



THE CHANGING FACE OF DIGITAL EXPERIENCE



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INTRODUCTION

In this whitepaper we will provide a fresh perspective on three areas of focus that top the agendas of CTOs, CIOs, and CMOs with whom we've spoken over the past six months.

Transforming legacy operations into a truly digital business that can compete in today's saturated market

Designing and implementing commercially actionable and engaging user experience across products

Establishing and fostering an environment that facilitates entrepreneurial thinking, innovation, and creation that grows organically, as opposed to one that originates as a corporate initiative

These objectives may seem like three distinct operational concerns; in actuality, they are not. They are interdependent on one another and work in concert to deliver value to businesses and customers alike. We will reflect on the path to this point, we will unpack the reality of the current goals and challenges, and we will offer insight as to approach and execution methods, offering visibility into some avoidable pitfalls as a business embarks on this journey.

THE ROAD TO DATE

A few decades ago, the field of computing developed a new facet and direction that has since grown into an incalculably large industry of its own, commonly referred to as Digital. In that time, the very word has come to embody so many meanings, taken on so many identities, and been applied to so much of what has become everyday activity that it ceases to hold the cachet it once did. However, it does not mean that value is lost; as energy in a system never truly dissipates, but changes form, so does Digital.

But ubiquity does not equate with success. Many businesses still have a long road to travel to fully embrace, institute, and realise their digital futures. Although it permeates almost everything in some capacity, if significant change within a business has not been architected as the market evolved around it, leaders may find themselves in an unenviable position now as success is further predicated on digital ability.

Contrary to previous economic and societal revolutions, the major difference in this tectonic shift stems from the fact that the change we are undergoing today is generated from **consumers, technology, and businesses** together. It is not driven by a government, nor purely by a technological invention. To better visualise the digital landscape and understand how progress is realised, perspective across all of those three areas is needed.



The rules of engagement are now dictated by consumers.

"There were four kinds of emotionally compelling content: funny, useful, beautiful, and inspiring."

BRIAN MILLAR¹

Consumer choice, opportunity, and voice has never been as abundant or pronounced as it is today, and it will only continue to increase. With myriad options for almost every touchpoint, transaction, and brand experience, consumer expectations are at an all-time high, and users are empowered to effect both sweeping positive and negative outcomes for businesses based on their interactions—or even their perception of interactions.

Consumers have more choice in almost any market: they compare prices on their mobile, have a choice of payment options, an expectation of fast delivery—and free returns. They are very verbal when things go wrong, but occasionally share positive sentiment in return when things go well. They can inspire an army of loyal followers to a brand, or vilify and decimate one with little more than a few seconds' worth of decision-making on social networks.

In spite of these mercurial aspects, a recent study by The Emotional Intelligence Agency has unveiled that consumers still care a great deal about brands—especially the brands that offer them a variety of emotionally compelling experiences.

This leads to great opportunity for talented Customer Experience (CE) professionals who can deftly and successfully manage the shifting sands of CE trends. Adapting and moving the CE of a business to match customers' needs and environmental trends has become table stakes for digital brands.

Digital ubiquity is already here, it's just not evenly distributed.

Consumers do have access to powerful technological tools and channels, and will exploit them to their benefit without remorse. Contrast that with the challenges that many businesses face: legacy, monolithic infrastructure designed by an IT organisation from a different time, so far removed from today it might as well have been from another planet. These systems—and sometimes people and processes within IT leadership, are not enabling businesses to be agile players in an ever-evolving network society. To reach digital ubiquity, companies will need to adopt a new way of looking at technology and will need to change their IT leadership and their operations.

In a July 2016 report², Gartner cites four different types of CTO roles. Whereas previously a CTO would be expected to function within the traditional technology landscape, it must now also complement the CIO role and continue to advance the external and internal digital agendas successfully. Depending on where the organisation is at the current time, the CTO may need to reflect more inward than in the past, helping to build foundations for future business that were not required before.



