The COVID-19 crisis made experience-centricity and IT agility paramount to nearly every business. In the post-COVID world, where digital acceleration is the rule rather than the exception, organizations need superior digital enablement and experiences to ensure business continuity, customer satisfaction and a competitive edge.

One proof point is Gartner's 2021 CEO survey.[1] It reveals that digital is among most CEOs' top priorities and indicates strong economic growth over the next two years.[2]

Experience-centricity is essential to drive business outcomes and, accordingly, has become a top priority of many CXOs. Experience-centricity, however, is not limited to creating new digital products and channels. It encompasses every aspect of software that can enhance an organization's ability to solve key business challenges, harness meaningful market opportunities and delight end users — both inside and outside the enterprise. Research reveals that fanatical devotion to desirability leads to tangible outcomes that can be measured by increased customer retention and revenue growth.[3,4]

The move en masse to all things digital is creating new business opportunities, but at the same time presenting challenges and risks to IT executives. Top of mind questions include: What makes digital products go viral? What are the key success factors? How can we make digital business thrive? How can organizations transform monolithic systems into sleek, modular digital products or platforms?

The pillars of superior usability are anchored by the right mix of user interface (UI) and interaction design, the creative application of design thinking, and a focus on functional and nonfunctional requirements that solve user needs. Best-in-class usability ensures effectiveness, efficiency and satisfaction. It also enhances the power of desirability, which delivers a meaningful, enjoyable and memorable experience. Desirability is what helps users

bond continuously with the product/service and exult in what they perceive to be a worthy experience. For example, Androids and iPhones evolved to become the most desirable phones — and rendered the rest history. One reason is the richness of each device's feature set and underlying platform, which spans communications; entertainment (media streaming, games that serve multiple personas, etc.); information services (news, dictionary/thesaurus, etc.); utilities (calculator, clock, etc.); an HD camera; and access to payment solutions. Add to that intuitive interfaces, slick packaging and upgrades/new versions delivered in a timely on-demand fashion, and it's easy to see why consumers are on average engaged with their mobile devices a quarter of their waking time daily![5]

Whether your organization creates and delivers new products and applications or modernizes existing ones to deliver an outstanding digital experience, enhancing desirability is essential.

This white paper presents five considerations for increasing desirability and offers real-world examples that reveal how any heritage organization can create experiences that help the business achieve its strategic aspirations and objectives.

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Five ways forward

## Empathy and experimentation:

Empathizing with business and end users and experimenting to deliver delightful products are necessary but not sufficient. Delivering successful digital products requires a deep understanding of customers and a focus on human-centered design. Moreover, consistent and fast experiments on both technology and engineering fronts using minimum viable product (MVP) concepts are necessary to build the experience right. These include focused experiments or proofs of concepts for validation among a small set of users, as well as MVPs released to a broad group of users. Organizations that deliver solid digital products master the art of combining design thinking with software engineering practices to enhance desirability.

Foster these qualities by:

