Staying Competitive through Strategic UX Design



A Conversation with **Apala Lahiri, MA, MSc, CUA, CXA** Chief of Technical Staff, Human Factors International How can one innovate with any degree of accuracy? And then, without any future modeling, how can you be sure that you understand the future ecosystem and the resulting changes in needs and opportunities that will happen in a few years?

In a nutshell, you must know your user's current ecosystem and the models of the future that are likely to impact your user's ecosystem. If you understand both, then you will innovate not just for today but will also plan for meeting the new opportunities that will emerge when the future models become reality.

Companies like Apple and Amazon have differentiated themselves and fueled their growth with good customer experience. Are there examples where poor user experience has proven detrimental to companies?

Actually I think it's more a question of how one defines user experience. That to me is at the center of the success of Apple and Amazon and the fall of, say, Sony.

If one defines user experience in a narrow and constrained manner as something to do with just the design of a product or service, then that kind of user experience may not actually lead to long-term differentiators. It was Steve Jobs' ability to fast-forward to the future but from a user's perspective.

On the other hand, if one defines UX more broadly as the strategy, innovation and design of the compelling, delightful, and persuasive user experiences, then there is bound to be long-term differentiation and success.

I believe that Apple and Amazon's success has as much to do with Steve Jobs and Jeff Bezos being able to envision the future much better than any of their contemporaries as it has to do with good customer experience. Why do I say that? Think of what really catapulted Apple from being a graphic designer's favorite brand to a worldwide phenomenon. It was Steve Jobs' ability to fast-forward to the future but from a user's perspective.

He was able to "see" that with the contemporary lifestyle of being on the move all the time, needing to communicate as well be informed/entertained anytime, anywhere becoming the acceptable way to live, there would be a need for an entire ecosystem of device and content that allowed all of this to come together.

At a time when no one else visualized the future lifestyle of users and what the resulting needs and opportunities would be, Steve Jobs did exactly that; hence came the iPod and iTunes in 2001. This duo provided a completely new way to access and consume music legally, in small "bytes" (instead of having to buy a complete album) and on the move.

From that, there was no looking back at giving the mundane phone a total makeover not just in terms of the form factor but also functionality. Suddenly, the phone was so much more than just a communication device! For the first time, app developers could develop apps for a phone! The iPhone completely revolutionized the way one looked at one's phone. It is exactly the same with Jeff Bezos of Amazon.

He foresaw what people would need in the future by way of "buying." He visualized that once again, with the modern lifestyle of being constantly busy and on the move, people would need a mechanism to select from a wide variety of items right from one's living room.

But that was not all. Thinking as he was from the user's point of view, he also realized that the initial hesitation to buy from this channel (that was not mediated by humans and involved no opportunity to actually see the product) meant that Amazon had to provide extra reassurance. Customers had to be able to return the product with ease. Also, the convenience of shopping online had to be made very, very compelling... hence, 1-click shopping and the recommendations from people like you, etc.

> Thinking of UX as a process that encompasses strategy, innovation, and design is the secret sauce of success.

With both Apple and Amazon it was about looking forward first, strategizing what each company would do, given the future vision and the company's own core competency, and then making sure that the new products/services came with excellent user experience.

I would add Google, Facebook, and YouTube as other very successful enterprises that got their future vision and strategy right and then drove design to fulfill that vision. Thinking of UX as a process that encompasses strategy, innovation, and design is the secret sauce of success.

But what about those who did not get their strategy right?

Take Sony, for example. They were market leaders in the area of electronic appliances just a blink ago! They stood for innovation and quality — and who can forget the Walkman, or the PlayStation?

However, its electronics business has been losing money for some years now. This year in May, Sony announced they were profitable again but most of the profit was made possible by selling of their assets, including their headquarters building in Manhattan!

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What happened?

According to Wharton marketing professor Peter Fader, Sony has overstayed its welcome in the electronics sector, rapidly losing ground to competitors like Samsung and LG. "What makes it shocking is the fact they were always so arrogant about their products," he notes. "It's a shame that they kept thinking, 'We're Sony; if we put it out there, it has got to be good." On the contrary, Fader adds that over time, the firm has become "an average, commoditized player" in electronics, producing "fine products but nothing spectacular." Sony should have "learned its lessons a long time ago," Fader says.