From the pages of Wired to the cover of Forbes.

"As it [digital transformation] continues its advance, the implications for revenues, profits, and opportunities will be dramatic."

MCKINSEY QUARTERLY, FEB 2017³

Digital competence is not just changing the way we are doing business but also the way revenue, profit, and competitive advantages are generated.

The McKinsey article explains that as digitisation penetrates more fully, it will have dramatic impacts on revenue and profit growth for the bottom quartile of companies, while the top quartile will capture disproportionate gains. This winner-takes-all logic will especially be true for digital disruptors and fast followers that manage to be operationally and organisationally lean.

As such, digital requires attention from senior business leaders. They should understand their digital infrastructure, its possibilities and the limitations, and should be included in conversations around the technology roadmap that will allow the business to deliver an evolved Customer Experience and establish a more flexible operating model.



UNPACKING THE NEW REALITY

In order to remain competitive and continue to lead the market, we are convinced that every senior business leader needs to be focused on the customer experience, thinking about what is required to be a truly digital business, and striving to make their culture and operations more agile and innovative.

The customer journey is unlocked through powerful user experiences.

Customer Experience is a hot topic. Lots of parties in the digital space try to own it and have included it in their service offering. From the digital communication agencies luring marketing execs with concepts like **omnichannel** and **single view of the customer** to the design and UX agencies drawing up user journeys and beautifully crafted interfaces, CE is pivotal to realising success. It is simply irreplaceable in today's consumer-driven environment.

We believe that a deep understanding of the customer and a design approach of rapid iterations sit at the heart of any good design practice. Senior business leaders across the most powerful organisations are finally taking an interest in the when, how, and why of customer engagement, with their owned, earned, and paid touch points. However, the outcome of these CE programs is often a design stop-gap to renovate digital interfaces rather than longer-term technology solutions that will address the real business challenges.

There has been a fundamental shift in the ambition and scope of User Experience. If UX used to be focused on helping users interface more easily with technology, today UX concerns go way beyond that. We see five dimensions along which UX is evolving into a much more holistic practice of thinking how we as humans live together with technology.

1.

PERPETUAL AVAILABILITY:

The rise of mobile and the enormous computing power and connectivity that this unlocks means we are constantly available and have almost any knowledge at our fingertips. Good UX is in an always-on mode.

2.

PROCESSING OF NON-DIGITAL REQUESTS:

As user interfaces continue to evolve and morph concordant with rises in computing power, humans adapt less to technology, and the reverse is true. Speech and language processing, image recognition, and biometrics are all layering to reduce the gap between humans and their technology.⁴

3.

ANTICIPATING NEEDS AND DECIPHERING USER INTENT:

There is an evolution—and even an expectation—that machines and digital interfaces are proactive. User intent is recognized even before the action has occurred and the needs of the user are anticipated. AI—and more specifically at present machine learning—underpins this from a technology point of view, but for UX practitioners the challenge lies in developing interaction patterns and language in this new space.

4.

DECOUPLING RICH EXPERIENCES FROM THE PHYSICAL WORLD:

The rise of AR/VR became apparent at CES in Jan 2017⁵ where both from a content and a hardware availability point of view, AR/VR stole the show. This possibility to create rich experiences in a virtual world or in a mixed reality opens new UX opportunities.

