Experience Engineering Is Critical for Success in the Digital Economy

A comprehensive and compelling user experience is the competitive battleground of the digital economy. A well-designed experience, enabled and reinforced by technology, is essential when competing to win business in any industry. In the age of the digital native (with infinite choice and short attention spans), a user experience must distinguish itself amongst your competitors (of course), but it must also stand out from competing and attractive user experiences provided by alternative business models and completely orthogonal propositions desperate to divert your customer. Experience Engineering is a philosophy and approach we have crafted to match beautiful design with the best modern technology to create compelling digital propositions.

What is a good user experience? An airline mobile app that offers check in, seat assignment and flight status with minimum fuss would count. Another would be an application that seamlessly follows your journey from inception to conclusion across multiple devices - and seems to know exactly where you left off, where you are and what you need to do next. It is Amazon's "buy with 1 click." Customers are increasingly demanding in their pursuit of a good customer experience. As the digital native generation becomes the predominant target market, every digital proposition must address this behavior or risk losing it all.

Obsessing over the needs and behaviors of digital customers is the modern interpretation of an ancient credo behind every successful company. These leaders take an outside-in view of how customers wish to be treated, and they define an ambitious digital strategy to ensure they continue to deliver innovative solutions in response to a dynamic market.

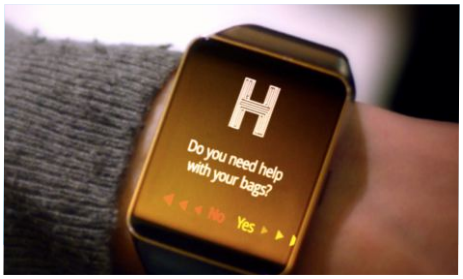
This paper highlights a number of tactics employed by industry leaders to address this critical customer experience challenge. It also details the strategic opportunities a business should embrace in order to adapt and excel in this new age:

- Employ Experience Engineering techniques to listen to your customers and deliver a better product or service to them
- Leverage data analytics to learn about user behavior, challenge assumptions and be proactive in aligning improvements in the experience with both customer and business needs
- Build a dedicated expert team to support future growth. Ring fence in-house talent and select a partner who demonstrates proven ability to deliver groundbreaking experiences on a sophisticated and flexible experience architecture

Why has the digital customer experience become mission critical?

There have been monumental changes in the way businesses interact with their customers. A typical customer journey in 2004 is almost unrecognizable in the digital economy, given the number of devices and touch points that influence customer interaction today. The most important technology change in the intervening years is the introduction and (almost) complete adoption of the smartphone.

Industries are creating digital propositions at different speeds. One early transformation happened inside the music industry, which saw dramatic disruption with the introduction of the iPod® in 2001. Since then streaming music from the cloud has become the dominant force in connecting consumers with a limitless variety of audio content whenever they want it, using ultra-efficient software and social recommendation engines.



Spotify® is a champion of music streaming and has come close to perfecting the user experience. It wasn't just the low cost financial model that appealed to consumers; their best-in-class approach to solving user problems and making everything so easy really helped. Spotify now offers on/offline streaming and device continuity, alongside the data intelligence to suggest new music that would be of greatest interest to the listener. All of this is delivered through a frictionless user interface.

Travel is another industry where the influence of digital has triggered significant change in the way consumers engage with a travel provider. From catching a flight to hailing a cab, digital is firmly embedded in the customer journey, and the expectations of savvy travelers for an optimized customer experience are sky-high (if you will forgive the clumsy pun). Mobile apps and omnichannel device continuity are no longer nice-to-have; in the age of discount, cattle-car travel, a well-engineered experience that traverses a website ticket purchase to a mobile check-in, and e-ticket to flight status to baggage claim is essential. Companies like British Airways have reported that over 50% of business traffic is now being managed on their mobile platforms and mobile revenues have doubled since the launch of their new digital strategy in 2014.

These case study success stories have set the pace for everyone else. Why should it be more difficult to schedule automobile service than to purchase an airline ticket? Why must I scroll through pages of impersonal rail schedules when Amazon seems to know what I need before I do? It is no longer acceptable for companies to treat digital as a bolt-on after-thought or only receive and address feedback on the customer experience during user acceptance testing.

The different digital and customer behaviors of Generation X and Generation Y have become apparent. Companies need to produce a compelling user-focused digital strategy (and make it a central element in their future growth plans) in order to respond to rapidly changing market dynamics and competition from new, disruptive digital products whose creators understand these differences instinctively.

