Labs Quarterly

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Volume 1

Labs Quarterly Volume 1

Introduction

— Gemma Wisdom

Welcome one and all to the very first ever Labs Quarterly. This little book in your hands is the amalgamation of the very best thoughts and words that we have strung together recently, a compilation album of our greatest hits that are sure to entertain, enlighten and otherwise engage your thinking muscles.

Grace Hopper once said that the most dangerous phrase in the English language is "We've always done it this way" and that is why the Labs look for alternative approaches to every problem that we encounter. We provide a different angle from the mainstream view, instead of accepting things as "common sense" we question why things are done the way that they are, and we would like to think that is reflected in the pieces that we have gathered here for you.

For this first edition we have collected some of our most read articles – pieces with insights that have continued to resonate with our readers. As you would expect from a team as diverse as the one that you find lurking in our labs, these cover a broad variety of themes and topics ranging from practical tips for dealing with the intricacies of icon design to more contemplative pieces where we compare and contrast different design philosophies and cultural viewpoints.

Albert Einstein is credited with the bookending quote to Hopper's, although there is no evidence he ever said it. "The definition of insanity is doing the same thing over and over and expecting different results." While our process in the Labs may look a little deranged from the outside – with post-it notes appearing on every surface like there has been a small, localized, bizarre blizzard – the truth is that by breaking down the processes that people take for granted, we are able to rebuild and improve them. And if you don't believe me, just read on, and you'll see.

SUTHERLAND LABS

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A degree at Yale, 8 years at Apple and 18 more in research have made Andrew insufferable at dinner parties as he examines the usability of the pepper grinder. He loves affordable technology that affects the lives of the wealthy and the rest of us alike.



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Simon, director of design research, is a co-founder of the international UX Alliance and a Journey Mapper Extraordinaire. His skills in experiential cartography are unmatched, much like his miraculous talent for not getting hit by London traffic when biking to work.



Psychologist, anthropologist, Royal

Society of the Arts Fellow, product

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25 years in the industry.

Sutherland Labs has worn over his

designer and Leica enthusiast; these

are a few of the many hats that Owen,

Gemma Wisdom

With over 13 years in the CX & Design industries, our communications and operations director, Gemma leads strategy initiatives, shapes company culture and guides thought leadership; sharing our stories with the world.

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Design Thinking and Engineering

- Owen Daly-Jones

Our very first piece comes from none other than Owen Daly-Jones, SVP and Global Head of Sutherland Labs. In it Owen takes a long hard look at the culture differences between the design thinking and engineering fields. Comparing the Japanese principle of Kaizen; the pursuit of perfection in design, with the more collaborative and organic processes of European design. So, without further ado, we present to you, Design Thinking and Engineering. They'll tell you these elephant-in-the-room products were unpredictable. They'll explain that their job is building stuff, shifting boxes is someone else's department. But is it? When products fail it might be nothing to do with the physical engineering of the product, but it's a mistake to assume it must therefore be a marketing failure. Product fails often reflect shortcomings in the design philosophy of the engineers that built them.

The idea that engineering-led product and service design can lead companies into problems (problems design-led companies tend to avoid) isn't new. Quite the reverse, in fact. It's old. That's because it's a reflection of deep rooted, cultural differences between the disciplines of design and engineering. Today, as design-led brands dominate the digitized modern economy and the engineering giants of 20th Century manufacturing struggle to keep up, this ebb and flow of market forces expresses a cultural divide of profound importance to the future of the global economy.







Where engineering aims for perfection, design values imperfection

The classic engineering mindset is expressed by the Japanese word 'kaizen', meaning "continuous improvement'. This was the design philosophy that reconstructed post-war Japanese engineering giants like Toyota, Honda and Nissan. The premise is sound: Continually monitor and improve every process from the shop floor to the CEO's desk. In product design, kaizen drove the trend towards making things smaller, more efficient and more reliable. But kaizen is an after-thefact process. It produces better products for the next customer, not the one you just lost because the product wasn't up to scratch. In a world where consumers churn through brands in a highly competitive digital marketplace, kaizen doesn't cut it.