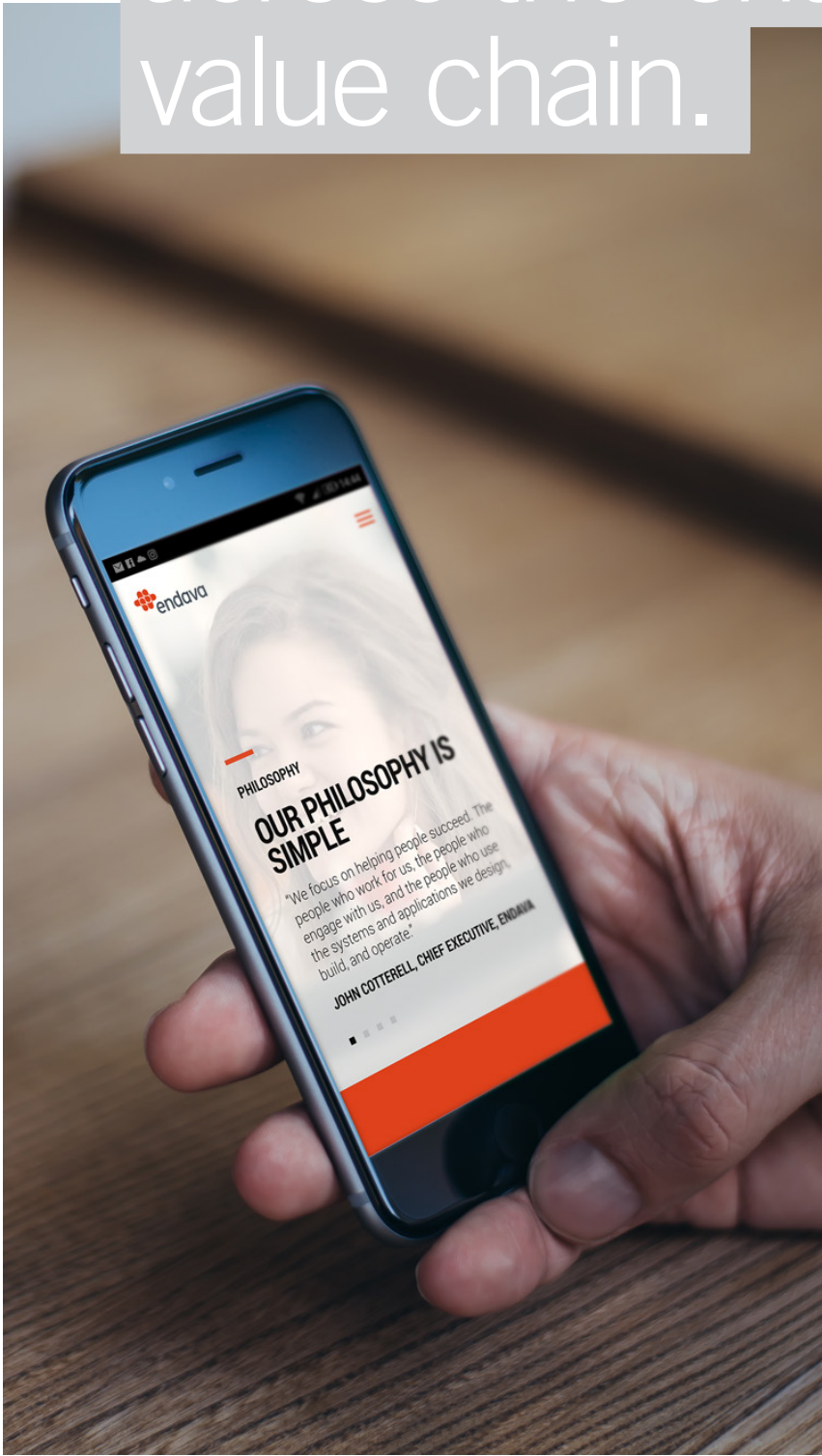
5.

CONTEXTUALLY AUTONOMOUS DECISION-MAKING:

Outcomes of the above-mentioned trends could culminate into a world of invisible interactions that surround us and make our life more productive, more inspirational, and even a bit more aspirational. The optimal user interface is one that creates no additional friction for the user and blends seamlessly into his/her world.

