Insights

The Business Value of Design

Intended audience
This Insight into the Business Value of Design is intended as a
reference point for business managers as they consider how best to
measure and communicate the value of their design investments.

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Insights

Measuring design initiatives

Over the last decades, businesses have evolved a greater appreciation for Human-Centered Design. Most executives can readily cite examples where design has effectively solved customer problems and delivered a decided business advantage.

Yet despite the evidence showing design investments enhance customer experience and address business problems, managers are frequently challenged to define the financial benefits within the confines of traditional return on investment (ROI) analysis. How do you quantify a disruptive idea that creates an entirely new market? Or a value proposition that heads off potential new competitors?

The difficulty in creating a business case for design initiatives is that benefits can be tough to measure, hard to attribute, differ by industry and even company, and pan out over a long timeframe. However, it can be done.
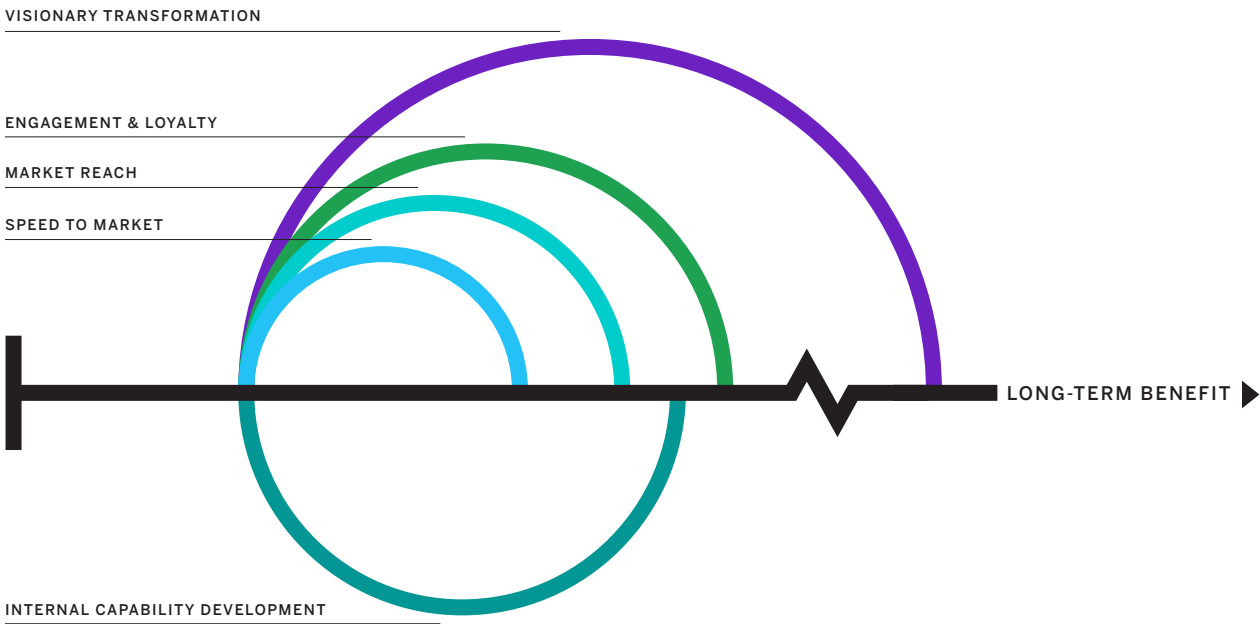
At frog, we find the most successful business cases begin with a clear and tangible proposition, are communicated through compelling stories that capture the imagination, and provide grounded measures that align with guiding business objectives.

What follows is a pragmatic summary of **five key sources of value** that frog clients have used to effectively judge the impact of their projects. The resulting framework can help guide those charged with assessing the potential or actual benefits of a design project using key tools, metrics and considerations that help demonstrate the tangible financial advantages of making design a business priority.

"Design is a toolset and mindset which gives firms the capacity to solve customer problems."

VP, STRATEGY

Timothy Morey

Tim leads a global team of business and product strategists who work alongside frog designers and technologists to bring game changing innovations to market. He has worked in Silicon Valley for 18 years in a variety of product, strategy and marketing roles. A classically trained strategist, Tim had his eyes opened to the power of design to solve business challenges through his work at frog.