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No industry will be untouched by the gravitation towards an integrated digital experience because the users will demand it. It will most certainly be the case that established industries and businesses that choose not to transform now will be left behind when Generation Y becomes the predominant target market in the Digital Economy.

Companies who have already embarked on this journey are leading the way in the Digital Economy. By embracing technology and listening to their customers, they are reaping the benefits of increased revenue, faster time to market, and improved customer satisfaction.

How should leaders address this new challenge?

Be Overly Ambitious

One of the fundamental principles, underpinning all successful businesses in the Digital Economy, is to be overly ambitious when it comes to describing your vision and digital strategy. Baby steps and halfhearted attempts will not cut it. Do it like you mean it.

In 2014, Uber gave a clear indication of its ambitious vision to disrupt another industry. The New York launch of UberHealth – a trial mobile vaccination service – is a showcase for Uber digitally-connecting medical professionals with patients who would prefer to be given the flu-jab in the comfort of their own home. Rather than attending a health clinic (where there is potentially an increased risk of contracting a virus), patients are able to call upon UberHealth. It's a convenient, low cost service that reduces your chances of infection.

How is Uber able to do this? It does so by leveraging the reliability and efficiency of its urban logistics platform to create a new product, delivered through its best-in-class user experience.

Employ Experience Engineering techniques to identify new opportunities and deliver a better product

Many of today's business challenges do not have 100% clear-cut obvious solutions, be they business (strategy/economic), marketing (UX design/psychology) or IT challenges. In the Digital Economy they become inextricably linked and distinguishing one from the other is nearly impossible. Trying to solve a problem by only addressing the customer experience or the technology is the equivalent of trying to solve a Sudoku puzzle by cutting it into nine squares and providing it to nine people for an answer. You must look at the whole puzzle to solve it.

Looking at the complete picture is the Ness Customer Experience Design approach. The best results are achieved when stakeholders from each of the business disciplines collaborate as a team. High-speed regular communication and quick-meeting protocols between the groups are needed for effective collaboration on a daily basis. Agile processes are adopted and tools like Basecamp track project requirements and conversations and act as a dynamic single source of truth. There is no substitute for a mix of expert talent, but the real art is not about how good you are in any one thing, but how good you are at weaving a combination of skills together to increase the value of the constituent parts.

Being obsessed with the customer and constantly trying to understand how the customer experience can be elevated is critical.

Core to the Experience Engineering approach is the outside-in view of your proposition from the customers' vantage point. Being obsessed with the customer and constantly trying to understand how the customer experience can be elevated is a critical success factor. In our personal lives we are

all travelers, patients, drivers, coffee drinkers, readers, shoppers, sports enthusiasts and music lovers. Why is it so difficult to empathize with those behaviors when creating a user experience for a new software product?

Digital leaders like Starbucks® are constantly learning and layering technology into their end-to-end customer experience to capture brand loyalty. As an early adopter of mobile, they have always searched for ways to improve connections with their customers. Starbucks uncluttered its customers' wallets with mobile payments, provided a unique rewards scheme to “gift a friend,” and conducted tests for a way to order coffee ahead of time with smartphones. They are real digital innovators, and that's a valuable reputation to have.

Leverage data analytics to understand customer behavior and evolve the customer experience

By analyzing past and current behavior, firms can better predict and anticipate future requirements. Applying insights from studying “big data” can improve cross-sell and upsell revenue, but that alone will not necessarily improve a user experience. Patterns from your data may highlight that a visitor to London likes to take the Heathrow Express train into Paddington rather than a taxi, so your application should offer the ability to purchase a return ticket (as the person will most likely be traveling back within the one month period for a valid return ticket). With one touch upon arrival, a QR code ticket is sent to the person's phone via text message per her preferences. The application has also learned that she will take a taxi from the rank and will not need a car service. It also knows from her Google calendar that she has meetings in various London locations throughout the day and connects to Uber, so that they are waiting at the roadside 15 minutes after her meeting is scheduled to end (because she is always 15 minutes late).

Another illustrative example would be the use of big data to create new products in the insurance industry. The car insurance market offers young drivers policies where the pricing is adjusted against a fluctuating risk profile. The risk premium is calculated through a combination of geo-location tracking and telematics technology and a data intelligence engine that helps insurers understand how often the person drives aggressively. In a market where young drivers are faced with an extremely high entry cost, this use of “opt-in” data analytics has created a product evolution for the insurance industry and a significant step forward in personalizing the customer experience.