Combine these elements of evolution in the user experience space, and we see a pattern emerge: UX is becoming simpler and more invisible to the user, with the bulk of the effort offloaded to the technology itself. However, the creation of a simpler, more human-driven experience requires significant knowledge and technical ability to build the infrastructure to support it. A creative agency may be able to design a great UI today that catches the eye and looks fantastic, but in the near future won't have the intrinsic architecture, innovation, and engineering capabilities necessary to actually implement and deploy it. The right balance between intense focus on user experience and engineering prowess is essential for companies serious about competing in the next phase of digital.

Embracing digital across the entire value chain.



While maintaining intense focus on customer outcomes and the delivery of a highly-engaging Customer Experience has tangible benefits to a business in today's markets, there are definite top-line benefits in embracing digital transformation. Accenture points out that to accomplish a digital transformation, a company also needs to transform across its whole value chain - or in their words "Be Digital".⁶

"Those that understand digital transformation earn 26 percent more profit than others."

ACCENTURE - BE THE NEW DIGITAL ENTERPRISE⁶

Advancing on the "Being Digital" axis is contingent on building out a new digitally-enabled operating model, that will reflect the breakdown of silos and foster speed and agility, as well as responsiveness and collaboration. This is a company-wide endeavour and takes digital conversations outside of IT or Marketing where they had been isolated in the past. The COO should be responsible for customer outcomes and the CMO should have a voice in the delivery part of the customer experience, not just the look and feel or tone of voice.



"Before becoming the CEOs of Google, Microsoft, and Yahoo, Sundar Pichai, Satya Nadella, and Marissa Mayer were product managers, and they learned how to influence and lead teams by shepherding products from planning to development to launch and beyond."

MCKINSEY & COMPANY MAY 2017⁷

Rethinking culture and operations to enable purpose-driven outcomes.

The triangle connecting People, Process, and Technology is at the heart of a well-executed transformation process. Focusing on People and Process dimensions together with the Technology change is more important than ever. Six Sigma Programme Managers and Operational Excellence initiatives have their place, but companies adopting agile operations combined with an entrepreneurial culture in today's markets receive a premium—and the premium of moving early will become even more pronounced in the future. This can only be done when there is a culture that ignites and supports permanent behavioural change.

The attributes of this new type of culture have roots in Product and Software Development.

"The pace of change will never again be as slow as it is today. To be relevant businesses need more than skills. They need a culture that inspires different behavior."

ACCENTURE - BE THE NEW DIGITAL ENTERPRISE⁶

Agile, Continuous Delivery, and Lean Startup have become vernacular of the modern CEO and it isn't surprising that a recent McKinsey article highlighted the connection between successful CEOs and their background as product managers.

A culture where people share a purpose while being empowered to develop initiatives that will help realise that goal—and have accountability for their initiatives—is what the ambition should be for every organisation that wants to be successful in this new economy.



IDENTIFYING AND AVOIDING PITFALLS

As an IT Services company with years of expertise in distributed agile software development, we noticed that we continue to receive questions from executives and business leaders about our practical experience with Product and Software development and the insight we can derive and share from our learnings. Enacting this type of change within a business is difficult, but the path does not need to be as fraught with uncertainty as it sometimes seems.

1.

DON'T CONFUSE STRATEGY AND TACTICS:

Spend time on robust strategic exercises, but use them to form the basis of a multi-year plan to deliver against it. Acknowledge current market, customer, and technology trends, positioning the business for the preferred outcome in the future. Build specific tactical actions from the strategic decisions—and execute.

2.

PLAN FOR THE SINGULARITY... BUT NOT YET:

It's easy to get carried away by the unending deluge of hype in the technology news stream. However, truly incredible strides are being made in artificial intelligence—but it's still early. Stay abreast of these changes, because they will fundamentally transform the way humans interact with technology, and proactively seek ways to enhance core products and services with them, but build a pragmatic roadmap that iterates successfully as this field develops. Resources like **Andreesen Horowitz's AI Playbook**® are great starting points.

3.

