Clearhead

New Principles For Data-Driven Experience Design
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It is almost a cliché to state that customer experience matters more than ever. It has been said that customer experience is the marketing strategy. Every executive, marketer and designer is acutely aware of this notion. With each passing day, however, this truth becomes more unsolvable for businesses.

A deluge of emerging technologies, customer data and market expectations accelerate so quickly and with such fragmentation that, for digital leaders, it can feel as though it is impossible to design the “great experiences” that the market, in general, or their customers, in particular, desire.

There is never enough time, resources or sheer ingenuity to keep up with emerging, native digital start-ups that are shaping new patterns for user experience. Similarly, it’s hard to keep pace with the outlying leaders ("the haves") that are able to innovate and experiment with tremendous capital and leverage and, in doing so, actually shape market expectations.

This handbook is for all of those digital leaders—the executives, the designers, the marketers, the product managers, the engineers—who, despite the impossible, humbling rate of change, still search for great experiences at the intersection of design and data.

We hope that this handbook provides you with methodologies and principles that, when practiced, yield behaviors and experiences that realize the full potential for data-driven experience design. This handbook is about removing the obstacles and the buzzwords that separate brilliant aspirational goals from the design thinking and insight necessary to continuously and confidently deliver beautiful experiences that perform for your customer and, in turn, for your business.

Every chapter in this handbook investigates principles of data-driven experience design from a different lens:

01. A design lens
02. A metaphysical lens
03. A scientific lens
04. A personal lens

Closing the gap between great experience design and measurable performance is long overdue. With a clear understanding of data-driven experience design through each lens, you can begin to use data and experimentation as the basis for creating great customer experiences that bring tangible and measurable impacts.
01. Good design is evidence-based design
“Is there art in a broomstick?” asked Time magazine in 1953. “Yes,” says Manhattan’s Museum of Modern Art (MOMA), “if it is designed both for usefulness and good looks.” More than 60 years ago MOMA played a leading role in the definition and dissemination of “good design,” a concept based on the precepts of functionalism, simplicity and truth to materials that grew in the decades following World War II.

Around this same time, German industrial designer Dieter Rams emerged as a leading design thinker, world-renowned for designing consumer products that intersected form and function. His design principles, which can still be found today on the T-shirts of designers and on posters around design-minded offices, are grounded in doing the minimal amount of design needed to solve a problem: “less but better.”

Any design beyond what solves the problem would be aesthetic (form or function not explicitly required to solve the problem) and should be weighed against the risk of introducing additional problems.

A lot has obviously happened between the 1960s and now, fueled by the imperative for designers to take advantage of technology innovation. The introduction of PC design software allowed multiple generations of designers to do “more design, faster.” Each successive technology advancement has, necessarily, made web and app design more complex (more layers, more editing, more motion, more graphics, etc.), often betraying the human desire for the simplest solution possible.

Today, design matters more than ever, but it is often assumed to be about the aesthetic or creating an unsailable feeling in the product’s user rather than problem solving. Further, due to a deluge of data and technology, design professionals often struggle to understand the root problems they need to solve. Finally, despite our advancement in data and technologies, designs typically get brought to market without the benefit of consumer validation.

A good customer experience will have evidence that it solves problems for the user and delivers measurable financial performance.

With so many industries facing pressures on business performance along with higher customer expectations, it’s time to challenge our evolution and adoption of design thinking. The rise of technologies and data make it possible to redefine “good design” as something that actually delivers measurable performance, in the short- and long-term. It should create net new value as measured by observable growth in a metric of return on investment (profit and loss, net promoter score, customer satisfaction, etc.). Uber and Lyft, for example, now control more than 70 percent of the US business traveller market through a new design for ground transportation, leaving taxis with just six percent market share. It’s time for a new design manifesto: a good customer experience will have evidence that it solves problems for the user and delivers measurable financial performance.
The evidence-based experience design manifesto

The evolution of web design has followed a path from static pages in the early 1990s to more visual static pages, to more dynamic pages. In the early 2000s companies started thinking of the user’s journey through the website. Digital design began to pivot from graphic and interaction design to user experience (UX) and human-centered design.

The cost of gathering customer data is dropping, and the democratization of digital analytics, testing and targeting software is increasing the ease of experimentation and testing. But still today, there is a decoupling of UX design and experimentation in many organizations and a failure to maximize the benefit of rapid evidence gathering at scale.