Sony, unlike Apple or Amazon, stopped looking into the future and strategizing on behalf of their users. Hence they kept creating "products" instead of thinking about putting together an entire future ecosystem for their users to step into.

The result was that very soon Sony became a company with a plethora of products that were, at most, better versions of earlier products. They were well designed but no more than that. The problem, therefore, was that they were not moving the user towards an anticipated future ecosystem and solving the problems of that ecosystem even before users actually started living in that ecosystem. And if one keeps designing for today's problems, even if innovating incrementally, the barrier for competitors to race ahead is always very low.

It seems like UX is required at a company's DNA level rather than as a veneer. How does implementing a strategic UX roadmap help to tackle that transformation?

First, in order to create a strategic UX roadmap, a company is forced to step out of the comfort zone of the "present" and think of a longer-term future and that too from the perspective of the user! When thinking of the future, from the user's perspective, you have no option but to ask questions such as: How will future technology (as relevant for the company) affect users? What will users be like in 5, 10, 15 years? Will alternatives to our current products/services emerge in 5, 10, 15 years? In 5, 10, 15 years, what will be critical for users as far as our products/ services are concerned?

Answers to these questions help the company create a big picture of a future ecosystem of their users. Once there is this big picture of the future ecosystem which has the user at the center, it is then easy for stakeholders to understand how a user-centric view integrates all other perspectives (technology, business, etc).

With a clear picture of the future user ecosystem in place, it's possible for the company to start thinking in a user-centric manner from strategy to product/ service design and Once the roadmap is created, it then sets into motion awareness building and aligning of this UX-oriented view throughout the organization.

implementation. The roadmap that emerges from this process in turn reinforces milestones that focus on user experience.

Once the roadmap is created, it then sets into motion awareness building and aligning of this UX-oriented view throughout the organization and leads to an integration of the UX perspective deep in the psyche of the organization.

What are the management challenges?

There are two major challenges. The first is for companies with the ability and willingness to incorporate the UX perspective as a major driving force for current and future modeling of their users. It is not easy to incorporate a relatively new design-oriented domain (UX) as a key enabler and differentiator of business.

The awareness of what constitutes "user experience" is still very ambiguous in the corporate world. UX is often looked at purely as visual design or art and not as a discipline that also has a solid foundation in science. There is also awareness of just the narrow and constricted view of UX that I mentioned earlier. Hence UX is often viewed as something that is tactical design, usability testing, evaluations, etc. — and not always a must-have. Senior executives need to become more aware of the full scope of what user experience is and how it can transform businesses. It is often the central capability key to the survival of the company.

Secondly, once incorporated, the management challenge is to give this UX perspective the respect that a profession deserves.

Stemming from the low level of awareness or ambiguity around UX and what it comprises leads to a feeling that this can be done by anyone with common sense and a bit of training. The fact that this is a profession with as much knowledge and rigor as business studies or computer science is not clear to most corporate managers who come from more concrete, number-oriented and older disciplines such as business studies, computer science or other physical sciences.

Changing this perception about the UX field is a responsibility of all UX professionals.

How far does one look ahead in developing a strategic UX roadmap?

"If everything you do needs to work on a three-year time horizon, then you're competing against a lot of people," Bezos told Wired in 2011. "But if you're willing to invest on a seven-year time horizon, you're now competing against a fraction of those people, because very few companies are willing to do that."

Every organization should map their future readiness on a UX Future Readiness Index.

I could not agree more. Being able to model distant futures sets an organization apart and ensures long term survival and growth.

In our strategy and innovation practice, we routinely model 5, 10 and 15 year horizons for our clients. Being able to visualize near, middle and distant futures is a major risk mitigation strategy and we know that from our personal life planning too! It surprises me to no end when I hear from some senior executives that their industry changes at such a fast clip that it is useless to plan beyond a year or two. This strikes me as a ridiculous argument. How can the pace of change in an industry make future planning redundant? What it may mean is that the future models have to be revisited and updated more frequently than for industries that do not change so rapidly. But to not do any future modeling beyond a couple of years seems like throwing the baby out with the bathwater!