The business value of design

VISIONARY TRANSFORMATION

ENGAGEMENT & LOYALTY

MARKET REACH

SPEED TO MARKET

LONG-TERM BENEFIT

INTERNAL CAPABILITY DEVELOPMENT

1. Increase speed to market

Increasing speed to market delivers a decided competitive advantage that enables organizations to outpace rivals or react more quickly to change. Techniques applied to increase speed to market include: **rapid iteration** to reduce development cycle time and quickly validate new business opportunities; **co-creation** with key partners, employees and end-users to accelerate innovation; and **lean methods** to build minimal viable products (MVPs) that are released quickly and tested with customers to gather input for further product development iterations.

CASE EXAMPLES

Executing rapidly on a vision

In 2014, CheBanca initiated a project to anticipate the future of home banking. Six weeks later, they were presented with a compelling vision for 2019 based on detailed customer data and qualitative insights. Convinced of a significant opportunity with a limited "window," management committed to quick decisions and approvals—and endorsed the use of techniques that would shorten the time to market for future digital service innovations.

To create extremely fast product iterations, senior designers and developers worked side-by-side to implement a "super prototyping" technique that delivered product code in a condensed timeframe. In parallel, a UI (user interface) toolkit was developed, providing a library of reusable and documented front-end code that empowered CheBanca to develop new products quickly and consistently. The extended project team and systems integration partner observed a **30% increase in speed to market compared to similar projects on the same UX platform**.

Saudi Telecom Co. (STC) provides a similar example. In 2015, STC wanted to create a fresh, modern digital experience to appeal to millennials. Saudi Arabia has a young population (roughly 65% are aged between 15 and 34) and one of the highest penetration rates of smartphones, social media and online platforms in the world, yet the experience for digital natives with legacy telecommunication carriers in the region was poor.

Prioritizing speed-to-market, STC created a new venture called Sapphire responsible for addressing the key market. Working with lean methods, Sapphire realized its **first MVP in just four months**. The digital service offering, launched as "Jawwy," provided a responsive and seamless user journey across desktop, mobile and tablet devices that went on to achieve **the #1 customer experience rating (Net Promoter Score) among all mobile operators worldwide**.

Those initiating lean digital programs at both STC and CheBanca convinced decision makers of the value of the potential market and the need to seize it quickly. They won the passionate advocacy of executive management because they demonstrated how a rapid, design-centric approach using tools such as super prototyping and, in the case of CheBanca, a UI toolkit, would develop revenue streams faster. Both companies then aligned their organizations to that goal. Key metrics used to justify the design initiatives and measure the final results include:

- **REDUCE DEVELOPMENT COSTS AND TIMELINE**
- **MEET OR EXCEED TARGET REVENUE**
- **GENERATE MVP-FOCUSED CUSTOMER FEEDBACK**
- **SHORTEN BREAKEVEN AND CYCLE TIMES**

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> **"Being faster to market is not just about being first with a new product. It is a matter of real money because you create revenues much earlier and reach breakeven faster."**

EXECUTIVE TECHNOLOGY DIRECTOR

Matteo Penzo
on speed to market

Matteo believes that designers must be "pirates"—fearless, prepared to break the "rules" and able to adapt quickly to changing circumstances. He has more than 18 years of experience in technology and software and his projects have been featured in the *Harvard Business Review*, *Forbes*, *Washington Post*, *Scientific American*, and *CNN Money*. His mantra is "deliver design through code."

2. Extend market reach

Of the 30,000 or so new consumer products launched each year, some 40 percent fail.[1] While there is never a guarantee of market success, design thinking helps organizations to minimize pitfalls, launch successful products, and extend market reach. Tools used by designers include:

1. **Deep user insights:** Everyone uses market research. Design research goes a step beyond to provide real insight about, and empathy for, actual users and their needs. Home visits, shopper shadowing or other immersive interview techniques help researchers understand and document the user journey, offering insights into how products might provide greater value, ultimately driving new opportunities.

2. **Breaking market segments:** While companies often think in segments and categories, customers do not. Design takes a more open perspective, transcending status quo product categories and market segments to explore radical opportunities that live between categories.

3. **Strategy as a creative act:** One limitation of traditional product strategy is its reliance on extrapolation—or linear conclusions based upon observable trends and tendencies. Design helps identify an ideal state more closely aligned with customer goals and a strategy to achieve it. This leads to the identification of future business, offering the opportunity to redefine markets and generate tremendous value.

100 million customers, 2x increased share of wallet
In the age of MP3s, jukeboxes needed to do more than just play music. In 2010, TouchTunes, an in-venue music and entertainment company, wanted to overhaul their flagship touch-screen jukebox. First introduced in 1998, it had been the world's first pay-for-play digital jukebox, but it needed to change to meet evolving expectations.