Consistent with Dieter Rams’ perspective on consumer products design, good digital design has to solve problems and the only way to know if a design is solving the problem is by testing and proving that it does. Experimentation is integral to how a solution is designed. A solution can be aesthetic and innovative but, short of proving it solves the problem, its value is subjective.

We believe that good experience design is evidence-based experience design and that it represents the next frontier in UX design evolution. The core principles of evidence-based experience design are shared herein. But, to summarize them in a narrative, we’d suggest that evidence is gathered continuously through a design process that never ends.

Evidence is gathered to understand user and business needs and to understand the impact of a solution on the user and the business. Evidence-based experience design deeply values the understanding of user problems and, therefore, focuses on elegant design solutions that deliver the precise amount of aesthetic design necessary to address the problem. Similarly, evidence-based experience design recognizes the user’s needs and control without the bias of business priorities or the subjectivity of aesthetics. Evidence-based experience design values beauty, innovation and creativity most when they solve important problems.

More than a solution, evidence-based experience design is a confident and continuous practice and operating system for designing, with closer proximity to the truth of the problem the users most need solved.
Principles of evidence-based experience design

1. Good design solves problems
2. Good design is measurable
3. Good design does no harm
4. Good design is an experiment
5. Good design is iterative
6. Good design is research
7. Good design listens
8. Good design enables user control
9. Good design is curious
10. Good design is statistically confident
A design lens

What to remember:

1. The next frontier of UX design is evidence-based design.
2. Design is a continuous experiment.
3. Evidence determines if design is performing.
4. Good design delivers measurable performance.
5. Design performs when it solves problems.
02. A metaphysical lens

The physics of ROI: from projects to problems
People spend their careers focusing far more attention on solutions than problems. It’s natural human behavior. After all, problems are burdensome. And there are a multitude of traps organizations easily fall into that lead them to focus on solutions first, such as:

- Table stakes—certain things we perceive have to be done to compete.
- Low hanging fruit—focus on the easiest things to do first, assuming they are valuable.
- Keeping up with the Joneses—do something because your competitors are trying it.
- Follow the leaders—read somebody else’s case study and try out their idea.

When a company is investing millions of dollars and thousands of person-hours in pursuit of a solution, that solution is naturally jeopardized if the organization is not clear on the core problem it is solving. Problems are the fulcrum for good solutions. Ideas are plentiful, but well understood problems are rare.

When evaluating a new business venture, a common question investors ask is, “What big problem are you solving?” This is then followed by: “How will you reduce the problem enough to create value?” Value is created when problems are eliminated.

Steve Jobs is widely known for his focus on value creation. In a 2006 interview with *Newsweek*, he explains his views on problem-solving:

“When you first start off trying to solve a problem, the first solutions you come up with are very complex, and most people stop there. But if you keep going, and live with the problem and peel more layers of the onion off, you can often times arrive at some very elegant and simple solutions.”
The laws of ROI

In the early days of experience optimization, and still often today, the common starting point for design was hypotheses—or clearly stated ideas about solutions. Some produced great return on investment. Others did not. Solutions that delivered results for one company did not have the same impact at another. Why was this?

Having considered thousands of hypotheses and the results in testing them, we noticed an unassailable trend. There are physics principles at play in user experience optimization: value is created in direct correlation to the size of the problems solved. Quite simply, the ROI goes up when the volume of problems goes down. Conversely, returns go down when the volume of problems goes up (i.e., you break more than you fix). And, returns are flat when the volume of problems stays flat. This recognition can change an entire business. It helps companies shift their investments from ideas and projects to problems and solution hypotheses.

Applying these physics principles to the user experience tells us that a user experience that solves a problem generates a return. One need only look at a trio of brave and successful digital start-ups to see this law of physics in action: We by Parker has grown to a company valued at $1.2 billion in five years by solving a massive problem for consumers: access to fashionable, reasonably priced glasses that people can try, without risk, from the comfort of their own homes. Similarly, Airbnb solved a massive problem: matching travelers with affordable, reliable, short-term accommodations, when hotels will not suffice. Finally, Rent the Runway, recently valued at $800 million, creates oversized value by solving a problem for fashionistas on a budget.*

Often referred to as the “Netflix for dresses,” the company gives those unable to afford to purchase exclusive designer fashions the ability to still dress in them.

A solution can be innovative but will only deliver sustained value if it solves a problem. That means:

- Love your problems. They are your most valuable assets.
- Find them. Understand them. Size and prioritize them.
- Then, focus your investments on solving them.