There's possibly a deeper, regional cultural heritage expressed through kaizen. As any anthropologist will tell you, despite the myriad social complexities inherent in all cultures, in engineering powerhouses like South Korea, China and Japan, there is a tendency towards social formality and more clearly defined social hierarchies than the multicultural melting pots of Europe and America. Could that difference in social norms come through in business culture too? After all, engineering culture is generally more hierarchical and formal than design culture, and engineering-led brands are often associated with the East, while Silicon Valley is in the West. It's an intriguing question.

Design thinking, by contrast, is not the pursuit of kaizen perfection, it's geared-up around human imperfection. It's a process guided by the realization we don't always know what we want – or use things the way we're supposed to. Children demonstrate this all the time. As every parent knows, when they buy a baby a toy they'll often play with the box it came in. The adult sees the toy and the box, the child sees two toys.



Understanding a child's inability to distinguish between the implied purpose of packaging and products is the essence of design thinking.

Design thinking, unlike traditional engineering, is collaborative. The word 'collaborative' is perhaps a little misleading in this context because it implies the user knows they're collaborating in the design process, but that's not always the case. Studying user behavior and customer journeys, then using that research insight to inform your design choices is a form of collaboration. It's putting the user into the process, but not necessarily asking them to participate in making product development decisions.

Collaborative design, like kaizen, has a regional cultural context that influenced its evolution. The European tradition of The Thing – the ancient community gatherings common to the Germanic peoples of Scandinavia and Northern Europe – was an early form of collaborative problem solving.

These gatherings didn't invite the everyday folk to make decisions but they provided tribal leaders with a chance to take the views and experiences of their community into account, and effect their decision making processes. Similar 'public consultations' were common to community gatherings for Native American tribes too.

Historically, the evolution of social structures in the West were more collaborative and influenced more designled commerce in the industrial age. Similarly, the more hierarchical traditions of the East favored more formal, engineering-led commercial evolution. This could explain why today, many global brands design in the West, but manufacture in the East.



The philosophy-culture problem: Perfection can't adapt to disruption

Let me offer an example of the market effects of the design-engineering cultural divide from my own experience. There was a time – too long ago – when all I wanted was the next Sony Walkman, because the next one was always better than the last one. The next one was always smaller, lighter, more efficient, and had more features listed on the box. Radio, FM, AM, Dolby, Metal, fast forward track search, the feature list grew longer, the box got bigger, the kit got smaller. And then MP3 arrived. And the Zune. And the iPod. And then I didn't want the next Walkman anymore.

Tapes became the walking dead overnight when digital arrived. Kaizen couldn't save the tape player. The Walkman engineers tried to convert the product to play CDs, but they lacked the functionality of playlists (the MP3 equivalent of mix tapes) and relied on the inconvenience of carrying CDs around with you. By the time the MP3 Walkman reached the marketplace it was too late, the digital music player market was already dominated by Apple and other digital music player OEMs. The Walkman's kaizen product development cycle couldn't handle the step change of digital music.

The moves Apple made – launching the iPod and building a marketplace like iTunes to simplify the piracy-wracked digital music market – were pure design thinking. As were their adverts, which changed the way brands advertised electronics by talking about lifestyle, not tech. Packaging changed too, breaking the traditional mould of a plastic window box with 1000 tiny words on the back. Apple disrupted the consumer electronics market through leveraging human behavior and customer experience, not the pursuit of technical excellence.



"Striving for perfection is a noble aspiration, but celebrating human imperfection is proving to be a smarter business model."

When engineers adopt design thinking, the impact is huge

Consider engineering pioneers like Henry Ford and Steve Jobs, both of whom brought a collaborative design philosophy to the engineering party. It's important to note that neither of them were fans of focus groups, but that's not what collaborative design is, that's what Hollywood movie producers do when they wreck a director's original cut of a film by showing it to a test audience and change the edit based on the response. Collaborative design is human centric, not designed by the customer. It's a subtle difference, but a crucial one.

It is also important not to laud these engineers as collaborative design evangelists, because they weren't. However, they both recognized that product success depends on customer experience as well as engineering. In Ford's case, the success of the Model-T wasn't simply down to his simplification of component tech or his innovative production line assembly process, the Ford Motor Company also promoted the lifestyle concept of 'automobiling'. They created local motoring clubs to encourage car owners to explore the countryside and participate in organized driving activities, which established the product as more than just a transport solution. They designed both the product and the user experience of owning it.