❙ Understanding the big picture from end-users' perspectives

❙ Practicing human-centric design and design thinking

❙ Running pilots to gather insights on user experience and usability

❙ Considering technology alternatives for continuous experiments, and shortlisting the best fit
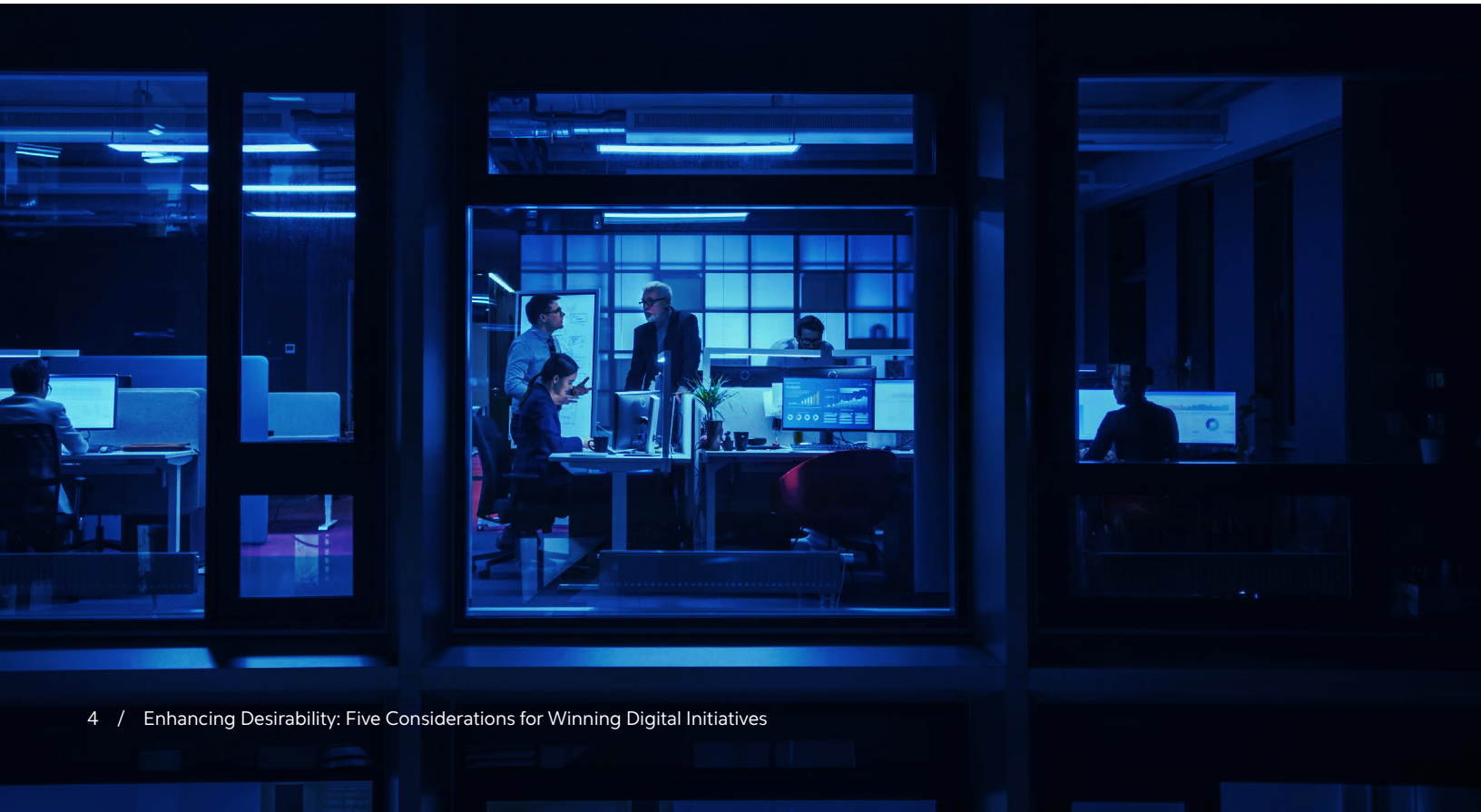
Quick Take

Reimagining Employee-Centric UX for an Enterprise Services Portal

Our client, a cloud computing company, operated a service portal known for its robust, configurable features and domain workflow. However, the portal lacked human-centric design, leading to an inconsistent user interfacer (UI), fractured information architecture and poor navigation features. The company's customers wanted a more consistent, innovative and intuitive user experience (UX) through this portal.

The client approached us to reimagine the platform and roll out the revamped portal to its employees globally.

Our team kick-started the engagement by auditing the company's applications and hosting design thinking workshops. We found that the outdated portal was not mobile-friendly, had an inconsistent user interface and navigation across applications, and fell short of reflecting brand consistency. We proposed an employee-centric approach with specific guiding principles and created a design theme for all IT applications.