The physics of ROI

Value is created in proportion to the problems your product or service solves for customers.

Value deteriorates in proportion to the problems a product or service fails to solve or to the net new ones it creates.

Value stagnates when the product or service neither solves nor introduces new problems.
Problem Solution Mapping

Problem Solution Mapping (PSM) helps organizations apply the physics of ROI to their business. It is part design thinking framework and part business optimization methodology. PSM aims to unify an organization around a common set of goals, problems, and solution hypotheses that are researched and validated with data. It was developed based on observations and cumulative learning from many years of UX experimentation.

PSM helps ensure a company solves the biggest problems and delivers confident and measurable outcomes. It can be applied to both business and customer-facing problems. The operating system helps businesses pivot from projects and roadmaps to programs and portfolios of experimentation on problems.

By aligning the business around the highest priority goals, and the most important problems getting in the way of those goals, every idea to solve those problems has a higher impact on the bottom line. Not every problem can be solved, but instead the most important and impactful ones will be solved. Consider Uber, for example. As Uber tests and learns, many customers move past smaller, discreet UX problems because the company effectively solves the gigantic problem of predictable, frictionless transportation.

It’s also not a “one and done” effort. Problems not focused on today may be the focus tomorrow. PSM is a way of operating to continuously solve problems recognizing the physics of ROI.

How PSM works

PSM follows a five-step approach. It starts with identifying clear goals.

Then, through data and evidence, it pinpoints the largest problems blocking those goals (the problems most worth solving).

Next, it generates ideas (or hypotheses) and tests them via experimentation to determine with statistical confidence which hypotheses are most likely to solve the problems.

Finally, based on the outcomes, it determines the next steps.
Goals

Most businesses don’t spend enough time clearly defining goals. For instance, an unclear goal may be “acquire new customers.” A better, more specific goal would be “improve new customer conversion by 20 percent in 12 months.” To test if a goal is sufficiently clear, ask if it is SMART: specific, measurable, actionable, realistic and time-based. Once goals are determined, prioritize and rank them, obtain leadership signoff on that prioritization and share them across the organization to ensure everyone is onboard.

Problems

Problem research is hard but an invaluable use of time. Good ways to find problems include internal brainstorming, watching and recording users, talking to the customer service team that is on the front line of the customer experience, customer surveys and research and analytics. Often the initial problem identified is not the true problem. To get to the root problem, ask “why?” Then continue to ask why until the question can no longer be answered or the answer is beyond the organization’s control. The closer the team gets to the root problems, the more likely it is to disrupt in a positive way. An example of a problem that is not a root problem: “Our site is not personalized enough.” A more actionable root problem: “We create too much work for X users to navigate to the products they purchase frequently.”

Next, validate that the problems are real. Data helps to differentiate signals from noise and determine which problems are real, which are suggestions, and which are distractions. Once real problems are identified they will naturally cluster into groups. Size and prioritize the clusters and align the organization with the problems most worth solving.

The marker of all good customer experiences is the extent to which they solve problems for your customers. Let problems be your compass and your North Star.

Solution Hypotheses

Develop hypotheses for solving the problems most worth solving. A good format to get to the specificity needed is to frame the hypothesis in this way: I believe that [insert change claim], and if I am right then [this is the outcome we expect]. Questions to test whether the hypotheses are useful and appropriate include:

- Will it solve the root problem?
- Will it create more problems than it solves?
- Is it specific enough that a developer or analyst can experiment based on it alone?
Experiment

Experiment to test the hypothesis. An experiment spans from the planning, design, development and creation of an experiment to the validation, learning and next actions and is a statistically rigorous test of variations or permutations against controls in a controlled environment. Apply FSM to improve any aspect of business, not simply as a way to experiment on web UX and digital products, but on products of all types (IVR, OTT, IoT, etc.) and as a way to experiment across the business from organizational readiness, to sales and marketing, to human resources, and employee retention.

Outcomes

Once an experiment has been running long enough to gather a sufficient amount of data, it is time to determine what the data is telling us. This “data story” will tell us whether the control, or variations, performed better and points to what our next steps should be.

Three questions to ask:

What have we learned?

How should we apply what has been learned?

What should we do next?

