DIGITALLY REMASTERED

How to Measure Better to Improve the Customer Experience

When every business—be it a startup or stalwart—is connecting with customers through software, it becomes imperative to deliver new experiences and services quickly. While incorporating software development as an integral part of business may seem like a daunting task, the first important step is to recognize the fundamentally different nature of software's role in business today. This isn't simply a matter of traditional IT with some added responsibility. The ability to deliver customer-facing, software-based experiences is an entirely new capability that you may need to build from the ground up. Your focus needs to shift outside the enterprise to the customer. You'll need to create software execution competency—a kind of modern factory—that will enable you to continuously deliver software experiences at scale to your customers.

In this excerpt from "Digitally Remastered," you'll learn the importance of metrics and how to get insights to power your digital transformation efforts and improve the customer experience.

Common Challenges with Metrics and Measurements

Digital transformation requires rethinking how, why, and what is measured. The traditional IT focus on operational metrics and infrastructure efficiency won't scale to meet the demands of an experience-centric approach focused on rapid business evolution. Operations will, of course, continue to be a critical part of the picture, but the new focus must include external outcomes as well as internally focused operational and efficiency improvements. In addition to factors such as cost and complexity, improvements must also be measured against the impact on the customer experience. Perhaps some additional cost or increased complexity is justified to improve the customer experience in a meaningful way. And data-driven approaches broaden the scope of operational improvements that are possible. For example, using data to dramatically increase the effectiveness of fraud detection and prevention can also have a transformative impact on an entire business.

Just as with other areas, digital transformation requires metrics and analysis to be integrated into the entire software process from design to delivery. All the disciplines involved in the process of delivering digital experiences will have a stake in measurement and analysis as part of the critical feedback loop needed for continuous improvement.

Not surprisingly, this change in the scope and role of measuring, monitoring, and analyzing with a focus on customer-facing outcomes brings with it a whole new set of challenges:

- **New skills and tools**. Extracting meaningful insights from varied sources of data goes far beyond traditional reporting of operational metrics and statistics. The acquisition of new tools and new skills may be required to be able to move beyond dashboards and to generate business and customer experience insights.
- **Breaking down silos**. Realizing the full potential of measurement and analysis will require cross-functional collaboration within and around the technology organization. Instrumenting and analyzing customer adoption of a new feature will often require participation of design, development, test, data science, and operational disciplines. It will likely also include collaboration with the sales and marketing teams to ensure that the entire business can gain insights to inform actions.
- **Constantly changing environment**. As new apps and new features are developed and deployed, measurements and the questions they aim to answer will change over time. This will be a major departure from monitoring stable, slowly changing environments and will require navigating through cultural change.
- **Insights instead of data**. A common response elevating the importance of measurement is to measure too much, or to measure the wrong things. Be wary of the temptation to over-instrument code and infrastructure to the point where you are collecting massive amounts of data that only becomes another management headache. The reason for instrumentation, measurement, and analysis should always be grounded in insights that create meaningful value to the business.

It will be important to avoid the trap of metrics for their own sake. Generating impressive looking graphics and charts can provide a false sense of security and the illusion of knowledge and control. Creating an agile analytics mindset focused on providing business insights and customer value will require iteration with concrete, actionable results as the goal.

Getting started

Metrics, data, and analysis must answer "why," not just "what" to ensure continuous improvement of customer experience. Why is a feature not being used? Why are some customers churning off an application? Why is a minor improvement driving a spike in adoption? As with agile, prioritizing customer value through measurement requires both organizational and cultural transformation. Here's a blueprint for starting that process:

1. **Focus on the questions.**
   The questions you are working to answer must become your true north. Instrumentation, data collection, and analytics are simply a means to an end. Technology is a powerful tool, but it can't tell you the questions that matter to your customers and your business. Importantly, make sure that the answers to your questions drive specific, meaningful action.

2. **Measure for insights.**
   It will be tempting to over-instrument code and infrastructure, and to collect massive amounts of data that simply becomes another management headache. Resist the urge and start small instead, concentrating on a specific area to demonstrate value. Keep in mind that you won't always know what data will be valuable ahead of time and that you will need to be speculative. Don't be afraid to over collect strategically as long as doing so does not become an operational burden.

3. **Run experiments.**
   Use analytics to guide ongoing experiments and to predict changes that will improve the customer experience. Armed with insights, you can then make changes to your service — or provide two different versions at the same time — and measure customer response to inform your product development. Analytics allows you to validate the results of proposed optimizations before adopting them at scale. You must not experiment at your customers' expense, but you can learn from your customers to improve the value and experience you give them.

4. **Optimize for the business.**
   Ensure that your efforts are deeply integrated into the business. The insights gained from targeted instrumentation can inform your business, and your business needs should inform the insights you set out to obtain. Your digital channels are central to your ability to understand your customers who, in turn, help to shape the evolution of your products and business. Integrate customer-facing measures such as Net Promoter Score (NPS) to track your progress and to help guide the evolution of your applications and services.

Don't get distracted by data. Instrumentation and data collection are important but must be focused on answering questions that matter to the customer and to the business in a continuous feedback loop.