By centralizing the information, making it contextual and easy to find, we facilitated early adoption of the platform. We introduced a global smart search, personalized dashboards and AI-driven chatbots to the platform. Also, we established a knowledge base that provides additional insights such as top-rated and most-viewed content.

In addition to developing scalable and responsive designs for mobile and desktop options, we defined a living UI toolkit so that designers and engineers can reuse the design style of components, ensuring a consistent experience across applications.

The all-new portal, with enhanced features like improved search by keywords and a virtual assistant, became the one-stop destination for the service needs of the company's more than 7,000 employees. Our client observed an 80% increase in the user adoption rate of this portal. Moreover, our information architecture and portal design resulted in improved productivity and speed-to-market for new features.

Being fast, frequent and predictable:

To enhance desirability, a good mix of empathy and experiments are also necessary but not sufficient unless digital initiatives are delivered quickly, frequently and with ever-increasing degrees of predictability. Be it greenfield development or portfolio modernization, when IT takes too long to deliver results, it is a struggle to delight customers and create long-lasting trust. Organizations need to follow ultra-high-speed Agile and DevOps practices, including extreme programming practices and Lean Startup principles, to make this happen. With digital initiatives, speed-to-market and time-to-value are highly valued. And the ability to ensure frequent and predictable releases with new features and enhancements is what provides holistic value and enhances desirability. Customers are delighted when they see the features they want delivered in a predictable and timely manner.

Put this into action by:

▌ Enabling software teams with hyper-Agile and DevOps practices and engineering rigor

▌ Enhancing the effectiveness of tool usage and leveraging productivity accelerators

▌ Building extensible and flexible architectures with design components that promote speed of change

▌ Identifying and promoting reusable patterns and components to enhance consistency, speed and accuracy of releases

Quick Take

Real-Time Fraud Assessment Through Automation

A leading telecommunications provider operating in more than 20 countries faced huge losses from fraudulent applications and discounted handsets. Agents responsible for fraud detection tried checking applications manually against credit agency databases and cloud services. However, data entry errors often led to incorrect assessments that approved fraudsters and denied genuine customers. The client wanted to automate the fraud assessment process to reduce loss and improve the customer experience.

The client engaged us to provide a real-time fraud risk assessment solution at the point of sale. We formed a nine-member team of developers and an Agile coach to set up a cloud-native application that communicated with data sources via APIs. We integrated it with a leading credit agency's decision engine and added microservices that checked the SAS Credit Scoring service and our client's CRM application. To accelerate the delivery of high-quality code, we used Agile techniques, including test-driven development (TDD), and continuous integration and continuous delivery (CI/CD). Cloud-native design made the application scalable to accommodate business growth. It currently handles 2,500 transactions a week but can automatically scale up to 70,000.

By automating the manual scoring process, we not only helped our client to enable on-the-spot approval for 90% of applications in less than one second but also eliminated any downtime during deployment, the telecommunications company told us. High availability of 99.9% for the application helped avoid long lines in its retail stores. Our real-time fraud assessment solution also helped the telecom provider save up to AUD 30 million.

Inclusion, relationships, retrospectives and results:

This is about moving beyond nurturing relationships, performing retrospectives and focusing on results within product teams or engineering teams. It is about building relationships with stakeholders — specifically, customers and partners — and considering end-user feedback for retrospectives and continuous improvement. Teams should consider this approach to enhance desirability by providing positive results.

Rather than localizing team learning to a product team level, this approach elevates desirability and usability to a higher echelon by including all critical stakeholders including key customers. For example, in one of our large greenfield programs, senior business leaders from field operations (i.e., auditors) played the role of product managers and became the spokespeople for extending relationships with end users. Rather than conducting retrospectives at the end of every Sprint or release within a team of software engineers, we engaged a large team (including such business leaders and end users) along the same lines. This enhanced the effectiveness of lessons learned for continuous improvement. We did an early release across four regions with more than 100 engagements in the first three weeks. This allowed some of the most knowledgeable and experienced auditors to work through some of the more challenging elements, which contributed to a 50% uplift in the firm's Net Promotor Score.