The outcome of an experiment does not signify the conclusion. Rather, it is a jumping-off point for further learning and optimization.
A simple example: Vitamix

Vitamix is a privately held blender manufacturer based in the Cleveland, Ohio, area. Vitamix brought a problem to us: first-time visitors struggled with the filters and facets their website offered for browsing through its products. The team researched the problem with users. The feedback received was not that users disliked the design of the filters and facets, but rather that they struggled to understand the complex ways in which blenders are differentiated (speeds, blade size, etc.).

The team refined the root problem to state: our customers require more guidance for selecting the right blender than our filters and facets provide. Customers were looking for less self-serve and more guidance. The filtering had fallen short not because of how it looked, but because it didn’t address the problem of helping users make choices.

The team created a hypothesis: I believe that a guided recommendation process will make it easier for new customers to match a blender to their needs. If I am right, new customer order conversion will increase by 15 percent.

The team built the “Blender Recommender” and conducted live experiments. The Recommender asks the users a series of questions about preferences and their intended use and makes recommendations based on their responses. Outcomes show that the Blender Recommender is solving the core problem it was intended to solve and, as a result, is producing growth in new customer Net Promoter Score (NPS), order conversion rates, and many other more specific metrics.

What to remember:

1. The laws of optimization: value goes up when problems go down.
2. Want better financial returns? Focus investments on solving big problems.
3. PSM is a framework designed to put problems in the center.
4. Business problems can be anywhere so experiment and optimize everywhere.
Experimentation is how you do things
Experimentation is not a thing you do. It’s how you do things.

For most of the first two decades of web design, the website and the web experience were not traditionally seen as something on which to experiment. The cost and risk were perceived to be too high, and the skills and technology were scarce. Instead, site design and builds were laborious creative and technical efforts in which teams did research at the outset, debated and pursued what they thought were brilliant and creative ideas, labored to make everything pixel perfect, wrote code, conducted quality assurance, launched, and hoped customers liked it. They then analyzed data, repeated the process with new ideas, and released improvements in a waterfall approach.

This approach started changing in the last 10 years with the proliferation of A/B testing software that provided the ability for front end developers and marketers to test things on the website quickly and with less risk to performance. But many companies embraced A/B testing in a highly constrained way.

They hired an “A/B testing person,” who was typically a developer or analyst who was proficient with certain tools. This evolved into a bigger, usually centralized, optimization team (developer, analyst, project manager working together), still separate from the creative design team. These new Centers of Excellence for optimization, complete with governance models for submitting hypotheses to test, became backlogged with ideas to prioritize, run experiments, and report back to the business teams. A/B testing was constrained to landing pages or small front-end changes that did not challenge major marketing, design or engineering assumptions.

Regrettably, the vast majority of businesses still operate this way. The testing program tests within the constraints of what is feasible to test, and most design and code is released to market untested. The notion that experimentation is an optional facet of design or product development is a failure in the evolution of digital optimization.

Experimentation is not a thing occasionally done on the tail end or edges of design.

Experimentation is core to all good design and product development. To be clear, experimentation is not a thing you do. It’s how you do things. The segregation of design and experimentation and the relegation of experimentation to small changes and deep funnel performance metrics, limits the learning and innovation of good designers and good design.

For years, digital transformation has been about bringing in digital talent, moving operations to the cloud, shifting from waterfall to agile. While these are often critical steps, what will help us transform more profoundly is to move from a business that has too much conjecture and learns too slowly to one that experiments constantly and learns faster.
The democratization of experimentation

Despite the constrained testing taking place in the majority of companies, businesses like Netflix, Amazon, and Facebook are known for the volume and velocity of their experimentation. This can’t be done if experimentation is funneled through a Center of Excellence (COE) or a single A/B testing team. To test at this scale, everyone in the company has to understand and employ experimentation.

The democratization of experimentation requires a sea change of organizational pivots. If a central function such as analytics or engineering is chartered with experimentation it will, by definition, be highly constrained from the start. Responsibility is tacked into the wrong place and thought of as being small iterations for incremental improvement. Democratization requires a wholesale rethinking of experimentation and optimization as part of the business design with all functions enabled with the analytics and technology to participate. It can be done across channels and through all of the elements of the UX. It serves as a single operating system and a cross-functional capability that everyone possesses. And, it is not just applied across the UX but to the entire enterprise.

What then helps the organization to scale and reach broad adoption is having a consistent, centrally defined way of experimenting—common tools, vocabulary, metrics, and processes for how problems are identified and hypotheses developed. Through a framework such as PSM, the organization has a common operating system for experimenting in digital product and experience, pricing, and supply chain—all parts of the business. The core concept of problem-centricity and experimentation is the same.