Notably, Ford didn't initially offer customers a choice of colors and

specifications, they built a product around the customer journey, not the customer's taste. Like Steve Jobs who decided, when he returned to Apple, that they would scrap the complex model line and make only four computers, a laptop and desktop for home and a similar pairing for work. That's another example of designing for the customer's needs, not technical specifications.

Like Ford, Jobs also shifted the product engineering process towards collaborative design by considering the role Apple's engineering played in people's lifestyles. After his return to Apple, this human centric approach cast Apple products in a mould more akin to furniture and household appliances than the beige box Apple product range at the time. The new Apple Macs weren't simply defined by the function of computing, but by the need to be intuitive and aesthetically pleasing. Similarly, Apple designers studied

customer behavior to improve their user manuals and discovered they were mostly thrown away with the product packaging or left shrink-wrapped and unused. So the company made a supreme effort to make their software easier to use and obviate the need for manuals in the first place. Again, this was observing customer experience and engineering products accordingly, not assuming because every other product in the category had a manual, manuals were fixed points on the customer journey.

Into the future: Will design-led engineering become the norm?

Of course, it would be rash to ignore the complexities of the globalized economy and make sweeping generalizations about it, but it would also be rash to ignore the impact of different regional design and engineering cultures upon shaping that complexity. And in terms of the digital economy, it has certainly been shaped by the difference between the engineering-led approach of assuming "build it and they will come" and the collaborative design-led approach that says "find out where they go, and build something there."

If there's an economic lesson for modern businesses in considering the differences between design and engineering cultures, it's this: Striving for perfection is a noble aspiration, but celebrating human imperfection is proving to be a smarter business model. Perhaps we're living through a period where the once separate disciplines of design and engineering are merging. In a world where you can order locally made haggis in Tokyo and drink Japanese whisky in Edinburgh, that feels like a natural – and wholly positive – development.

 $\mathbb{B}(U)$ STICKY POST-IT NOTES

Plotting a Journey Map

- Simon Herd

Lifting the lid on one of our most popular research tools, Simon Herd, director of design research at the UK Labs introduces us the amazing world of experiential cartography. Which is to say that this next piece teaches you, in no uncertain terms, how to go about Plotting a Journey Map. An impactful, collaborative tool for gaining an view of end to end customer experiences, broken down here into its most basic components. Journey maps are a tangible expression of the rising interest in customer experience – highly visual, attention-getting, and dense with information. With the spotlight on them, it's important that they deliver, rather than just look nice. Here are some tips for practitioners looking to make their maps more effective.

Planning the map

Customer journey maps typically have common elements, such as journey stages and touchpoints; however, they come in many forms. Thinking about the right form for any particular map is an important first step.



Clearly define the problem the map is aiming to solve

Some talk about journey maps as if they were a standardized one-size fits all tool, and the biggest mistake people make is to use a format which doesn't fit the purpose of a particular project. There will be an underlying reason for journey mapping and this should drive its fundamental structure.

Is the intention to use the map:

- · to reflect the current experience or to propose a new experience?
- to align channels better?
- to compare your group's brand experience against a competitor's?
- to drive high-level strategy or low-level change?

Once you've defined the problem you're trying to solve, you can define a framework for the map which you'll complete in a journey mapping workshop.

Prioritize which journeys to map

You may feel you have 100 customer journeys, but fixing the most common or important will resolve many of the others too. Also, you'll quickly lose focus if you go too detailed on the map – leave that for after the mapping activity and allow yourself to work at a manageable level. At this stage, it's better to define 1, 2, or 3 specific journeys well, than 100 journeys abstractly.

Base map content on customer research

If you take on none of the other tips, this is the one that will make your project worthwhile. Your company's internal view of the customer's experience is important, but may not reflect all of what the customer does, making it easy to miss valuable insights and opportunities for innovation. If you can't afford full research projects, use lower cost techniques, such as vox pop street interviews, or talk to your contact centre/ store staff that speak to customers every day.

Emotion is critical

Tracking customer emotions across the journey is important to understand what matters to customers and so where you can make a difference. For example, a problem at the point of payment is going to be stressful and needs to be prioritized. Equally, ambivalence about researching your product means you need to adapt product messaging to make it easily digestible.