Strengthen these through:

❙ Early and continuous identification of stakeholders who are critical to product success

❙ Include these stakeholders in Sprint and release retrospectives[6] for their suggestions and guidance

❙ Enrich your cross-functional teams by introducing experienced subject matter experts from business who can provide real-time guidance on how to delight end users

❙ Maintain consistency in commitment reliability in order to enhance predictability

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Quick Take

Leading Insurer's Digital Transformation Journey

A large property and casualty insurer had multiple vendors managing different services across its lines of business, resulting in a lack of transparency into the operations of these vendors. Aligning processes across businesses was a big challenge, leading to delays in driving operational efficiencies and transformation. What started as a small engagement for us to streamline the insurer's group benefits business expanded into a large-scale optimization project across many of its service lines.

Our insurance technology experts identified opportunities to drive efficiencies in IT and business processes across all lines of business. We became the client's single service provider for digital operations in commercial insurance, accident and health, personal insurance and individual annuities, and group benefits.

We delivered services for new business, underwriting, policy servicing, claims, contact center, finance and accounting, and mailroom and document management. We collaborated with the client to implement common robotic process automation use cases across the enterprise and an analytics-driven program with an outcome of 2% to 3% topline improvement. We reduced total costs across the client's IT landscape by 20% while improving end-to-end cycle time on most business functions by 20%. Optimization projects are delivering annual savings of $5 million to $10 million, and the transformation roadmap has saved the insurer a total of $56.7 million.

Quick Take

Automaker Improves Customer Journey With Chatbots

A large automobile manufacturer had big plans to drive digital globally over the next five years, its goal being to provide a seamless, personalized, omnichannel experience to increase customer satisfaction and loyalty.

This included creating a best-in-class chatbot assistant to guide customers through their journey. It involved researching the types of vehicles that would suit their needs as well as moving them through the purchasing process and beyond. To accomplish this, the automaker needed a partner with proven experience in the automotive industry, specifically with experience-driven product engineering and rollout.

Our team studied the automobile manufacturer's 2025 digital transformation goals and devised a roadmap with specific details on how to create these capabilities and roll them out to multiple countries globally.

To provide a strong backbone for executing this end-to-end omnichannel solution, we applied our six-dimensional framework: (1) strategy, (2) opportunity analysis, (3) architecture and technology, (4) people and skills, (5) governance and (6) organizational change management.

Finally, we leveraged conversational AI to support and guide customers throughout the car purchase process. Through multiple iterations and retrospectives, we refined the agent and made it to the production release. This resulted in a 13% increase in car configurator users, a 5% increase in interaction success and a 3% increase in conversion rate in the first few months, our client said. Next is the rollout to 16 additional countries in 13 different languages.

Attention to internal and external quality:

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UX is not limited to the static aspect of user interface UI design or the dynamics simulated by UI prototypes. It has a deep bearing on the internal quality of products that correlate with performance, scalability and maintainability. Microservices-based architectures, cloud-native development and modern engineering practices such as pair programming and test-driven development[7] have the potential to deliver elegant code base that is scalable and extensible. Site reliability engineering[8] is critical to assure resilience and reliability. Coupled with DevOps environments that are auto-scaling and self-healing, UX can ascend from usability to desirability.

Enhance quality by:

▌ Establishing a consistent, KPI-driven approach to ensure the quality of architecture and design

▌ Being proactive in addressing nonfunctional requirements by writing secure, scalable, flexible and extensible code, and by practicing refactoring

▌ Moving beyond continuous testing to continuous everything in order to enhance quality

▌ Ensuring feedback loops and perpetual learning

Microservices-based architectures, cloud-native development and modern engineering practices such as pair programming and test-driven development have the potential to deliver elegant code base that is scalable and extensible.