Common org models for experience optimization

<table>
<thead>
<tr>
<th>Emergent</th>
<th>Controlled</th>
<th>Centralized</th>
<th>Democratized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each participant defines their own strategy, resourcing and budget.</td>
<td>One department controls the experience optimization strategy and rolls it out to participants.</td>
<td>Centralized cross-functional team provides a universal framework, strategy and process to be implemented by each team.</td>
<td>Teams act nearly autonomously from each other under a common brand.</td>
</tr>
<tr>
<td>Benefits</td>
<td>Great for consistent customer experience, coordinated resources and rapid response.</td>
<td>Central group is aware of what each spoke is doing and provides holistic experience to customers with centralized resources.</td>
<td>Teams are given individual freedom and agility to deploy as they see fit, yet a set of common services and strategy is shared across all.</td>
</tr>
<tr>
<td>Risk</td>
<td>Does not scale well and does not enable true collaboration.</td>
<td>Executive support required, program management and cross-department buy in.</td>
<td>Requires constant communication for all teams to stay coordinated.</td>
</tr>
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An experimentation team  Experimentation as a capability that lives broadly in the business

The mindset that experimentation is a technical or analytical function  Thinking of experimentation as a design, product and business innovation, and a performance function

A roadmap of experiments  An enterprise program and portfolio of experiments around core business problems

A series of hypotheses that get tested  A series of critical business problems the whole business is experimenting on

An A/B test manager  A conductor who is managing a portfolio of experiments around a problem and understands how all other parts of the business play to it

Thinking of success as increasing conversion rate  Thinking of success as experience and lifetime value, measured by average revenue per user, net promoter score, or customer satisfaction, just as much or more than session-related conversion

Conversion rate optimization ≠ experience optimization

As organizations move through this transition, many fall prey to thinking myopically about conversion rate optimization rather than more broadly about experience optimization. There are many ways to get users to buy something sooner or perform a task earlier than they otherwise would—through design that removes friction or through discounted pricing, for example. Earlier purchase does not mean the user had a better experience or a better outcome. If the user explored the site further, he may purchase something at a higher price or purchase more.

To be sure, online order conversion rate (OCR) is an important metric, but it is not a proxy for measuring the experience through net promoter score, customer satisfaction, customer lifetime value, or revenue per user over a target period. Experience optimization requires measuring in a different way. A web conversion rate could go down, but a user's overall positive online experience could result in greater spending in other channels, taking actions that are driven solely by a desire for higher conversion rates can be at the detriment of the overall business. The objective is experience optimization.

Finally, successful businesses are experimenting beyond the digital experience. They are experimenting through all veins of their operations—from their brand value propositions to their supply chains. Rather than looking at projects by department (marketing, sales, engineering, etc.) they are simply doing two things with all groups collaborating: understanding user problems, and designing and experimenting with solutions to those problems. In the most basic sense, the organization that experiments continuously on the problems most worth solving is the one most likely to achieve and exceed product market fit.
What to remember:

1. Experimentation is not a thing you do. It’s HOW you do things.
2. When centralized in a business, experimentation is often constrained and underserved.
3. To achieve enterprise-wide experimentation, a system has to be in place that has codified a common methodology, goals, and vocabulary for experimentation but democratizes the hypothesis development and testing effort.
4. Conversion rates measure the success of specific tasks but do not necessarily measure the health of an overall customer experience. While OCR may or may not correlate to business value, a successful experience always will.
From the ocean of personalization to the beach of personal experience design
Personalization is both an ocean of possibilities and a persistently frustrating term

For most companies, it’s a line item on the budget that has been there for years and has been consistently deferred or has produced unclear benefits. And still, the promise of personalization persists as a lofty pursuit for so many digitally inclined businesses. As often defined, personalization can sound like a moonshot: ideas ("the right content at the right time to the right individual") that takes so long to complete, that by the time it is done it may no longer be relevant.

Today, companies are creating data lakes, building a single view of customer data, creating recommendation engines, implementing localized ad targeting, and a gamut of other things. They are trying to swim in an ocean filled with various technologies, customer data, applications, and endless possibilities to assist them in “doing personalization.” But the ocean is unswimmable. It’s too deep and it is full of high waves and rip tides.