Observational research with bar owners, managers, staff and customers revealed opportunities to make browsing and selecting music less overwhelming. Designers observed that it was rarely a single person picking a song,

identifying the jukebox as a social experience. This sparked the re-imagination of the jukebox as an entertainment hub with a distinct physical appearance and an extensive catalogue of venue-specific songs. The platform was devised to adapt to future digital services and the 26-inch touch-screen was turned sideways for collaborative song selection.

The new product—Virtuo—sold out at launch in spring 2011 and TouchTunes shipped 4000 units that year. By mid-2013, Virtuo was in **10,000 venues in Europe and North America**, reaching 100 million customers each month—30 million of them in the 21-24 age group. The new machines generate **more than twice the industry average revenue** for jukeboxes.

The product revolutionized the international jukebox market, spurring increased customer satisfaction and **driving higher revenue and profits for venues**, operators and TouchTunes. Today, the platform continues to support the rollout of new services desired by customers, such as photo booths and karaoke.

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KEY METRICS FOR EXTENDED MARKET REACH ▶

To get ahead of the trend and block rivals, TouchTunes undertook a design project. The company has since measured the success of the product using:

- MARKET SHARE
- INCREASE IN SHARE OF WALLET
- PERCENTAGE OF REVENUE FROM NEW PRODUCTS

"Design allows you to step outside the space you occupy as a company and think more about customer goals than market segments."

VP, DESIGN

Thomas Sutton
on extending market reach

Design is a bifocal activity for Thomas as he insists you need to try to see both the wood and the trees. In this way, solutions can be created that improve people's lives in small but significant ways. Originally hailing from New Zealand, he manages and mentors 30 creative professionals whose work is particularly renowned in the healthcare field. He believes it is essential for people to embrace complexity and ambiguity in design thinking, but that success is measured in humanizing technology.

3. Drive engagement and loyalty

A customer experience, or CX, is the sum of all interactions a customer has with a company over time, through digital touchpoints like websites, apps or social media and physical touchpoints, like packaging or point-of-sale. The more cohesive and meaningful the CX, the more customers are willing to engage, form a relationship and remain loyal to a firm.

Too often, customer experiences are inconsistent or frustrating. To win and retain customers, companies need to not only understand their customer experience, but also proactively imagine what is possible—and then design, implement and manage it.

A three-factor framework of **breadth, depth and consistency** can be used to assess a customer experience. Breadth is the number of interactions with the customer. Depth measures the quality and meaning behind each interaction. Consistency ensures a cohesive feeling and promise to each interaction.

As competition increases, customer experience may be the only way left for organizations to distinguish themselves in the market. Companies that focus on the breadth, depth and consistency of that experience will be rewarded over time with greater engagement, loyalty and customer lifetime value. Those who don't risk seeing their customers leave for the competition.

CASE EXAMPLE

3x engagement, 75% new forms of engagement
Banco Indusval, a mid-sized Brazilian bank, saw an opportunity to provide wealth management services to the country's growing upper-middle class. This market was poorly served by existing financial advisors and research showed significant distrust amongst potential customers stemming from historic instability within the local finance sector. One 40-year-old interviewee had seen five mid-sized banks fold during her lifetime, wiping out the savings of many people.

In 2015, Indusval launched Guide Investimentos, an investor-centered wealth management platform that strived to establish a more empathetic relationship with customers. Based on innovative personality testing, it developed a deep understanding of each customer's needs and risk appetite and then

matched them to appropriate agents and products. Information and education, presented in attractive and readable formats, were key platform components meant to build knowledge and confidence amongst clients.

Within a year, Guide Investimentos acquired **10,000+ new clients** and **revenues grew 46.2%** year-over-year (2015 to 2016). **Market share also grew by R$1 billion ($320 million)** as measured by assets under management (AUM). By 2016, the bank had 40,000 customers and AUM of more than R$5 billion. Customers were **engaging with Guide in new ways**: GuideLife, an insurance and private pension plan from the bank, attracted over 1000 clients within two months of being offered.

KEY METRICS FOR ENGAGEMENT AND LOYALTY ▶

Moderate improvements in customer experience can generate significant value. Customer relationships emerge over time through meaningful interactions, which require companies to be just as committed to serving customer needs as they are their own. As competition increases and customer empowerment grows, companies who focus on improving their customer experience can see positive impact to metrics like:

- CUSTOMER ACQUISITION
- CUSTOMER RETENTION
- REVENUE
- MARKET SHARE
- BRAND EQUITY

"In today's disruptive markets, customer loyalty is more important than almost any other strategic imperative. Companies who take customer experience seriously will thrive, those who don't risk being left behind."

CO-LEAD OF CUSTOMER EXPERIENCE

Geoffrey Schwartz
on driving engagement and loyalty

Customer expectations are higher than ever before, so business success is becoming more and more dependent on the ability to meet or exceed those expectations with nearly every interaction. Geoffrey had his business start building an umbrella of e-commerce sites that disrupted the furniture retail market. With over 10 years of experience in global innovation, he now helps innovate, design and execute effective business solutions for clients ranging from the Fortune 100 to early-stage startups.

4. Enhance internal capabilities

Businesses, like people, can be cognitively biased. Even if decision makers say they value innovation, there is always a strong organizational desire for reliability. The status quo in successful companies remains strong because it is built on effective, reliable systems that have demonstrably worked well.

The problem is that the status quo can leave a firm stranded in the present by limiting the ideas under consideration and ignoring contradictory data. The net effect is a reduction in the flow of innovative ideas and products.

Collaborative processes create an environment where everyone has a role to play in innovation, sustaining a culture that imagines alternatives and helps bring them into being. By helping to build a compelling vision that appeals across divisions and drives stakeholder alignment, a design approach enables a firm to pursue longer-term opportunities.

CASE EXAMPLE

Changing mindsets

Pfizer has long been a successful innovator in the consumer healthcare field. To tap into disruptive ideas and technologies developing outside its walls, Pfizer initiated a Design Collaborative in 2015. It **partnered with 20 startups taking non-traditional approaches** to healthcare, assessing their potential and bringing the most promising ideas rapidly to market. The project was complimentary to, but outside of, established innovation processes at Pfizer.[2]

Pfizer's approach is an example of a company seeking to further develop its **venture mindset** by improving the novelty, value and breadth of ideas. This is one of the many tools that design brings into an organization, allowing it to enhance its internal capabilities.

$300 million saved, 100% productivity gains

Known for its industrial expertise, by 2010 General Electric Co. had quietly become the world's 14th largest software developer by revenue. These capabilities had grown opportunistically, primarily in response to requests from specific clients. As a result, little software consistency existed across the

company and significant development efforts were invested in problems already solved in other divisions. Overall, users of GE software reported that the quality didn't reflect the excellence of GE's hardware engineering.

GE leadership decided to make an investment to create a common software platform for the company. The Software Center of Excellence would develop a common backend infrastructure for GE, and the associated UX Center of Excellence would guide a management and company culture change to ensure that their software user experience matched their well-earned reputation for stellar hardware engineering. Leaders, engineers and designers collaborated to build processes and tools to support culture change, together with a core foundation of design tools and success metrics that would support its UX practice.

Working across divisions, GE identified software patterns common across industrial hardware, developing a common toolset for GE digital services called the Industrial Internet Design System (IIDS). In the first year after its launch, the IIDS generated a **100% productivity gain in development teams**, and saved **an estimated $30 million for the company**. These digital transformation initiatives provided the foundation for GE Digital—and GE's leadership in the industrial internet.

Read more at www.frogdesign.com

KEY METRICS FOR ENHANCING INTERNAL CAPABILITIES ▶ Many companies that turn to design projects are seeking cultural change. They want to motivate and inspire staff, foster and retain talent and improve team performance through collaboration. Successful projects are anchored in metrics relating to corporate culture, such as learning and development, staff engagement or a reduction in hierarchy.

• INCREASED COLLABORATION AND KNOWLEDGE SHARING
• IMPROVED EMPLOYEE ENGAGEMENT
• REDUCED RELIANCE ON OUTSIDE EXPERTS
• TALENT RETENTION AND LEARNING AGILITY
• EXECUTIVE ALIGNMENT

> **"Many businesses focus on short-term results, but businesses engaging with design are daring to invent a different future—and they are able to tap into the wisdom in their organization and release their staff to be co-designers of that future."**

DIRECTOR OF ORGANIZATIONAL DESIGN

Linda Quarles
on enhancing internal capabilities

Linda describes her life work as part of the perpetual struggle to simplify the complex. She believes in two guiding principles when it comes to design: our idea will always be better than my idea and bring your strong ideas held lightly. After carrying the torch of organizational transformation inside Fortune 500 companies for over two decades, in her role at frog she brings empathy to the hard work of designing organizations that both delight customers and increase business value."