In fact, I think every organization should map their future readiness on a UX Future Readiness Index. This index will allow the organization to work towards a very measurable goal.

The Future Readiness Index helps our clients understand how ready they are for the various models, especially for the models most likely to happen.

What is the Future Readiness Index?

Every organization must have its own preferred model of the future that they will then work towards. In our future modeling work for clients, we often help create preferred models along with the probability of these models becoming reality over a specified time frame (Yes, sometimes there are multiple models). We then help do some revenue projections for each model in the context of their current strategy. This helps our clients understand how ready they are for the various models, especially for the models that are most likely to happen. Once there is clarity about their future readiness, they can then ensure that they have a strategy to be successful given the most likely model.

This exercise leads to the Future Readiness Index. Let me illustrate this with the help of a few models from our repository of future models. Imagine that we are working with a client who is a major global retailer and helping them build their Future Readiness Index.

The steps we would take:

- 1. Create customized models of the future
 - Light and Connected Model
 This model describes a future lifestyle
 where ecological awareness will be
 high, people will shun today's material
 status markers and new status
 markers around contribution to
 sustainability will be the key driver to
 any consumption decision.
 - DIY

This model describes a future where 3D printing will bring about radical changes. People will not buy products but simply print everything out. They will buy designs/blueprints/patterns and then print their own shoes/dresses/appliances, etc.

- Forecast probability of each model becoming reality over specified time frames
 - Light and Connected 30% likelihood by 2020
 - DIY 70% likelihood by 2020
- 3. Create revenue projections (given current strategy) for each model
- 4. Create strategic roadmap for success with DIY model, which may imply a strategic shift away from the other less likely model for which the organization is better prepared in terms of future revenue



Innovation is critical to meeting the demands of the future, but where does UX research and future modeling fit in?

Innovation needs to be informed by a deep understanding of users who are the target of the innovation. And how does one understand users without research?

How can one understand, for example, that the time when users travel back and forth for work is the time when they are most frustrated because they have Innovation needs to be informed by a deeper understanding of users who are the target of the innovation.

nothing to do and feel that they are wasting their time? This, therefore, provides a most interesting opportunity space for innovating and coming up with ideas of products and services that may not even exist now. On the other hand, our future models may suggest that telecommuting, tele-socializing, and tele-educating will grow—reducing this opportunity in the future.

Or for example, in order to innovate and come up with concepts for the future for operators of mining equipment, without researching the operators and their current ecosystem, how can one innovate with any degree of accuracy? And then, without any future modeling, how can you be sure that you understand the future ecosystem and the resulting changes in needs and opportunities that will happen in a few years? In a nutshell, you must know your user's current ecosystem and the models of the future that are likely to impact your user's ecosystem. If you understand both, then you will innovate not just for today but will also plan for meeting the new opportunities that will emerge when the future models become reality.

Is it the same as market research?

Market research is primarily about understanding what people will buy. It uses both qualitative and quantitative methods, but the ultimate goal is always to understand what people want to buy.

User experience research is not about markets, trends, what people say they will buy, their demographics, or how the market can be segmented apart and analyzed. Rather, user experience research looks at what a person feels about using a product or service. It's not about looking at trends that capture generalizations. It's about looking at very specific, deep-dive information about users. User experience research is more valuable in providing direction about how a solution should be designed. It's less about pricing and more about design. What aspects of a solution will meet the needs that we identify during our user experience research? What feelings do users have about the product we are interested in? It's not so much about buying as it is about using a product or service.

Market research and UX research, do, however complement each other. What works well is to use market research and user experience research to gain different kinds of insight. Market research can be used for initial market sizing, analyzing competition, getting an idea about trends and product/service areas that people are interested in, and also for identifying approximate price points. From that initial research, user experience research will dive into the focus area we want to understand more deeply.

You must know your user's current ecosystem and the models of the future that are likely to impact your user's ecosystem.

An understanding of culturally diverse users will help craft locally optimized versions of global solutions.

