Why user experience is crucial for procurement

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Abstract

Procurement touches every part of a company and the critical role that suppliers play in a company's operations only increases its importance. For direct materials, the purchases are managed by dedicated experts whose focus allows them to develop expertise in using specialised, and sometimes complex, systems. On the other hand, indirect purchases can be made by anyone in the organisation, most of whom will be infrequent users who struggle to adapt to any system that is difficult to use. At the same time, procurement departments are looking for ways to increase the amount of spend under management to reduce costs and minimise the risks, such as information security, associated with uncontrolled buying. Solving this challenge requires that we expand our perspective of procurement systems to include the overall user experience (UX). This paper is a summary of our collective learnings on why UX is critical to any procurement and supply chain organisation, and the proven framework and techniques we deploy to help companies achieve their transformation and operations goals.

Keywords

user experience (UX), customer experience (CX), end customer, procurement transformation, journey mapping, Amazon effect, self-service technology, spend management technologies, enterprise resource planning (ERP), indirect procurement, spend compliance, behavioural science, human computer interaction, shadow procurement organisation

CONTEXT

The international standard on ergonomics of human-system interaction, International Organization for Standardization (ISO) 9241-210 defines user experience (UX) as 'A person's perceptions and responses that result from the use or anticipated use of a product, system or service'.1 According to the ISO definition, UX includes all the users' emotions, beliefs, preferences, perceptions, physical and psychological responses, behaviours and accomplishments that occur before, during and after use. The ISO also lists three factors that influence UX: the system, the user and the context of use.

To date, most of the research and focus on the discipline of UX has been as it relates to the external end customer, from the design of websites to software applications, to the careful improvement of customer service operations. This same level of care and consideration is often overlooked for the deployment of digital solutions that serve internal customer needs. Without a clear correlation to key business metrics such as revenue, customer retention, customer lifetime value, profitability or market share, the internal customer experience has taken a back seat.

The oft-quoted Amazon effect. whereby self-service technology has enabled customers to order online in a frictionless process, has increased customer expectations,² in part due to saving them time and effort.³ In procurement, historically, there has been a desire to provide an Amazon-like experience and from an end-user standpoint, people have expectations that they will have business-to-consumer (B2C)-like experience when purchasing something. They are accustomed to using sites such as Amazon in their lives as consumers.

But this might not be the best way to look at this challenge, not least because procurement organisations are much more complex. A user is not just buying goods, but services, including travel and logistics. Procurement functions require controls and risk management strategies, and do not have the budgets to build an amazon.com-style enterprise.

WHY NOW?

The spend management technologies that arrived during the dotcom boom, including Ariba and Coupa Software, spearheaded a previously nonexistent era of UX in e-procurement. As these technologies continue to evolve, dozens of competitors have entered the market, accelerating everyone's access to a growing list of features and functionalities, but how these solutions are tailored and deployed is still just as critical.

At the same time, business users of procurement services have become more accustomed to performing consumeroriented services online. whether shopping or banking, and are now more comfortable with technology but have also become accustomed to higher levels of UX design. Just as the bringyour-own-device (BYOD) movement was driven by user expectations, the move toward better employee experiences will also be driven by their consumer experience. The challenge for procurement, however, is more daunting. The products and services purchased by a company are more diverse than the typical online consumer purchase. In addition, corporate procurement must address control and risk issues, such as information security, which are less important to individual consumers.

Technology will continue to be a key enabler of procurement's increasing

democratisation. We expect this trend to continue with some sourcing being pushed out to end users and the procurement organisation transitioning to being an enablement function.

One of the factors driving this democratisation is the increasing number of digital natives in the workplace. Many of the millennials who comprise 35 per cent of the US workforce and are predicted to make up 75 per cent by 2030 have grown up with technology. The 11.6 per cent of Generation Z in the US workforce are true digital natives and a 'hypercognitive generation very comfortable with collecting and cross-referencing many sources of information and with integrating virtual and offline experiences', according to McKinsey.⁴

At the same time, talent management continues to be a struggle for most large organisations worldwide; there were 10.7m job openings in the US in July 2022.⁵ Employee experience has never been so important. Technology that is not aligned to employee needs drives talent away (see Figure 1). For procurement, this means UX needs to be front and centre to engage with stakeholders across the business.

If employees do not know where to start when submitting a request to procurement and technology fails to predict human behaviour, strategic procurement professionals can become a help desk for employees struggling with systems and processes and mandates to follow procurement processes fail.

Instead, a positive UX will persuade users to adopt technology and follow the correct processes, freeing procurement professionals to focus on their crucial strategic role. This also improves negotiation leverage with suppliers, productivity, supply chain stability and operating costs.

Most companies face the same challenges of improving spend compliance and margins and running stable and seamless business operations. Now is the perfect time to bring UX under control.



