User Experience Research and Market Research

A conversation with Apala Lahiri Chavan
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Apala Lahiri Chavan, Chief Oracle and Innovator of Human Factors International, talks about the synergy and differences between user experience research and market research.

How do you define "market research" versus "user experience research?"

There is a lot of overlap and blurring of the line between the two.

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.

Market research is useful in two phases of a project–the initial strategy and planning phase, and then when validating concepts/designs. It is very important as an input mechanism to decide strategy at the beginning of a project. Inputs from market research could be used to identify a certain segment of the population as a target for a new product, or for determining if a new market is available altogether. You definitely need some hard numbers to make a business case for these kinds of questions.

It's also very important to understand that market research focuses on large samples and verifies its insights with large numbers. Furthermore, in order to provide input to business strategy, these large samples must be statistically balanced in order to give confidence to decision makers within an organization. After a survey with 10,000 people, it is possible to use sophisticated statistical techniques, and one can be confident about the results.

To summarize, market research is important in providing business insight early on. It tends to involve large numbers and large samples. It also focuses on what people will buy. Finally, an important aspect of market research is that it focuses on what people say, rather than what they do. This is the essence of market research.

We can use this definition to help distinguish market research from user experience (UX) research. In fact, UX research is exactly the opposite.

"Market research tends to involve large numbers and large samples. It focuses on what people will buy. It focuses on what people say, rather than what they do."

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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 not about markets, trends, what people say they will buy, demographics, or how the market can be segmented apart or analyzed."

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 are users having about the product we are interested in? It's not so much about buying as it is about using a product or service.

Therefore, user experience research focuses on smaller sample sizes. This is because we are not interested in looking at statistically valid, large samples from which we can see what price ranges ought to be targeted. We use small samples, but we go deep into the psyche of the user to discover how the user relates to a product or service. We see much more than what they say; in user experience research, we can see what people do. User experience research is more focused on how a person uses a product, not on what they may or may not buy.

Market Research	User Experience Research
What people say	What people do
What people will buy	How people use a product or service
Large samples sizes	Small sample sizes
Broad insight	Deep, focused insight

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"User experience research helps a company design a product that people want to use, and in fact, may not exist in the marketplace."

What is the relationship between market research and user experience research?

This is also a very interesting question. I've noticed from my experience that 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.

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.

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It sounds like market research gives an organization an area to focus on, or an idea of a product line that could be profitable. Then, user experience research provides more insight about why a person might choose specific features and other, deeper understanding about the motivations of the buyer. What is the interplay between market research and user experience research? What is the lifecycle of that process?

It's useful to divide the product lifecycle into three distinct phases.

The first phase is strategizing, where an organization is exploring whether or not to design a certain kind of product or enter a new market. During this stage, both methods are used—that is, market research and user experience research. In this phase, there is more emphasis on market research, because this is where large studies are done to slice and dice the market to identify segments, demographics, and price ranges. You consider age groups, income ranges, geographic information, and so on. Market research is very useful for these insights.

"The techniques used in large surveys are indirect methods. You can't possibly go and directly interview 10,000 people."

Once that information is clear and the business formulates a specific market strategy—for example, to sell washing machines in Asia—that specific formulation can be validated with a round of user experience research. In HFI, we experience this often. Clients usually ask us to do deep dive research with small samples to validate that the market research done before that is correct. And, since we're doing the fieldwork anyway, they have us gather the information about what exactly about that product is so important. So, even if we conclude that we disagree with the market research findings, we can often provide input to give the company another direction to pursue.

However, this is one of the dangers of market research. The techniques used in large surveys are indirect methods. You can't possibly go and directly interview 10,000 people. It's too costly and time consuming. Instead, market researchers will often send out questionnaires, do phone surveys, and so on. Companies that are mature understand this problem. You could get in big trouble when survey respondents say, "Yes, I would like this washing machine," but they don't actually mean it! That's the problem with just believing what people say.

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More than 60% of participants said
they were "likely" or "very likely"
to buy a kitchen appliance
in the next 3 months.

8 months later, only 12% had.