Quick Take

## Banking App Development Fosters Intelligent Selling

A large US bank holding company wanted to improve communication with its customers and discover better ways to support them through innovation and automation. As part of their legacy modernization program, the company partnered with us to deliver a new platform and solution. The client needed a secure, intuitive and advanced mobile application that would help customers manage their finances through straightforward interactions.

Our experts modernized the client's legacy banking platform, moving it from a predominantly web-based experience to next-generation mobile banking by developing applications for iOS and Android. In addition, they integrated mobile activity, analytics and reporting into business process management and other productivity and sales channels.

To help the client deliver a personalized digital banking experience, we started a universal application development project and built a new mobile app environment. This implementation provided personalized digital banking experiences enabling customers to organize, engage and manage all aspects of their financial lives. The mobile app ecosystem for iPhone, iPad and Android is a complete banking experience that enables customers to pay bills, send or receive payments with Zelle, make transfers, get credit scores and find a local branch. Our focus on quality, both internal and external, helped us deliver it to our customer.

This ensured improved communications with our client's customers and created a secure, interactive user destination to help them better manage their finances and facilitate intelligent selling opportunities. The traffic on mobile channels doubled from 30% to 65% across the banking customer base, our client revealed to us. In this engagement, we continue to roll out new features and enhancements, including a personalized dashboard, enhanced security for card control and customization, push notifications and augmented reality to expand the company's application capabilities. These additions offer the client cross-selling opportunities and the ability to build a consistent platform across its lines of business.

This product consistently achieved top-three ranking in a well-known mobile app satisfaction study, in addition to its 100% increase in both iOS and Android app ratings.

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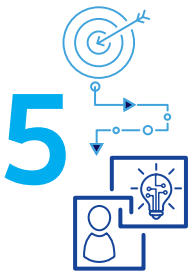
Attitude of elegance, tenacity and courage:

Digital natives courageously embrace emerging technologies, and are tenacious in creating excellent, elegant products that delight customers. They delight end users by delivering on the factors that are most desired by customers. Most customers expect digitally native products built with modern tools and techniques that deliver near-clairvoyant experiences. Traditional IT organizations can no longer afford to experiment with monoliths and hybrid software development approaches that deliver static and unrewarding experiences. Embracing modern software engineering paradigms such as cloud-native development and DevOps tools can help put IT on the path to user delight. Enhancing desirability is essential for helping their organizations master any digital journey. For legacy organizations, this means intelligently and selectively applying the trend-setting accomplishments achieved by digital natives to their particular business challenges and circumstances.

Promote this by:

❚ Adopting product-centricity and establishing a product-engineering culture

❚ Encouraging autonomy and "failing fast and failing early"

❚ Implementing rewards and recognition that promote result-orientation

❚ Establishing community-based networks versus traditional hierarchical organizational structures

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Quick Take

Proactive Customer Retention Powered by Machine Learning & Predictive Analytics

Our client, a global digital agency, was facing challenges with its existing customer engagement platform on several fronts — including an inability to handle large volumes and varieties of data, high licensing and operating costs, scalability problems and a lack of robustness — which forced it to take a customization route. This approach extended timelines for new product rollouts and didn't support real-time use cases or the ability to add customers from new industry verticals.

In addition, this client struggled to retain customers through subscription renewals because it could not predict possible customer churn in time. Sales managers and sales executives lacked a modernized central repository of information on past transactions, key decision-makers for accounts, product-related details and other issues that were key for customer retention and sales expansion. This agency reached out to us to help them move all transactional systems to the cloud and enhance predictive analysis and churn probability capabilities.

Using an Agile delivery approach, we incorporated machine learning into the company's analytics model to elevate its view of customers. We built a platform that provided a 360-degree view of customers to deliver personalization services in real time. This software as a service (SaaS) platform uses a modern architecture that is multi-tenant, secure, highly scalable, high performance, configurable and simple to operate. It pivots around a real-time data hub with modernized data to distribute consumer profiles anywhere (i.e., across touchpoints, products or devices), and features a data processing engine with secure APIs and a logging and monitoring component to reduce operational costs. It includes a flexible dashboard on customer performance at all levels. This provides details on churn probability, propensity to buy scores and customers' lifetime value. With this information, sales managers are able to provide discount offers and premium support to minimize customer churn.