Buy extra-sticky post-it notes

Post-it notes are the building block of most journey maps. However, they have an irritating tendency to detach and flutter to the floor if not firmly stuck. A super-sticky post-it note is the answer.

Creating the map

Maps can be created in isolation, but we find that a collaborative process, involving workshops with wider stakeholders has wider impact. In fact, many of our customers tell us that it's the discussion that takes place in the workshop where the value lies, more than in the map that results. The map is just the mechanism to stimulate the discussion.

Focus on a particular persona

A snapshot of the preferences, capabilities and needs of the customer is an important frame of reference. Creating such a persona helps all involved in mapping to build empathy and a deeper understanding of needs, which in turn drives innovation.

Create maps collaboratively

UX staff have a central role, but front line, technical, marketing and other staff have a deep well of experience to contribute. Involve them as much as you can in the mapping exercise.

Assign a map master

Getting a range of people involved in map creation is great, but somebody needs to control the process. People come with slightly different interpretations of what they're doing and what's important. Having a gatekeeper to steer what goes on the wall keeps the exercise coherent and best harnesses contributions.

Actively manage large groups

If you're dealing with a large workshop, allocate participants to subgroups covering the most appropriate parts of the map to them. The map master can then steer each group and track the bigger picture. Each subgroup can then present their stage to others to ensure stages integrate and nothing is lost.



Take a broad view of the journey

Don't restrict your thinking about where your existing customer experiences starts and ends. Thinking about what customers do before and after they interact you can reveal opportunities for change. Also, remember that processes may not even be linear.

Touchpoints shouldn't be at the screen level

Customer events, such as phone calls and instances of web browsing are a focal point of any map. When identifying these, be careful to keep these reasonably high-level. If you define touch points to cover each screen in an existing process, you're more likely to refine rather than reinvent. You'll also get quickly swamped in detail.

Don't over complicate your map key

Any map contains a combination of symbols, shapes and colour to signify information such as priorities, delivery channels and other information. It's easy to get carried away in defining these in great detail. However, making mappers think too much about a range of possibilities will detract from thinking about the task in hand. Keep it simple.

Don't lose sight of valuable insights

During the mapping workshop it is inevitable that you'll identify useful insights that don't apply to the persona at hand. Participants can get distracted by worrying about these. Capture these separately from the map. By visibly recording them elsewhere, you'll acknowledge contribution, keep the group focused and ensure nothing is lost.

Taking next steps

Once the map is created, you'll need to review it to identify where the issues and opportunities lay and identify next steps. Again, collaboration is key.

Triage the top issues together

When reviewing a journey, nobody can be an expert in everything. Having multiple disciplines involved in analysis gives a more rounded view in identifying what's most important and defining next steps. Getting consensus on these also increases acceptance within the organization more quickly, so it's wise to do for more than one reason.

Prioritize against other data sources

Maps are dense with information, so you'll need to prioritize next steps. One good way of doing this is to look at other sources of data such as support calls, NPS, or sales and returns. Cross-referencing research insights and mapping against a depth of data can validate and provide a different perspective.

Look closely at the final experience

The customer's last memory of interaction with you will be the most influential. If you've ever had an online shopping experience undermined by poor delivery you'll understand this point. Pay particular attention to this part of the journey when deciding what to do next.

Create maps for sharing

You'll need to document the map created, using Omnigraffle, InDesign, or something similar. When doing so, think carefully about how it will be used. A map can be the length of a wall in creation, but this is going to be difficult to read in full view on screen. If you've got a big audience for the map, think about how it broken down for easy incorporation within presentation slides. Chunking by stages to do this is easy to design in, but painful to do afterwards. You might also create posters or other artefacts to spread the message.

If maps have been created collaboratively, take time to publicize this. Take a photo of those involved by the map and include it on internal news. It's a positive story where staff have been involved in setting direction, so be proud of it.