How Customers Think, Gerald Zaltman, 2003

http://www.slideshare.net/Optimal.Usability/why-user-experience-is-more-important-than-marketing

"A mature organization will look for validation and deeper insight. That's where the user experience researcher comes in."

A mature organization will look for validation and deeper insight. That's where the user experience researcher comes in. We can see what people actually *do* with a washing machine. That will validate whether what people say is actually what they meant when they gave their inputs to the market researchers. Therefore, in the strategy phase, it is not unusual to have market research results passed to user experience researchers, and a more focused ecosystem research conducted.

I have seen in our work that 80% of the time, the market research data is pretty accurate. That's great! We come back (after the UX research) and provide a lot of additional rich information about the user groups, which really helps during the next phase of design.

But, in about 20% of cases, we find something more surprising. It might even be true that the product or service that the market research suggests will be profitable is actually *not wanted* by the consumers. In these cases, the user experience research provides great value, because it has prevented the company from investing a great deal of time and money in an idea which is actually not viable.

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"Often, user experience researchers help design the survey instruments used by market researchers."

During the strategizing stage, there is a lot of interplay between market and user experience research. During the design phase, it is all user experience research; there is no market research during the design process. In this phase, we are designing iteratively based around the feedback we get from small samples users.

Depending on what we are designing—a product like a website, for example—we use methods like usability testing to do our iteration and get the design right. We do this by directly working with the people who are within the target user group. This involves observations, in-person conversations, etc. If we are dealing with a physical product design, then we have other methods. For example, we could create interesting prototypes based on storyboards. But, it's important to remember that it's all small sample research during this phase. We are iterating and tweaking the concept/design.

Then, we move onto the last phase of product development, which is the validation phase—the final assessment that we have the design right. It's also an opportunity to understand the interplay between the different concepts we have come up with. We may have several different designs or ideas that can be combined according to data we gather, and then create a final concept which emphasizes the desirable aspects of all the concepts we have identified.

In the validation phase, we have the opportunity to identify the ideal price points and the right combination of features. This phase is largely market research driven, but the ideal situation is to have market and user experience researchers working together. As user experience researchers, we do not have the core competency of running the large scale, quantitative surveys. We pass that on to market researchers who have many different methods for gaining insight into our concepts using large scale feedback and statistical analysis.

Often, user experience researchers help design the survey instruments used by market researchers. Even though it's an indirect method—that is, we don't work directly with the people we study in this phase—user experience researchers can greatly help with the instrument design. Once the survey is designed, the market researchers essentially take over with the execution and analysis of the study.

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It sounds like market research and user experience research are definitely distinct disciplines. But, there seems to be a lot of interplay between them, as well as between the professionals in those fields.

Yes, you are absolutely right. In general, market researchers categorize themselves as either qualitative or quantitative professionals. It makes a lot of sense given the nature of the work they do. Quantitative research is really driven by an understanding of statistics and an ability to work with very large data sets. A qualitative researcher isn't necessarily expected to have a high level of expertise in those areas, but is instead, better with skills such as in-person interviewing, conducting group sessions, etc.

My experience is qualitative researchers are professionals who most often conduct focus groups. They are usually not interacting one-to-one and doing deep dive research. They might be working with people directly, but working with a group requires a very different skill set than working with individuals in a deep way like we do as user experience professionals.

And even if they do *in situ* observation or one-on-one interviews, they do not observe or probe from the perspective of how the solution will actually be designed, how the user experience will be crafted.

Although the lines are blurred—clients will often tell us that the market research agencies they work with do qualitative research—we sometimes have to explain that the kinds of insights we can provide are very different. There is a clear divide between quantitative research and UX work, but often there is confusion about the differences between qualitative research and UX research.

A major difference is that large group sessions happen inside facilities where participants are not in the context where they actually use the product or service you want to investigate. That loss of context is crucial because we can't get the kinds of insights we get when doing in-home visits and actually see how people interact with products in a familiar and natural setting. We can do a much deeper level of probing and questioning, because we see the issues they face in actual real life situations.

"There is a clear divide between quantitative research and UX work, but often there is confusion about the differences between qualitative research and UX research."