We ensured faster time-to-market with continuous DevOps integration and deployment capabilities. Our solution, according to the client, resulted in a 75% reduction of manual efforts, and 80% accuracy in customer churn predictions.

Quick Take

Mobile Channel Sparks 150% Growth in Use

A major communications service provider sought a makeover for its mobile app. More than wanting merely a new look, the company's goal was an all-digital front end, and so a sleek, modern customer experience was a must. In addition, the telecom planned to position the app as its primary channel for customer engagement, mission-critical for everything from self-service and payments to promotions. To achieve these goals, our team partnered with the company on an innovative contract that established business KPIs as targets.

To better understand the telecom's business, we assembled a cross-functional team that gave us a holistic view across the client's organization, architecture and development. Working together, we conceptualized business and technical KPIs that ensured value for both partners. Although the up-front work required a significant time investment, the collaboration enabled our team to develop the trust that's at the heart of the outcome-based model. Agile development lifecycles for software development and delivery led to regular iterations that provided large impacts through small improvements. Mapping the call flow journey from the front end to the application server, and then to the back-end legacy system, helped us spot bottlenecks such as database calls that were slowing response time for front-end users.

Through our focus on client business outcomes and the use of Agile methodology, we delivered a mobile app that serves as our client's primary channel for customer engagement. In one year, the app's rating in Google Play Store rose to 4.5 from 3.3, and in the Apple App Store to 4.3 from 3.3, with 150% growth in the use of the app for recharges and payments, the client noted.

Desirability: The big picture

1	Empathy and experimentation	Understanding the big picture	Human-centric design and design thinking	Pilots to gather insights on UX and usability	Continuous experiments
2	Being fast, frequent and predictable	Hyper-Agile, DevOps and engineering rigor	Effective tools usage and productivity accelerators	Extensible and flexible architecture	Reusable patterns and components
3	Inclusion, relationships, retrospectives and results	Success-critical stakeholders	Inclusive Sprint and release retrospectives	Cross-functional teams with SMEs from business	Commitment reliability and predictability
4	Attention to internal and external quality	KPI-driven architecture/ design quality	Focus on nonfunctional requirements	Continuous everything	Feedback loops and perpetual learning
5	Attitude of elegance, tenacity and courage	Product-centricity	Autonomy and "failing fast and failing early"	Rewards and recognition, and results-orientation	Communities-based networks

Figure 1

Looking forward: Parting thoughts

Engaging experience is mandatory for enhancing desirability. The starting point is an unflappable focus on experience-centricity based on design thinking, customer journey mapping, contemporary UI design and visualization of the UX. From there on, the process is nothing less than a true transformation that combines modern architectures, cloud platforms, engineering practices, high-performing teams, digital-aware governance teams and involved stakeholders.

Several highly publicized failed IT projects have highlighted the need to get experience right.[9] The lessons to be gleaned from these failures have one thing in common: the absence of focus on desirability. A focus on desirability and the five considerations above provide an opportunity to course-correct, and to deliver the right products to help customers succeed in their digital journeys.

For IT organizations, this means nurturing the right talent, culture and mindset to deliver on this promise. In addition to strategic intent, commitment and investments, ensuring the proper balance between workforce enablement and hands-on experiments can promote continuous learning and operational improvements that result in tangible business outcomes.