Treacherous icons





One of our most shared UX pieces coming up from Andrew Swartz, another director of design research. If you have ever been rushing to catch an elevator only to see the people inside furiously hammering the "close doors" button and looking confused, then this article will finally explain why. It isn't because you have bad breath. It is because you, and everyone else on that elevator have been betrayed by some Treacherous Icons. Icons can be treacherous. The world takes them as the essence of a friendly interface, so expectations are high; but they rarely work well. We have some advice about their design. Icons are one of the great paradoxes of usability. The most familiar icons work well enough. The now ancient scissors icon for cut, and the glue bottle for paste, the trash can for delete, and the highlighter for, well, highlighting.

But outside these traditional areas, we see icons elsewhere failing in their main purpose. Designers want them to be minimalist visual representations of an action or option that take the place of ugly words or long menus. They expect users to understand them at first glance, pick them out quickly, or at the very least to learn them over the time. In practice, they often don't work that way.









If you don't believe it, you can prove it to yourself with two small observational experiments.

First, go to your nearest elevator and prepare to ride it up and down a couple of times. Make sure it has open door and close door buttons that look something like this:



Now's the fun part, wait until someone needs to press the Open Doors button – usually because someone is running for the doors. (You might have to precipitate that with an ally who will run for the doors.) What you should notice is that many people will struggle to figure out which button to press, and some will mistakenly press the Close Doors button. This is true even for people who use the elevator and those buttons frequently.

What you are seeing here is the failure of iconography that is, as far as visual design goes, simple and elegant. Everyone can explain the design, even people who have just struggled to pick the right one: the icons are simply arrows that show the direction you wish the doors to move. In theory, that's the essence of good design, but it still doesn't work. The second observation is as close as your smartphone or computer screen. Have a look at the home screen. How many of the application icons now have as their most prominent element a letter or word indicating their name? Designers from some of the most prominent companies are acknowledging that small conceptual pictures often don't work as well as old-fashioned initials and words.

Should you give up on icons? Absolutely not. Users expect them, and well-designed icons used frequently by people who want to use them can be learned as a new sort of iconographic language. But it's important to remember these two fundamental laws of icon design:

- Never force the user to rely on the icon's visual design alone, especially if they are likely to be in a hurry.
- 2. Icons are recognized by their distinctiveness rather than the meaning of their imagery. Make your icons distinct from each other.

Here are a few tips to help:





Established Icons? Designing for a field where there are already well-established icons? Use them. It saves a lot of work for you, and

even more for you users.

Include names with your icons

And make the name localizable. Consider incorporating initials or words into the icon design.



ICONS ARE A PARADOX OF USABILITY





Localize your designs

Many online icons are based on real-world counterparts, for example a mailbox represents email or a house represents the home screen. Beware however that these objects have different appearances in different countries. British homes have mail slots rather than US-style mailboxes. And in many parts of the world, houses do not have the straight peaked roofs that American homes have.

Similarly, technology sometimes makes real-world imagery unrecognizable to new generations. It is reasonable to use icons for applications where expert users frequently have to select from large numbers tools. Even then it is helpful to follow the advice in this list of tips.







Test for distinctiveness

Because users select icons based on distinctiveness, make sure your tools are as distinct from each other as possible. A good test for distinctiveness that you can do on your own is to put all your icons on one screen and use a Photoshop-style tool to blur them all by 3-5 pixels. See whether you can pick them out quickly.





emergency situations

have an Undo function, as users often

learn them by experimenting. We once

saw a user break down in tears when

he pressed a button to see what it did

and it erased a train track he had spent

an hour designing. We must admit that

user was only six years old.

Words and Icons are best for

Test with real users If the icon is recognized instantly the Don't use icons alone for safety-critical first time, that's a big win, but it's rare. applications, even when those icons are More often, what you're aiming for standardized. Similarly, don't use icons alone for any application that does not

is a test to show that it can be figured out with experimentation, and then remembered after an interval. If it can't be remembered 5 minutes after it's been learned, it's probably not going to work. If you can design a real-world way to test this, that's ideal. If not, you can have people learn the icons briefly as a flash card game, then distract them with another task, and then give them a timed test to see which icons they remember.

Follow the same rules for print

Sometimes icons appear in print rather than on screen, whether in a report, a map, or signage. The same general rule applies for these icons - except for a handful of very familiar universal icons (for restrooms and wheelchair access, for example), icons are not well recognized on their own. If the icons appear on a map, you have one advantage. You can include a key of their meanings in a corner of the map, so you don't have to repeat the text on every appearance of the icon.