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Let's say I'm an executive trying to decide what kind of research I need to do. Generally speaking, are there any indicators about when I should be using user experience research? How can I be confident that it will provide information that is valuable and actionable in my decision making process?

"Attitudinal information requires market research … behavioral research is best left to user experience researchers."

If you want attitudinal information about your market or about a target population, this requires market research. If you just need people to express their opinions, it's quite simple. "Do you think this washing machine would be useful? Yes or No? Do you think a washing machine will save you time? Yes or No?" Those are attitudinal questions.

On the other hand, behavioral research is a question best left to user experience researchers. "How do people actually behave while they are washing clothes? What kinds of problems do they run into?" These questions of behavior cannot be completely understood through market research alone. When you really want to know what people will do as opposed to what they just say, that's when you need insight on the behavioral level and should consult user experience researchers. When you want to understand the "why" behind your attitudinal insights, then you have no other way but to use user experience research methods.

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Not Surveys

<u>**Walmart's $1.85 billon dollar mistake**</u>

- $1.85 billon dollar customer experience mistake made by Walmart (a conservative estimate of lost revenue that does not include the hundreds of millions spent on remodeling stores)
- What happened? Walmart rolled out "Project Impact" - a major change in strategy and store customer experience - starting in 2008
- Why? Customers answered a Walmart survey and told Walmart that they would prefer less clutter in the stores

YOY Same-store sales

http://dailyartifacts.com/walmarts-185-billon-dollar-mistake
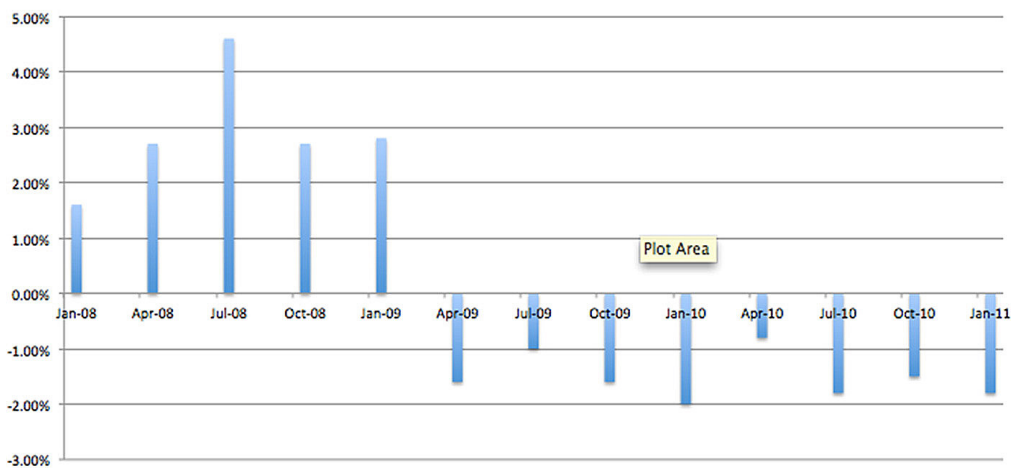
*In depth research would have revealed that piles of merchandise and chaos
are associated with low prices and provide social proof.*

It sounds like understanding the behavioral aspect can give a lot of insight into the design process.

Yes. Market research will answer questions about general trends, opinions, market sizes, these kinds of things. User experience research, on the other hand, looks at the entire ecosystem of the user. This includes the environment, actors and artifacts, needs and desires, barriers and blocks, core values, cultural aspects, and how all these interact and influence usage and purchase decisions.

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As you just indicated, it seems the idea of understanding the behavioral aspect of product research is an area where demographics, cultural influences, and the overall ecosystem become important.

That's right. Because ecosystem is something that market research doesn't confront very well. It's very difficult for market research techniques to uncover the entire ecosystem and how different issues are linked together.

Ecosystem research is a key part of HFI's approach to user experience research. I'll give you an example. We worked very closely with a washing machine manufacturer last year. It really displayed the differences between market and user experience research. The company came to us with a large amount of very good market research. They asked us to do ecosystem research, but they wanted us to be informed by the market research they had already completed. When we viewed the presentation by the market researchers, it was slide after slide telling us things like: what percentage of women in India wash clothes by hand; their income levels; which cities they lived in; the percentage of women who passed the job along to servants; and so on. It was all about percentages, down to the last detail.