LEVERAGE BIG PLATFORMS, DON'T RECREATE THEM:

Companies like Google, Facebook, and Amazon—and their respective platforms—have invested substantially in engineering and ecosystem development at scales most other businesses simply can't match or fathom. The platform advantages realised by building atop these massive systems may outweigh the desire to own that engineering effort in-house. Look for ways to partner with these types of companies, using their strengths, and instead apply focus to your core products.

4.

CREATE A CULTURE OF INNOVATION, NOT A SINGLE INSTANCE:

Many companies are recognising big successes by crafting digital layers on top of core products. Building APIs and services around agriculture and construction has elevated John Deere®, and creating a lifestyle ecosystem centered on technology has enabled Nike to sustain a new digital business on top of its existing retail offerings. But it's more than a single MVP; rather it is a transformation that starts at the core and emanates outward, through every aspect of the brand. New roles may be necessary to facilitate this kind of systemic change: experienced Product Owners can help establish the context within a company for innovation and align those efforts with the core business.

5.

OWN YOUR CUSTOMER EXPERIENCE, END TO END:

It's easy to be taken in by a great presentation on Customer Experience, but underestimating the practicalities and realities of setup, maintenance, and scaling of that experience can be devastating to a brand. CE must be included as a fundamental precept in almost every decision the business makes, and not just as a creative layer or a tweak to the UX. The relationship shared with your customers is too important to risk, and the stakes in a consumer-driven market are far too high.

True CE is an integral part of your existing or new products and services and is delivered through technology. The interactions your customers and employees have with your products and services are enabled, augmented, and facilitated by technical capabilities you have put in place. Often these capabilities will not come out-of-the box and will require software engineering to make them fit for purpose. Senior business leaders must build capabilities that will allow their organisations to become more mature in delivering against good CE over time and will allow them to fully own this critical operational component.

NEXT STEPS

This is by no means a quick fix, or an overnight process. It involves deep, cultural, operational, and systemic change to a business, and the process can be uncomfortable at times.

However, the time to equivocate has long since passed. If a business wishes to compete in this new economy, to grow into the future, and to continue providing compelling reasons for consumers to engage, creating a strong digital foundation is paramount.

It's not impossible. It takes a little bit of foresight, a little bit of courage, and someone to help guide the way.

Endava is an experienced partner in the transformation of companies as they identify their digital futures, and facilitating the ongoing evolution of business. **Endava** can join your company on this path and deliver insight, support, and innovative thinking that will enable the kind of change necessary to thrive.

Endava can deliver industry-leading, transformative user experiences with the engineering and technical acumen to back it up. One company capable of full-scale delivery—today, and into the future.

The time for action is now.

Join us, and together we can reshape the digital landscape of your business.





ABOUT ENDAVA

Endava is a public technology company, with over 18 years of experience of working with some of the world's leading Finance, Insurance, Telecommunications, Media, Technology, and Retail companies. Through the Digital Evolution, Agile Transformation and Automation solutions, Endava helps its clients be more engaging, responsive and efficient by supporting them from ideation to production.

Find out more about the digital solutions we can deliver.

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ADDENDUM

REFERENCES

1. We Studied Brands Around The World. What Consumers Want Isn't What You Think – <https://goo.gl/efKLfL>
2. Define Your Future Role as a CTO in the Digital Age – Gartner July 2016
3. McKinsey Quarterly, Feb 2017 – <https://goo.gl/fCBBpx>
4. Microsoft Design - Voice User Interface Design: New Solutions to Old Problems Feb 2017 - <https://goo.gl/L6xdwW>
5. Forbes - AR and VR Were Everywhere at CES - <https://goo.gl/6yKtaQ>
6. Accenture - Be The New Digital Enterprise - Competing In The Industry X.0 Era Of Smart, Connected, Efficient Business. July 2017 - <https://goo.gl/iyFXbR>
7. McKinsey & Company, May 2017 – <https://goo.gl/P2wahc>
8. Andreesen Horowitz AI Playbook – <http://aiplaybook.a16z.com/>
9. Develop with Deere - <https://developer.deere.com/>