Chatting About Chatbots

— Philip Say

At the cutting edge of omni-channel experience design are the immature artificial intelligences that fake their way through customer service jobs with nothing but a script and a cheerful disposition. In this piece Philip Say, our VP of product management, explains the ways that we can adapt chatbots to ensure that they do not end up going the way of so many of their silicon compatriots to the big recycling bin in the sky. Here he goes again, Chatting About Chatbots! Are chatbots an important tool when you're designing smarter customer experiences? Yes. Do they work? Not so much as you'd expect. For chatbots, digital assistants, self-service conversational user experiences, call them what you like, it's been a rollercoaster ride over the last couple of years.

Between February and July last year, nearly 18,000 new chatbots appeared on Facebook messenger alone. Surveys showed Generation-Z users reported spending up to 4 hours a day with chatbots, and around 27% of customers expressed a preference for chatbot tools in their daily experiences. But, this year Facebook announced it is refocusing its AI tech away from bots because 70% of Facebook bot chats fail. In fact, regardless of the channel you select, there's almost daily news that another big name brand has dropped its bot.

Some industry commentators are asking if chat is a burst bubble, but remember there was a dotcom bubble once, and after that burst many commentators wondered if the web was over, too: It wasn't. It's more likely what's really happening is a predictable boom-bust hype curve. All new tech experiences it, in one form or another. Just like the early days of the commercial website ecosystem where the mass market forms we take for granted today took a while to emerge, chat isn't over, it's just taking time to mature.

The huge success of Amazon's Alexa, the launch of Google Home and Apple's Siri-powered 'HomePod' suggests the concept of conversational user experiences isn't going away anytime soon. However, the boom-bust hype is an inflection point for the conversational interface industry. It means rethinking the way that we use bots and designing them better. At Sutherland we've been building digital assistants using text interfaces and voice commands for a while now, and here are 8 insights we've gained to define a more robust, reliable conversation design process to improve the customer experience of chat interfaces.



1. Spend more time writing than coding

The single most surprising thing I've learned from each conversation design project is this: you will spend more time on writing the script than the software engineering. Designing conversations isn't primarily a software engineering challenge, chatbot success, like movies and games, largely depends on the quality of the script. More than that, the script depends on researching an in-depth understanding of the customer journey. Human-centric research and UX design thinking is essential for the writing process. Fortunately, that's what Sutherland Labs is all about.

The most important part of any script (screenplay, novel, movie, blockbuster RPG or chat) is the opening line. We worked on a HR recruitment bot and spent 3-4 weeks – including on site user research – to define the initial opening lines, then spent several weeks testing and refining the first draft. That opening interaction is critically important because it's the hook that captures the user's attention and motivates them to complete their goals through the chat interface; so it should be part of an ongoing process of continual testing and refinement.

Don't underestimate the writing challenge this represents. It's the kind of 'micro-copywriting' skill your regular copywriters might not have because engaging two-way natural language dialogue isn't generally needed in other areas of UX writing. Chatbot scripts aren't static, they need to handle multiple variations in the form of words used to understand the user's intent and convey the same information back to them in a format that is responsive to their natural language.



2. Chat is emotional

Another lesson from the world of scripted entertainment is recognizing the user's need to emotionally engage with the characters (in the chat UX case, this means the bot). Where traditional software engineering processes aim to move users logically from point A to B (like dragging and dropping files) a chat needs to convince a user that the bot is actually conversing with them interpersonally. That's not to say the bot needs to pass the Turing Test for simulating a human chat, consider the goal more like emulating a well-designed customer support script by a well-trained support agent.

In effect, you need to make the user relate to the bot, which means making it feel more human. Making the bot feel human means scripting unanticipated replies, dynamic responses that convey a feeling of empathy. That's the difference between pushing buttons on a vending machine and chat. Banter (unpredictable, improvized components of friendly conversation) engages people emotionally in conversations. It's why we enjoy talking to friends and colleagues more than formal conversations where good-natured banter is lacking, like talking to a tax auditor. A good chatbot script should convey the good-natured mannerisms of a well-trained support assistant, not the robotic feel that we've all experienced of an overly formal human support assistant sticking to a clumsily designed customer service script.