What businesses can do is to move away from trying to “do personalization” and think about how to create more personal experiences. They can stop worrying about the ocean of personalization and learn to love the beach of personal experience design. The personal experience island draws what it needs from the ocean in order to thrive, and all activities undertaken are in the service of that experience.
In Data & Signal

Content & Experiences

UX Design

Explicit

Conversational

Intelligence

Implicit

User Control

Content

Out

Content & Experiences

A personal lens

That means the organization starts with the customer problem and the hypotheses to solve that rather than, for example, starting with personalization technology and what it enables. Without question, the hypotheses could require software acquisition, or data services, or architecture changes, but the difference is that those requirements are experience-led versus technology- or data-led.

The most ubiquitous form of this is, of course, a search bar, which listens to what the user wants to search for and responds accordingly. Netflix’s recommendation engine also does this. Netflix explicitly listens when users indicate preferences upon sign up—they implicitly listen when users give thumbs up and thumbs down to things they watch. They then use collaborative filtering based on what the user is watching and rating highly, and what others watch and rate similarly.

There are two important areas to get right to refine the personal experience: knowing what inputs actually matter, and enabling more explicit user control. There is a myriad of possible customer information one could collect, but only some is predictive of more valuable outcomes. This is why there has to be an understanding of the experience the organization wants to power. It is the desired experience that determines the inputs that matter the most.

Personalization has historically employed a good deal of guessing. The creation of customer segments is subjective. Anticipating that a certain segment would respond to one offer better than another is guessing. Rules engines are built on guessing—if the user does this, then take that action. And, while collaborative filtering can be more intelligent than segmentation, it is still a form of guessing that becomes more accurate as the sample size increases and statistical confidence grows. Listening to the user—implicitly or explicitly—moves the experience from one based on guessing to one based on knowing.

A personal experience is any experience that listens to the user implicitly or explicitly and uses that insight to adapt content and experiences for greater relevancy or personal utility.
The ins and outs

A limited amount of information can create a valuable personal experience that delivers return on its investment. Spotify generates its Discover Weekly playlist after getting to know the listener’s musical tastes for a few weeks. Kindle recommends books based on prior reader selections and then allows users to rate books to improve Kindle’s recommendation algorithm. Netflix doesn’t require vast amounts of demographic or psychographic data on its customers to recommend videos to engage people. They work primarily off content consumption.

Knowing what the right inputs are to create the experience comes from experimentation. In the Netflix example, Netflix uses collaborative filtering, but what if Netflix knew if someone had just returned from a festive night out with friends. Would that be useful to making the best recommendations? What if they were on a beach vacation at their hotel? The way to determine this is by experimenting with how different inputs and weights would refine an algorithm. Invest in getting the data point, perhaps by asking the user, power recommendations on that input and see how it performs. Personal experience design is not separate from enterprise experimentation. It is part of a portfolio of enterprise experimentation but centered on a different problem—one of loyalty, utility, or relevance in the pursuit of more converting events.

We think you’ll like this...

Netflix Recommendations: Organizing content based on product data that adapts to signals in (what you’ve watched) and outputs categories and product suggestions based on an algorithm that connects inputs to a product genome.
User control

A second important area to get right is enabling more explicit user control. On the web, “personalization software” often yields experiences that don’t feel personal. Every day, robots and algorithms are recommending things to users, and to varying degrees users have no visibility to why, and no ability to help those robots improve. As decisions are made through data, organizations tend to put too much emphasis on implicit, and not enough on explicit, listening. This approach is in contrast to two human instincts: don’t guess who I am, ask me, and let me control as opposed to putting something in front of me.

One step toward giving users more control is being transparent on why choices are being offered (e.g., “this is suggested to you because ...”). Many thought leaders from Google to Microsoft to the World Economic Forum espouse the importance within AI design of explaining to users how machines think or what algorithms are doing.*

Ask them, visually.

Warby Parker Selector: Rather than pushing users to search and filter for frames, Warby Parker simplifies the navigation and discovery process through simple, highly visual inputs based on intuitive questions that then output more relevant results.
Another way to give users control is to let them provide information. Humans can customize output as well as applied intelligence would in a search algorithm. By asking questions, and creating controls that allow the user to adjust, correct, and share preference, the organization has more signals and information to create a smarter output, and a more personalized response than segmentation or clustering can produce. It is a conversational user experience loop that moves from input, to intelligent output, to customer response.