Endnotes

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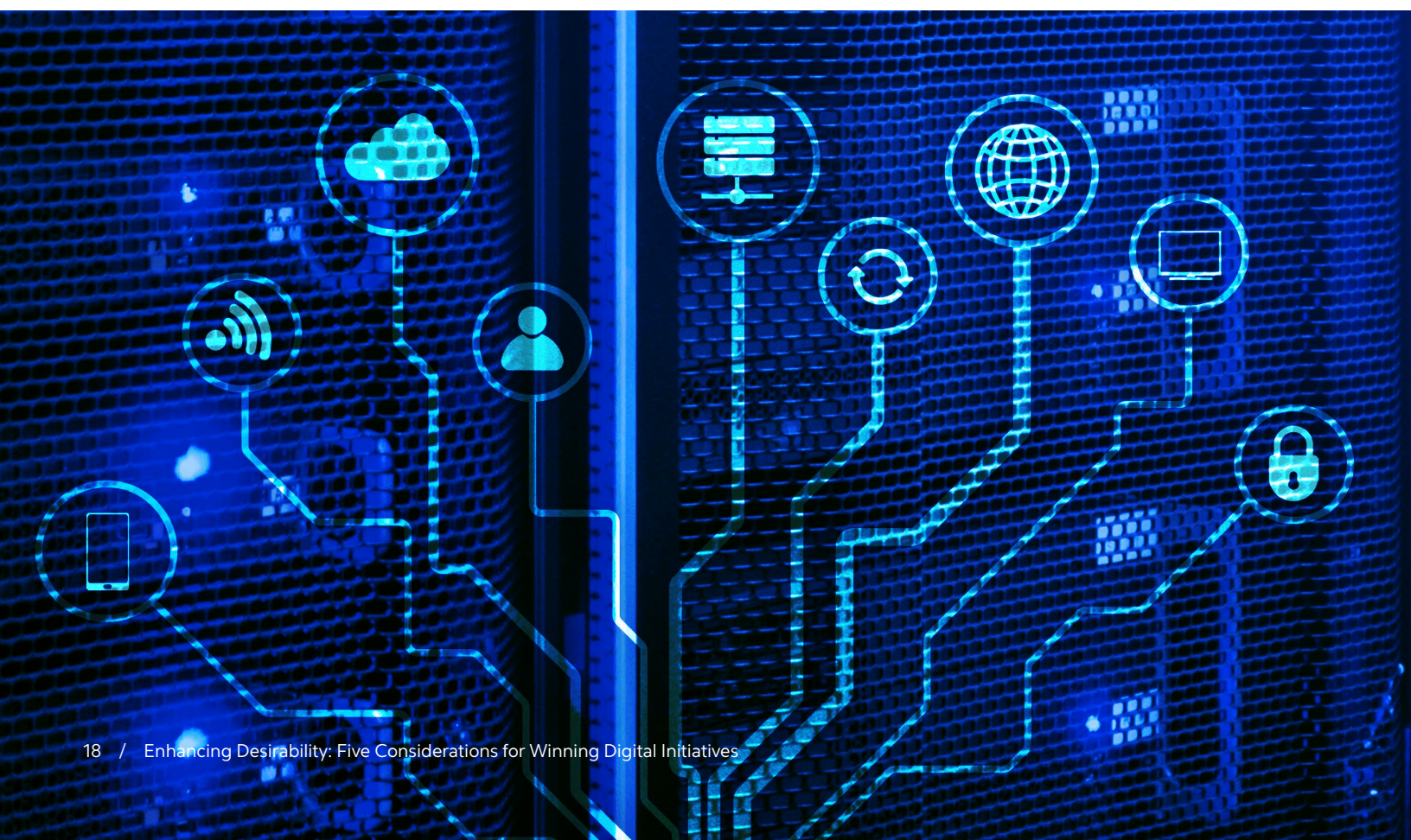
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About Cognizant Digital Business

We help clients build digital businesses and innovate products that create new value – by using sensing, insights, software and experience to deliver on what customers demand in the digital age. Through IoT we connect the digital and physical worlds to make smart, efficient and safe products, operations and enterprises. Leveraging data, analytics and AI we drive intelligent decisions and anticipate where markets and customers are going next. Then we use those insights, combining design and software to deliver the experiences that consumers expect of their brands. Learn more about how we're engineering the modern enterprise at cognizant.com/digital business.

About Cognizant

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