3. Leverage the canvas and use all channels

Every messaging channel has a wide range of features that enrich conversation design, and most 'omni-channel' customer experience interactions combine automated online interactions with digital receipts like emails or TXT messages to confirm the outcome of the interaction. Remember, the chatbot is still a form of UI, and so all the usual UI tools like emojis, quick response buttons, graphics, videos and audio feedback have a role to play in the chat experience. It's useful to assume best practice from other web and mobile interactions, set user expectations that reference other channels they use, use breadcrumbs to clarify the stages of chat journey, and affordances like using a smiley for 'yes' or a sad face emoji for 'no'.

For example, a thumbs-up 'like' emjoi can replace a line of 'thank you' text and gives the user an unexpected dynamic response (creating a banter-like experience). This deepens the visual experience of the UI. We've learned to be resourceful with every object at our disposal in chat design, so if there's baked-in functionality in the chat channel, experiment with using it to enrich the chat experience. On the flipside of that approach, in addition for designing for the most used apps and channels, consider the feature depreciation in channels that lack rich UI potential, like SMS (which lacks buttons etc.) and Voice (where the visual aspect of the UI doesn't exist). It's a question of building a range of options for the UI aspect, enabling rich responses in some channels, and compensating for the lack of UI in others.

4. Brand conversations appropriately

Bots don't live in isolation, they're part of an overall branded experience. You need to define your conversation in the light of the branding goals and constraints that apply to everything a client does. The bot's personality is an avatar of the brand's personality. That could mean funny, inquisitive, serious, or a thousand other language tonalities. A bot should reflect the tone of the brand's advertising and marketing, because even a great bot can fail if you get the branding wrong. We spend a long time reflecting on getting the brand personality right and using the existing tone of advertising material can be very effective for making it feel brand appropriate.

Funny Serious Inquisitive

5. Make bots friendly with contextual surprises

Imagine meeting someone and chatting, then meeting them again a few days later and realizing they don't remember you, but worse than that, they ask you the same bunch of questions again. That's a frustrating experience. It's the same with bots. A bot that says "hello again!" or asks you "hey, did you get those pants you wanted?" builds a positive customer experience. It also optimizes the value of the bot by making it more useful in repeat usage scenarios. The HR bot we designed was created to recognize users who'd been before, and greeted them with a 'welcome back'. Use customer profile data effectively to personalize the chat experience and the bot is much more effective.



CHAT ISR'T A BURST BUBBLE





6. Chat is like comedy... it's all about timing

It would be irritating if you called up a store and asked the clerk "hey, when do you open in the morning?" and they took 60 seconds to think about it before they answer. That kind of question usually needs an instant reply. So, it's natural to assume all natural language processing needs to be similarly instantaneous, but that's not the case.

Let's say you ask the store clerk to help you match a shirt with some pants you just bought. In that exchange, you're more likely to take their advice if you can see they're taking time thinking about their answer, not blurting out an instant response "the pink one" as soon as you finish asking the question. You expect a pause. You want to feel like they've thought about their answer. The same applies to bot conversations too.

We've experimented a lot with this kind of response. Incorporating pause interactions like "Hmm... give me a moment," simulates human responses more accurately in certain contexts. This helps the user to engage emotionally with a simulated human response, it makes it seem like the bot is actually thinking as opposed to processing data instantaneously (which is closer to what's really happening).

7. Make sure the user always wins

Interfaces always have limits, and for chat interfaces there is always the risk the bot can't give the answers the user is looking for, which explains why so many fully-automated bots fail. Users are unforgiving when it comes to broken customer experience journeys. So we've learned to purposefully engineer all our bots to work in synch with a human to avoid that scenario.

A bot is, in business process terminology, digital labor. So every bot deployment needs to be considered in the context of a digital labor program. This means supervising the bots with human operators who can intercede in a chat where the bot is failing. Repeated questions and inappropriate language signal a frustrated user, and a bot that gives multiple "I don't understand" responses indicates the same. Those are trigger events that should always signal a human operator to take over the chat. Think of it as a customer experience failsafe. Users get angry with unresponsive bots, and causing user frustration is a customer experience fail.