A similar scenario arises in health insurance. Wearable devices continuously track and record health data, and this is the starting point for customized, personalized insurance plans. This data can be matched to records on health club attendance, workout data (via connected machines), and dietary behavior through grocery purchases. Rather than using risk assessment and legacy mortality tables of millions of people, innovative insurance companies will go the other way and zoom in on the “behavior of you” to determine premiums. It is the ultimate, digital pay-as-you-go model.

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The innovative application of data can help companies provide more intelligent and personalized products and services to their customers. Companies who don't implement a big data strategy risk falling behind the market. Industries are being transformed through a personal, granular understanding of customer needs, goals and behaviors, and this is a crucial battleground for companies who will thrive in the Digital Economy.

Build a dedicated team to support future growth

Designing a compelling, forward-looking user experience is not a project or an initiative. In the Digital Economy, it should be an obsession and the journey never ends. Many times an outside participant with a fresh perspective is required to help challenge, envision and architect both the customer journey and the user experience. The most successful teams have cross-functional representation and commitment. It is critical that the team and its partners understand and address the entire range of issues, from business objectives to technology infrastructure, from user experience design through to the mobile app.

The first steps are to agree and prioritize the importance of the work effort at the Board level, build a dedicated team, and acquire the additional skills where necessary. Many companies create a Chief Digital Officer position to oversee their move to being a “digital-first” company. They may well designate Product Owner roles to manage the end-to-end experience of specific digital products and build or acquire companies to create labs that focus on innovations.

It is not always feasible to grow your own talent or acquire the specialist mix of skills that are required, so an alternative solution is to look at a hybrid model and select a partner that can help mitigate the risk of delay and non-continuous development cycles. Ideally, your partner evangelizes a customer-centric approach and has proven techniques to understand and elevate the customer experience, while delivering a complex experience architecture with seamless interfaces underpinned by robust software engineering. Do not underestimate the need for solid, reliable and measurable software engineering. User experiences memorable for frequent crashes create the undesirable customer experience all companies wish to avoid.

Here are some key attributes to look for when considering a partner to support your business on your digital journey. They must be:

1. Prepared to constructively challenge everything
2. Obsessed with the customer's point of view
3. Able to provide a seamless, integrated service for business strategy, UX design and technology development
4. Able to demonstrate proven techniques to deliver valuable products with aggressive speed to market
5. Subject matter experts in the field of data analytics and big data
6. Able to work in conjunction with business stakeholders and act as a long term partner
7. Able to envision and develop a flexible and modular technology solution

Conclusion

The digital revolution is well underway, and the rise of customer expectations to improve the connected experience across all channels demands that companies address the experience gap - or become a loser in the race for supremacy and market share. This gap is not just for pure-play online companies to bridge, but also for traditional operations that are enabled and being transformed by technology. Creating connected and delightful experiences through sophisticated experience platforms is the future of all businesses wanting to succeed within the Digital Economy.

Digital start-ups and innovative incumbents are currently demonstrating what best practice looks like and what results can be achieved by applying a systemic and cross-functional approach to user experience, platform transformation and data analytics. A key principle of all successful organizations is to have an overly ambitious vision and digital strategy. To be truly disruptive, they frequently need to disrupt themselves.

Revolutions are swift and competition is brutal. There are no industries or positions that are unthreatened. If you have not yet committed to your digital strategy, a risk mitigation strategy would be to select a partner with a demonstrated track record in being able to provide the range of services that is needed in all key disciplines, and particularly in the area of Experience Engineering.

About the Author

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Jane Linton has over 14 years of experience in strategic planning, UX, creative management, and web development with a strong focus on digital and mobile solutions. She works closely with the Ness Digital Engineering team to deliver end-to-end User Experience design, proof of concept business cases, and digital insights that help Ness's customers become best-in-class. Jane is passionate about customer engagement and believes in the power of collective imagination. She has worked on projects for leading firms including British Airways, Nestle, Citi, Budweiser, and Condé Nast.

About Ness Digital Engineering

Ness Digital Engineering designs and builds digital platforms and software that help organizations engage customers, differentiate their brands, and drive revenue growth. Our customer experience designers, software engineers and data experts partner with clients to develop roadmaps that identify ongoing opportunities to increase the value of their digital products and services. Through agile development of minimum viable products (MVPs), our clients can test new ideas in the market and continually adapt to changing business conditions—giving our clients the leverage to lead market disruption in their industries and compete more effectively to drive revenue growth.