Technology not aligned to employee needs drives talent away

FIGURE 1 The impact of technology on talent

STRATEGIES FOR SUCCESS

Some organisations think that purchasing new technologies is the answer to improving UX. Others think that a more robust change management programme is necessary. While both of these are a part of the solution, it is essential that these initiatives are undertaken under the umbrella of a deeper understanding of the true UX. In this section, we will discuss three key strategies for broadening your perspective and applying this perspective to key process and technology decisions.

STRATEGY ONE: DESIGN THINKING

Design thinking was first coined in 1969 and is a non-linear, iterative process that teams use to understand and address rapid changes in users' environments and behaviours. It involves five phases: empathise, define, ideate, prototype and test, and tackles ill-defined or unknown problems, helping to reframe them in human-centric ways.⁶

The intersection of behavioural science and digital that comes with design thinking is exemplified by what the mobile phone — 10,000 times more powerful that the technologies that put man on the moon — has taught us in our personal lives. We engage with it, we participate with new technologies via it, we adopt new ways of living with it. In addition, the human-computer interaction discipline can teach us a great deal about how design thinking can be integrated into multidisciplinary teams. If we apply those types of multidimensional teams to traditional business problems, we can unlock a better way to achieve business value.

Applying design thinking to procurement UX involves thinking about

the use case — the user journey through the digital process — and how the system responds to it. As with many business functions today, the interaction between business users and procurement teams will be increasingly enabled through digital interfaces, so the criticality of this discipline will only increase over time. In many ways, design thinking for digital interfaces is the equivalent of customer service training for peopleintensive services.

A complete course in design thinking is beyond the scope of this paper, but there are three concepts to consider for someone beginning their design thinking journey: embracing personas, developing journey maps, and following the facts.

Personas

Archetypal users whose goals and characteristics represent the needs of a large group of users,⁷ personas are tools to understand behavioural traits, common behaviours, tasks and interactions. They are usually presented in a one or two-page document and can include fictional personal details to make them a realistic character.8 A persona tells us what motivates or frustrates an individual, what they are trying to achieve, their general attitude towards the channel they are using. There are many techniques to create meaningful personas, but one of the best is an ethnographic research approach:

- What is that person's motivation?;
- What knowledge and experience do they have?;
- What is their typical day like?;
- What do they care about?;
- Are they mobile, analogue or web-oriented?

Truly understanding a persona involves doing your best to walk a mile in that person's shoes.

Journey maps

A journey map is a view of the entire process that a persona goes through to perform some task or objective. While this may initially appear to be a flowchart, there are some important differences. Flow charts or process maps typically are focused purely on the system interaction or the task steps to be completed. This may miss many of the elements that truly shape the user experience. For instance, in a hospital admission process, a flowchart may focus on items such as registration, triage and insurance validation. As we all know, however, much of the experience in a hospital is defined by the waiting room, something that is likely to be missed in most process maps.

So, when applied to procurement, a journey map takes a step further back to consider the entire journey from when a user first thinks they need to buy something all the way through to the payment or execution of the product or service. It attempts to expose the process from the perspective of the user by defining the key moments that matter in that process and what is happening during those moments. It is about building an abstract version of what that person does, or a day in their life, to a successful outcome. And it should highlight where the gaps are in current technology.

- What are those moments that matter?;
- What are the high points?;
- What are the points of friction?;
- What are the points of uncertainty that solutions need to be designed around?;
- How do we better navigate a person through those points?

How does this apply to procurement?

- Have you tried buying something through your organisation's processes?;
- How do users find out which systems to use for purchases?;
- Are policies clearly written and easy to find?;
- Where do requisitions typically get held up?

Follow the facts

Each of the previous concepts is only as good as the data and research behind it. Creating personas and journey maps may seem intuitive, but doing it properly requires research and fact-based decision making. This is the hardest part of the process.

As you go through the design thinking process, some of the key questions to ask are:

- How do you know which personas are important?;
- What information do you need to truly understand that persona?;
- Is your journey map reflective of the typical use experience?;
- Do you have enough information to identify the key 'moments of truth'?

With some online research, you can find out methods to help facilitate this discovery and investigation. Thirdparty companies can also be a source of expertise in this area.

Case study: Rethinking the submission process

For one client who was interested in improving the process for submitting service requests to procurement, we fundamentally redesigned the submission process and interface to ease the user's initial procurement experience. For a sample use case, let us assume the user needs to submit a request for support negotiating a large purchase. In the prior design, the procurement team asked for 50 fields of information at the beginning of the request to ensure they had all the information they need. The poor user, who knows nothing about procurement, opens the form only to find they do not know what most of the 50 fields mean and cannot add any context to their answers. So, they close the form, come back to it a couple of days later, open it, then close it out of desperation. Then they will speak to a colleague who found a way to work around procurement and pursue that course instead.

In this instance we need to consider it from a survey design theory perspective, asking:

- What are the critical fields needed to get the ball rolling?;
- What does the user need to do and what information do they need that enriches that process?;
- What are the facts that they need to know to make that decision?