For example, people might say that they want to use washing machines, and market research will identify price ranges to sell those machines in certain geographic regions. Then, user experience research takes this knowledge and conducts a deep dive study inspired by ethnographic methods, with smaller samples to understand what people do with washing machines. We might ask questions like, "What problems do washing machines solve other than just washing clothes? Are there reasons why people are expressing interest in buying washing machines? Is there an unmet need that we can fulfill?"

Because of the expertise and techniques used by user experience researchers, we can gain insight into the unsaid and unknown needs of washing machine users. This helps the company design a product that people want to use, and in fact, may not exist in the marketplace.

There is an interesting relationship between market research and UX research happening here. Market researchers may be able to identify a strong market for washing machines as opposed to microwaves, stoves, etc. They can show the company that certain price ranges could be more competitive than others, and that certain demographic groups are worth targeting. User experience researchers can then provide insight into innovation, designs, and iterations of a particular product idea.

Once the product is designed—at this end stage—market research again plays a critical role. An organization might have several designs to choose from. Market research can reach out and evaluate which of those concepts are most likely to sell successfully and identify price ranges that buyers are willing to pay for the specific models that have been created.

As an expert in multi-national UX, are there specific and critical points to include on the UX roadmap when considering culturally diverse users?

When creating a future model of the user ecosystem and then the strategic UX roadmap, it is critical to ensure that we consider the most important user segments for the organization and detail out how they are different. In fact, an understanding of culturally diverse users, whether within one country or across the world, will help craft locally optimized versions of global solutions. For example, if say we are creating a strategy for the ecommerce sites of an international lifestyle brand from the USA.

Would their users in the USA, India, Japan, China, France and Singapore all have similar preferences, motivators, barriers and core values around the brand and also around online shopping? Most certainly not!

Some of these countries may truly prefer the convenience of researching and buying online (USA, France), while for some others there may be different degrees of distrust of online payment methods (Japan, India, China) or there may an element of having fun visiting the brick and mortar stores with family and friends (India, China, Singapore). Some segments within a country may research online but buy when they visit the USA (India).

Hence, an understanding of the differences and how these differences would be applied to the strategy for each country website is essential in providing the kind of locally-flavored user experience that truly delights the users, whether it's a radically different flavor or just a slight twist. What is the #1 trend you see that will impact the next generation of user experiences?

I strongly feel that the most significant trend will be around the blurring of lines between creator and user.

Whether it's the advent of 3D printers that will soon allow users to print everything from shoes to houses to food, or the increasing creation of content via social media platforms, or ownership of devices and apps that allow users to become creators, in 5 years' time users will become creators!

An understanding of the differences and how these differences would be applied to the strategy for each country website is essential in providing the kind of locally-flavored user experience that truly delights the users. What kind of user experience will these "creative users" need and demand? Or will they just create their own experience?

We had better start visualizing that right now!

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About Apala Lahiri



Apala Lahiri, MA, MSc, CUA, CXA Chief of Technical Staff CEO, Institute of Customer Experience Human Factors International

Apala Lahiri has been responsible for growing Human Factors International's UX consulting operations across Asia (Mumbai, Bangalore, Pondicherry, Shanghai, and Singapore) since joining HFI in 2000.

Apala and her team have helped designers, marketers, product managers, and ethnographers in Fortune 500 companies apply her innovative techniques to develop exciting new concepts and products. She is co-editor of the book, Innovative Solutions: What Designers Need to Know For Today's Emerging Markets. She systematically guides the ideation process to uncover subtle patterns in ethnographic and market data to reveal the exciting breakthrough ideas that can drive business and generate more revenue and profit on the one hand, and improve quality of life for users on the other hand. Apala is an award winning designer (International Audi Design Award) and specializes in the area of Cross Cultural Innovation and Design. She is active on Twitter @FuturistApala.

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HFI (Human Factors International) is the world's largest company specializing in user experience (UX) design. We've been in the business since 1981. Our focus is on helping our clients develop mature and effective UX practices. We provide a complete and seamless suite of advisory, training, certification, methods, standards, and tools to help our clients institutionalize user (customer) centricity. Our vision is to help our clients build long-lasting relationships with their consumers across all touchpoints and leverage the influence that results from engaging digital experiences.



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