A guided concierge experience, such as Sephora’s Gift Finder quiz or the Stitch Fix Personal Style quiz, is one way to give users control. Product or service configurators, such as Dell’s for laptops, Nike’s for shoes, and Warby Parker’s for eyewear are another. Preference centers, such as that offered by Quora, Carnival Cruise Line or Mango (fashion, not fruit), are a third. Consider this: if someone repeatedly goes to a site to exclusively buy a specific style of women’s pants, why not listen and respond to those preferences or allow the user to set those preferences? Based on these explicit preferences, when that user comes back to the site, rethink the navigation, search results and recommendations to recognize and respond to these preferences. This approach is much more “personal” than what might be inferred based on cookie data or collaborative filtering.

Personal experience design is a form of experience optimization. Just like other forms of design experimentation, it is centered on a problem—of relevance, or utility, or loyalty—and should be tested and optimized. Inputs can be tested. Algorithms can be tested. UX and content outputs can be tested. To be clear, personal experience design is not better or worse than A/B testing. The two terms are highly related and similarly not comparable.

As user control and data transparency increasingly become imperatives of digital experience design, the promise of personalization is coming into focus. Rather than pursuing the impossible, the core tenets of personal experiences are highly achievable through evidence-based experience design principles. Like all UX, the only good personal design is not that which is most complex, data-driven, or novel. It is that which demonstrably solves user problems.

Preferences are personal

Stitch Fix asks users to provide explicit inputs to a robust set of preferences through their Style Quiz and then uses those inputs to increasingly match their products to your style. Similarly, Quora offers an easy and accessible preference center from its native app menu to ensure notification and content align with user expectation and controls.
What to remember:

1. Rather than starting with the data or technology, begin your personal experience designs by identifying problems of relevance or personal utility that are worth solving.
2. You can A/B test personal experiences just like any other experiment.
3. Any experience that uses data about the user to power the output is a personal experience.
4. Personal experience design values listening, user control, and data transparency.
It’s an undeniable truth that customer experience matters more than ever. At the same time, the path toward a better customer experience is unattainable in the minds of many executives, marketers and designers. But, native digital companies such as Amazon, Google, and Facebook have grown a test-and-learn culture that optimizes their customer experiences continuously and delivers results for their customers and their bottom line. They are forging a new frontier of designing with evidence and transforming through experimentation.

The principles of data-driven experience design shared in this handbook can be adopted by anyone—at the enterprise level to solve problems, or to optimize the customer experience. They are based in simple concepts: good design is evidence-based; the physics of ROI require a focus on problems not projects; experimentation is how you do everything; and personalized experiences lead the way toward personalization.

Evidence-based design is a new frontier in customer experience design thinking and practice. It is designed to give you—the curious digital leader—a clearheaded approach to building customer experiences that perform.
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Accenture Interactive

Matty leads the North American Experience Optimization offering for Accenture Interactive. Previously, Matty was the Founder and CEO of Clearhead, the world’s largest pure-play UX Optimization agency. Clearhead was acquired by Accenture Interactive in 2017.

Prior to Clearhead, Matty served as the Chief Digital Officer for the Warner Music Group. Matty arrived at Warner Music Group when his start-up, Insound, the first vinyl record store on the internet, was acquired in 2007.

When not with his family in Austin, Matty divides his time between evidence-based design, advanced baseball statistics, and piles of vinyl records.

Ryan Garner
Managing Director,
Experience Design and Optimization,
Accenture Interactive

Ryan Garner is the Managing Director of Experience Optimization for Accenture Interactive. Ryan served as the co-founder and Chief Product Officer of Clearhead prior to its acquisition by Accenture Interactive.

Prior to co-founding Clearhead, Ryan was client-side at Warner Music as Vice President of Direct-to-Consumer Services, and at JetBlue as a product manager and solution architect for JetBlue.com.

After a 15-year stint in New York City, Ryan returned to Austin, Texas, where he’s enjoying the live music, the craft beer, and the front and backyards he gets to play in with his sons.
About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 449,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com

About Accenture Interactive

Accenture Interactive helps the world’s leading brands transform their customer experiences across the entire customer journey. Through our connected offerings in design, marketing, content and commerce, we create new ways to win in today’s experience-led economy. Accenture Interactive has been ranked the world’s largest digital agency in the latest Ad Age Agency Report, for the third year in a row. To learn more, follow us @AccentureACTIVE and visit www.accentureinteractive.com

References:


