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Organizational renewal and innovation through design

The products, services, technologies, ecosystems, and networks of today are much more interconnected and complicated than ever before. As a result, private and public organizations alike are turning to design to find new ways to create value, manage uncertainty and innovate in a sustainable manner. Design can play a variety of roles on different levels in organizations, with different effects. The Design+ book offers an overview on how design and design thinking can change our organizations, drawing from academic research and company experiences in different industries. We showcase different perspectives and approaches, and hope to inspire you to explore the opportunities through which design can help to renew your own ways of working.

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DESIGNING GROWTH AND CHANGE

Tracking the impact of design

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The complexity of tracking the impact of design is well known - how do we isolate the effect of design in a team effort? In an organizational push? Its long term effects? At the heart of measuring design should be the current needs of the organization. After all, you tend to get what you measure.

While still an understudied area, a number of reports have demonstrated the positive effects of design on for example brand, product success, launch times, profitability and innovation¹. Bringing design into organizations can be tricky enough as is², demonstrating its impact should not require a scientific study - or else your change efforts will run into challenges pretty soon.

Much of the pull for design efforts inside organizations is created through interaction - the experiential evidence comes from getting people involved in the process, seeing first hand the challenges customers face, the questions design can help to unearth, the power of prototypes and small wins to energize collaborators. Nevertheless, "how do you measure the effectiveness of design" is one of the most frequent questions we hear. Reviewing research³, we've found a number of external metrics (market and customer effects) and internal metrics (employee and operations effects) used for design focusing on

- 1] The financial performance and valuation of the company
- 2] Customer satisfaction and behavior
- $3\,]$ Extent and emphasis of design within the organization
- 4] Project outcomes
- 5] Development process
- 6] Employee outcomes

Despite the abundance of metrics - or perhaps even due to the proliferation - most organizations do not measure the effects of design in their organization⁴. Selecting the right metrics depends on what you are after. To answer this question, it's worth taking a minute to do some self-reflection on where your organization is right now and what you hope to achieve by the metrics.

WHERE ARE YOU AND WHERE DO YOU WANT TO GO

There are a number of practitioner frameworks for companies to map their design efforts against, evaluating the different areas design is applied to and the systematicity and extent of doing so in each arena*. Go with whatever model works for your organization, or craft your own labels and levels for different target areas and extent of usage. (we'll use the Design Ladder⁸ as a reference point in this chapter as it's a simple analogy and widely recognized in the Nordics). However, it's important to realize that particularly in larger organizations, different units will likely be at different steps on the ladder with different needs, and the appropriate metrics will vary accordingly.

STEP 1: NON-DESIGN

- Introducing design to your organization

When there's absolutely no use of design in the organization, metrics come into the picture mainly as benchmarks of other organizations. Typically, the focus is on the external-facing metrics of financial performance and valuation, such as share prices, turnover growth, or amounts of innovations. Publicized case examples, such as IBM's can be useful, but testimonials will likely prove more efficient - find local, trustworthy partners who can share their experiences.

However, in most cases you're not starting completely from scratch. If another unit in your organization is already using design, or you've

^{*} See e.g. the *Design Value Scorecard*⁵, assessing how systematically and proactively design is used in aesthetics and functionality of development and delivery, connecting and integrating in the organization and the organization's strategy and business models; and the *Design Maturity Matrix*⁶ tracking how integrated design is into company operations in the areas of customer understanding, mastery of design thinking, support for design and consideration of cultural, social and environmental impact, as well as the market response to the design output of the organization; and *The InVision Maturity Model*⁷ identifying five levels of design adaptation, ranging from producers (where design happens on screens) to visionaries (where design is business strategy).

used outside design services in the past, these can provide the most compelling showcases. Here you want to track more detailed metrics of financial performance on the project or product level on sales and revenue, as well as customer satisfaction and feedback, to make the case of bringing design in-house in your unit. For example, when OP (one of the largest financial companies in Finland, with cooperative banks and customer-owners) hired its first in-house designers back in 2011, user analytics from the first mobile applications represented the first attempt to measure design, and soon Net Promoter Scores (NPS) were launched to track customer satisfaction.

Evaluative/summative metrics on performance:

If you want to show that it works for design-centric companies:

share prices, turnover growth, amount of innovations, testimonials

If you want to show that your own early efforts have been worth it:

sales, revenue, customer satisfaction, feedback, showcases

STEP 2: DESIGN AS FORMGIVING

- Unleashing design in product design

When organizations bring in design, involvement typically starts in product and service development. Initially, design is often brought into the conversations rather late, as a finishing touch rather than driving force. While this limits the effect design can have, it's important to demonstrate the impact that designers are able to pull off. This can include tracking the performance of the designed products and services, comparing the performance across different levels of design involvement, as well as seeking external validation for their quality in the form of awards, such as the Red Dot Design Award. Having such a public reference can help to create legitimacy internally in addition to generating good publicity externally. On the other hand, when design is able to enter projects in early phases, potential challenges will be caught earlier and in a less expensive manner. Tracking the effectiveness of operations can show decreases in overall project timelines and resource consumption.

In addition to showing that design leads to good outcomes, it also becomes important to understand the extent of design in the organization. How many product or service development efforts involve designers? At which phases? How large is the investment into design, put into the context of other expenditure in the organization? For example, when OP started hiring more designers, a "design percentage" measure was created to capture their reach. Design percentage represented the portion of development projects utilizing designers, design methodology, or design thinking at some point during the project from idea to launch. This made increases in reach visible: the percentage of projects utilizing design grew from 10% to 38 % in 2015.



Evaluative/summative metrics on performance and operations:

If you want to show that your efforts have been worth it:

external outcomes:

sales, revenue, customer satisfaction, feedback, rewards

internal outcomes:

cost savings, reduction in time to market or project budget comparing KPIs of projects and products that have used design and those that have not

If you want to understand the reach of design:

Ratio of projects/product lines including designers
Timing of design involvement on project timelines
Ratio of designers to other staff, ratio of design budget
to other expenditure

STEP 3: DESIGN AS PROCESS

- Integrating design to development processes

Once designers start to be commonplace in development efforts, the question becomes how the benefits of design approaches can be scaled in organizations. In order for designers to do their work well, they need input, uptake and collaboration from a number of stakeholders within and beyond the organization. The organization now faces the challenge of not only supporting in-house designers, but facilitating non-designers in working customer-centric, iterative ways. Thus, while external-facing metrics continue to play a role, the focus starts to shift more towards internal metrics.

Tracking the extent of design within the organization expands to examining more nuanced design activities. For example, the percentage of development projects utilizing design at OP rose to 78% already in 2016, and is now close to a 100 percent. This necessitates moving towards more evolved metrics to continue to show progress. OP, for example, now surveys project participants after finishing projects on the impact and quality of design methods and tools in the project. Other internal metrics useful in this stage can include return-on-investments on a project level, internal ratings on the value and novelty of outcomes, as well as metrics tracking the extent of design beyond designer-involvement, such as the number of people in the organization trained in design thinking or taking part in design sprints.

Furthermore, the purpose of measuring transitions to more formative metrics that focus on identifying areas that can be improved rather than judging the overall quality becomes important. This is reflected in the inclusion of more process metrics in addition to output metrics. For examples, organizations can track the amount and frequency of contact with users and customers, responsiveness to their needs, as well as metrics related to testing and iteration, such as frequency of prototyping.

Evaluative/summative measures on performance and operations:

If you want to show that your expanding efforts have been worth it:

internal outcomes:

ROI per project, produced value and novelty, customer-centricity

external outcomes:

brand perception, brand loyalty, growth profitability, market share

Formative metrics on operations:

If you want to understand where you could improve the use of design approaches:

Employee satisfaction with design, frequency of using design methods

Amount and organizational location of employees trained in design thinking or using design approaches

Contact with users in development projects and responsiveness to customers

Frequency and type of experimentation and prototypes

STEP 4: DESIGN AS STRATEGY

- Building an inquiry-oriented organization

Once design enters a strategic level, it becomes a way of doing things in an organization rather than a part of the offering development. The focus becomes identifying new opportunities and models for business and organizational structures and processes to support this. Metrics for these, unfortunately, remain rather scarce, with most requiring either significant investments in the act and analysis of measuring, or, alternatively, suffering from a low traceability of effects back to design. However, on this level, sufficient buy-in is typically no longer a primary concern for measurement, allowing the focus on metrics that are helpful in developing operations regardless of their connection to design-specific impact.

Collaboration in and effectiveness of operations, as well as employee engagement become important metrics for building design-driven organizations. For example, with the financial sector facing disruption, OP measures feature turnaround time, focusing efforts to effectively develop areas that are meaningful for customers and drive business results, as well as design thinking and innovation maturity on an organizational level. Twice a year, OP personnel are surveyed on cultural change, including design. Employees rate statements such as "I find design relevant to my own work", "I have a possibility to learn how to apply design in my own work", "At OP, design is a key ingredient in developing new products and services", "Design is a key element in business development", and "Design gives OP a competitive advantage" to provide an executive view and actionable results for leading cultural change in the organization.

As the role of design shifts and grows in organizations, so, too, do the most useful metrics. While the discrepancy between existing

Evaluative/summative metrics on performance and operations:

If you want to show that design has an impact on strategy:

external outcomes:

entering new markets and the market response

internal outcomes:

seniority/rank of design positions within the organization, design-driven innovations

Formative metrics on operations:

If you want to better target your design investments:

Measuring the effectiveness of specific strategies and their operationalizations

Frequency and quality of collaboration in the organization and with external stakeholders

Employee engagement

metrics and organizational needs become more pronounced as design capabilities grow in the organization, having a chosen few key performance indicators helps to focus and visualize the impact of efforts, fueling further progress. However, it is worth remembering that these metrics will only capture a sliver of the complexity of design. Regardless of the level of design in the organization, numbers need to be complemented by rich examples and first-hand contact. Designing these into the experiences of leaders, employees and external stakeholders should be on the task list of any organization wishing to reap the benefits of integrating design into their operations and offering.

Tracking the impact of design on different steps of the design ladder:

2

1

Design as formgiving

Non-design

Benchmarks & external outcome metrics showing design works, e.g. sales, share prices External and internal outcomes showing progress, e.g. customer satisfaction, cost saving

Analyzing the reach of design internally, e.g. ratio of projects with design input

Showcases and first-hand

4

3

Design as process

Internal and external outcomes showing increased value, e.g. ROI per project, brand perception

Identifying where design approaches can be improved internally, e.g. employee satisfaction and frequency of prototyping & contact with users

Design as strategy

Targeting design investments and developing them where it is most needed, e.g. effectiveness of strategy, employee engagement

Showcasing reach of design to strategy, e.g. representation in management team

l experiences to persuade

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