8. Designing conversations is an iterative process

We always have high expectations of a new technology, but often too many of them are placed on the first generation of the tech. All tech platforms take time to mature and deliver on their initial promise, so you have to separate out the potential of the tech from what's reliable and achievable as a commercial platform solution for today's real world.

That means investing in a robust conversational UX testing program. It also means using agile development to engage in a process of 'diligent augmentation', a structured software engineering approach to refine the bot and release new iterations based on your UX research. The whole UX industry has always represented an ongoing conversation between designers, engineers and users, and conversation design is no different.

Designing the future of conversations is also about having conversations... Chat isn't a burst bubble. It has huge potential to create genuinely useful and engaging user experiences. So get building, learn from the process and share your experiences to help improve the whole product category. That's an important conversation between humans... because it's the smartest way to make chatbots that have important conversations with humans.





Inside Patient Experiences

— Gemma Wilde

Last but not least, we catch a glimpse of the very real applications of design thinking. Gemma Wilde, director of design research at the US Labs worked closely with Lawrence General Hospital to explore the ways that a design thinking approach could help to minimize stress for their patients and staff, and to take a closer look Inside Patient Experiences.

CULTIVATING ENPATHY UNDER PRESSURE



Lawrence General Hospital is situated just outside of Boston and serves about 300,000 patients each year. To make sure that their focus is always where it is meant to be, Lawrence General Hospital (LGH) has an active patient experience team with representation from across the hospital. The team runs a number of initiatives to better understand and serve their patients' needs and are always striving to incorporate new tools and techniques into their practice. To that end, they recently invited some of our team to run a Design Thinking workshop.

While we have worked extensively with the healthcare sector in the past, there were some unique considerations required to run a workshop for a hospital.



Choose a location that won't kill

The 25 people who were involved in our workshop at Lawrence General Hospital came from across all the different parts of the business, and while some of them could afford to be absent if catastrophe struck in the nearby area, many of the staff members who were in attendance were on-call. The workshop had to be conducted on-site in the hospital in case an emergency hit. In other industries an unavailable employee can cost the business money or slow down the speed of service, in healthcare it can cost lives.

Workflows as complex as the human body

In an ideal world, the workflow for a hospital would be as simple as one for a retail business. A patient would arrive, be diagnosed, receive their treatment and be sent home. In reality, health problems are much more complex and the resources that are available to treat people are limited.

Ongoing treatment for medical conditions can last for months or years with dozens, if not hundreds of appointments needing to be scheduled, rescheduled and shuffled around to accommodate not only the availability of staff and resources, but also the availability of the patients. Even patients who are receiving regular care can be forced out of their usual workflow and into the emergency room if their symptoms suddenly gain intensity.

Cultivate empathy; always

The "pain points" in the patient's journey through the hospital are massively amplified by the fear and confusion that they are experiencing. While this is easy to understand in the abstract, the demands on medical staff and lack of visibility across the patient's journey makes it difficult for them to cater to all of the patient's emotional needs.

As Vanessa Sevilhano, one of our design team for the project, explains: "By giving workshop attendants a patient persona and having them work through the process that the patient would experience, they discovered the moments when stress levels would be the highest. From there, we worked out ways to improve the patient experience – for example, providing patients with more information about their situation."

Concluding thoughts

Lawrence General Hospital was already well on its way to developing an understanding of patient experience, and they were already working to break down the barriers between the different departments of their hospital to achieve their goals. The workshop provided a quick, cost-effective way to gain a grounding in design thinking techniques to gather and act on insights from patients and staff.



Conclusions

— Gemma Wisdom

We hope that you have enjoyed this inaugural – taster – issue of the Labs Quarterly, although the fact that you are still reading it after you have gotten past all of the juicy stuff suggests that you probably did. You will have to judge for yourself whether the contents of this little publication have helped you to break free from Hopper's "way we've always done it" or Einstein's repetitive madness spiral, but if it did then we would appreciate it if you passed it along to a friend or colleague to ensure that the transformation is contagious.

In the next issue we will be focusing on voice technology. Voice has been hailed as the third wave of online interactive design, following in the footsteps of the web and mobile with so much potential in these embryonic stages that it has us so excited that we just can't stop talking about it. We hope that you will join in with that excitement by picking up the next Labs Quarterly.