5. Visionary transformation

Visionary transformations occur when challenges are reframed, identifying opportunities to bypass competitors and reset customer expectations. At the heart of all such transitions are teams and leaders with the courage to think broadly so as to create a long-term perspective over the wider business context.

Creating magical experiences

The MagicBand that transformed the visitor experience in Disney World Orlando began with the question, "How can we help people get through the park gates faster and easier?" Over time, the team realized that the transformative opportunity wasn't simply about waiting lines; it was about overlaying the park experience with a digital layer to enhance the magic. The design team reframed the essential question to become, "How can we bring magic back into the experience?" Answering this question enabled a solution to be designed that not only integrated into Disney's strategy, but also aligned to its core values while fulfilling the emotional and practical needs of visitors.

At the heart of the system is Disney's MagicBand, a personalized, data-enabled wristband that grants a visitor entry into the park, allows them to join ride lines seamlessly and is an identifier, credit card and room key. Behind the scenes, the MagicBand connects to sensors and digital services throughout the park, creating a frictionless, magical Disney World experience for every family member.

To realize this, Disney invested $1 billion in backend infrastructure to integrate more than 100 technological systems. This included 30 million square feet of Wi-Fi coverage, more than 300 turnstiles and retrofitted services throughout the park.[3]

Press reports indicate that since launching, **customer satisfaction rates have soared** such that **70% of guests claim they would recommend** Disney World. With most visitors wearing the band, the park uses real-time data to predict crowd flows so that **an estimated 5000 additional guests** can enter the park each day without degrading the experience.

3. Read more about how Disney fixed the magic experience at "https://www.forbes.com/sites/bernardmarr/2017/08/24/disney-uses-big-data-iot-and-machine-learning-to-boost-customer-experience/#7e34fcfa3387" *Forbes*, and "https://www.wired.com/2015/03/disney-magicband/" *WIRED*

The Disney example illustrates how design can reimagine a value proposition in the face of shifting consumer expectations, new competitors and business models. Metrics used to help substantiate the validity and measure the success of such projects include:

• NEW PRODUCT REVENUE
• ABILITY TO ATTRACT TALENT
• IMPROVED CULTURAL METRICS
• MARKET REPUTATION
• BRAND VALUE

"One responsibility of designers is to reframe client problems to ensure we are addressing the right questions. The true return on investment in design is the ability to identify the strategic answer to the real, underlying business challenge."

EXECUTIVE DIRECTOR, ORG ACTIVATION

Turi McKinley
on visionary transformation

"When you think about form following emotion," says Turi, "it's not just about creating a product that works or doesn't work, it's about getting to a product or service that evokes an emotional reaction and inspires the 'wow' in people." With 15+ years of experience in interaction design, design research and experience strategy, Turi's clients have spanned domains and include GE, Honeywell, ETS, Humana, Qualcomm, Mars, MTV, Telstra, Colgate and UNICEF.

Growing by design

Human-centered design has long been about more than just the creation of smart, effective goods and services. It is about developing the collaborative skill sets that businesses need to build services and experiences for customers.

Companies seeking to drive growth and competitive advantage are increasingly committing to design as a core aspect of their approach. Indeed, many companies treat corporate strategy development as an exercise in design to help navigate the extraordinary levels of complexity faced today.

Such an approach has the potential to generate tremendous value, but even as design becomes integral to the business strategy, there remains a need to justify the spend. Traditional metrics provide a way to gauge possible returns, but the rigid application of ROI measures can kill radical ideas in favor of opportunities closer to the core business. Yet, it is the radical ideas that can transform a company and set it on a new trajectory.

So how can companies get beyond a "way things are done here" mindset and make space for radical ideas? **First, there is a need to understand the power of design**. It should be applied in situations where innovation is required, to cut through complexity or to imagine the future. Design offers a different set of tools than those for optimizing, rationalizing and streamlining a business, so it cannot be measured in exactly the same manner.

Second, it needs to be understood that the system-level value that accumulates throughout a firm over many years is not easy to fit within basic ROI metrics. What value will an initiative ultimately bring if it provides a far better customer experience? How can you measure the value of a business transformation? Holistic initiatives that enhance multiple aspects of a business need broad measures that truly capture their value to the firm.

While each company's design initiatives will be unique, there are—as this Insights Paper reflects—a wealth of business metrics that effectively measure the business value of design.

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To start a conversation about the business value of design in your organization, contact business@frogdesign.com

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