At the end of the whole presentation, I still had no clue what people really wanted. Did they really want washing machines? What was it we were taking from this research? My takeaway was that many Indian women still hand wash clothes, and a lot of Indian women use their maid servants to wash their clothes. Sure, that is interesting, but this is common knowledge in India. Did you need to invest so much time and money to validate that? I'm not so sure. At the end of the presentation, the market researcher suggested creating a washing machine that specifically deals with germs and bacteria in a way other washing machines do not.

We did use that information to guide our research. But, immersed in the ecosystem, we found that nobody worries about germs and bacteria. At the end of the study, we did hear one thing from the users we studied—they would worry about germs if there was an infant in the house.

"Ecosystem is something that market research doesn't confront very well... it is a key part of HFI's approach to user experience research."

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Otherwise, there was almost no concern at all. Some of the housewives even said that products that claim to fight germs and bacteria were untrustworthy and not effective in the Indian environment. They even felt that their families needed to be exposed to some amount of germs and bacteria to develop strong immune systems.

These findings were very different from the findings of the market researchers, and that's because certain things are very difficult to understand through indirect or group research alone. If somebody asked you, "Would you like to have a washing machine that kills germs and bacteria?" would you say "No?" But, when you visit the homes and see what they are like and talk to the families, you get a much clearer perspective about how high a priority this really is.

Furthermore, you get into deep conversations about all of the issues surrounding their clothes washing habits. In fact, these conversations happen as part of the research process, providing insight into many aspects of their lives. People are open to telling you what bothers them, what makes them feel angry—and it's not just about washing—it's about everything. And everything influences their decisions to buy and use something. Hence, if you rely solely on market research, you're missing a huge opportunity to learn about countless factors surrounding usage and purchase decisions.

When you invest in user experience research, it seems you develop not only deeper insight, but you learn things that are immediately practical. This is very valuable and can save organizations time and resources by helping them make wise decisions more effectively early on.

Absolutely! We have helped clients avoid investment disasters through the unique insight user experience research brings to the table. Organizations don't just need high level insight—but they also need specific information about the product or service in question. It might be something as simple as, "You need to improve the panel on the washing machine," that can make a huge difference to the people who are buying your products.

"Certain things are very difficult to understand through indirect or group research alone."

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"With all of the economic growth and resulting power shift to emerging countries, there is likely to be a shift in value systems."

Let's say I'm a UX professional, and I'm really excited by this topic. What do I need to understand about marketing research and how I can work effectively with these professionals?

The most important thing for user experience professionals to know is when marketing research is needed, and when user experience research is needed. If you understand how these two methodologies work together through a product lifecycle, you will be able to work effectively with marketing departments. You can demonstrate the value of including user experience research in their projects because you are able to explain how it complements the market research they are already conducting.

But, a user experience professional who has no idea about the strength of market research might be viewed as uninformed. Marketing departments are already accustomed to working with large data sets and statistical analysis, but they might not understand the need for deep insight. Be clear that although you aren't an expert in that area, you understand its importance in the organization. You'll probably need to work with marketing research data to do your work effectively.

HFI often takes insights from market research and uses them as a starting point for user experience research. In fact, some of our most successful projects have leveraged the synergy between marketing research and user experience research. Marketing and UX both have a role to play, and both groups must be able to clearly articulate the value of their research and how it fits within the product lifecycle.

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About Apala

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Apala Lahiri Chavan 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.

She is an award winning designer (International Audi Design Award) and specializes in the area of Cross Cultural Innovation and Design.

Beginning as Managing Director—India and Vice President—Asia. Apala has taken on a new role recently in HFI as Chief Oracle and Innovator.

Apala and her Contextual Innovation 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 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.

Recently, her focus has been on the emerging markets. She has co-edited a book on this subject, *Innovative Solutions: What Designers Need to Know For Today's Emerging Markets*.

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