In this case, we redesigned the form to reduce the number of fields required, provided contextual definitions for those fields and auto-populated others. The remaining information is gathered once the user has started the process and has better context for the required information. This is analogous to the process used by apps and websites to request feedback. The initial request just asks you to select a number of stars for the rating, but once you have done this and are engaged, it offers you an opportunity to provide more specific feedback. By asking fewer questions and questions users should know the answer to, they can now participate in the process. We have established trust, managed expectations, and invited and enriched participation.

STRATEGY TWO: OPTIMISE EXISTING TECHNOLOGIES

Often, procurement problems are not caused by the technology itself, but by poor underlying data or technologyfirst implementations. It is crucial to re-evaluate how current systems and tools have been deployed and are being used. Go back to the research stage:

- Who are your typical users?;
- What do users find especially frustrating?;
- How easy is it to find the products or suppliers they typically use?;
- Is the system designed to optimise the needs of the procurement, finance or analytics teams at the significant expense of the user experience?

Case study: Category taxonomies

A large retail client asked Genpact to simplify its category taxonomy. In its original state, it was using the UNSPSC taxonomy of about 3,600 categories, all of which were presented to a user when creating a requisition. This decision was made by its analytics team, whose goal was to get very granular data to perform detailed analyses. Cleary the human factor was overlooked. Choosing from so many categories was difficult and timeconsuming, even for an expert. For an occasional user who was not motivated to choose the correct taxonomy, the data collected was guaranteed to be inaccurate. This not only frustrated users, but the data provided was of no use to the analytics team.

Some key questions to ask to avoid this scenario:

- What can you expect your average user to know?;
- What motivation do they have to provide accurate data?;
- Are there other ways to achieve your goals beside putting the ownership back on the end user?

Other ways to optimise existing technologies:

- Ensure that workflows have a feedback loop, so users have visibility of where they are in the process;
- Select only the critical few fields that are necessary to make it easy for users and then add extra fields later in the process;
- Provide user-focused content such as catalogues;
- Simplify master data and approvals.

If enterprises focus on improving how an employee interacts with the existing system, they will see improvements in key performance indicators (KPIs), engagement, retention and minimising tech footprint.

STRATEGY THREE: EMBRACE NEW TECHNOLOGIES

Digital procurement and supply chain tools have come a long way in the last 20 years, evolving from green screen data entry platforms to intelligent end-to-end solutions. Many technologies now have a much more intuitive user interface and experience. New technology can also be an enabler for achieving UX change. There are two broad categories of technologies to consider: procurement applications and procurement platforms.

Procurement applications

In addition to the legacy procurement suites that have existed in the industry for the past decade or two, we are also seeing more and more procurement applications - off-the-shelf procurement tools, either hosted on a company's own site or in the cloud, often from smaller providers. They are all trying to solve niche problems but can be a mixed blessing. On one hand, they can elegantly solve some specific use cases, such as services procurement or vendor onboarding. On the other hand, each additional system represents an additional user interface for users to learn and requires users to know which system to use for which specific activity.

During the application selection process, the UX design needs to be done upfront; companies need to understand their personas and journey maps. These insights can then be built into the selection criteria for the software. Even more importantly, the selection team should use these insights to develop specific use cases that they would like demonstrated with the technology. If left to their own devices, software providers will often demonstrate features which put them in the best light and often focus on flashy features rather than those used most frequently. It is the equivalent of buying a car based on the cup holder design instead of comfort and fuel mileage. Solid UX principles will provide the foundation for avoiding this trap.

Procurement platforms

For the purpose of this paper, platforms are defined as low code technologies that

are not procurement-specific but can be applied to procurement use cases. Some specific examples include:

Platform type	Sample providers
Business intelligence (BI)	PowerBI, Qlik, Tableau
Workflow	ServiceNow, Appian, Pega
Modular cloud	Azure, Amazon Web
components	Service

These platforms represent significant advances in shifting power to people closer to business functions. This is enabling new capabilities which previously did not justify an investment in custom technology. For example, BI tools have given procurement teams direct and interactive access to data critical to their functions. But beware, there is also a hidden danger in using these tools. The attractive and professional-looking visuals can give the impression that the data is accurate. This is not necessarily the case. In the past, if a company invested in technologies to develop slick dashboards, they also typically invested in the data architecture and maintenance to ensure the accuracy of that data. These new technologies fundamentally change that paradigm so that users must consider the sources of data, and procurement departments have a responsibility to manage and disclose this on any applications.

Similarly, these platforms provide a significant opportunity to transform UX by:

- Filling in gaps in the technology landscapes, such as for vendor onboarding or requests to the procurement team;
- Providing real-time status updates to users to avoid being perceived as a black hole;
- · Improving the guidance provided to

end users using AI and other decision support technologies.

Again, there is a downside to the power unleashed by these tools. The burden of user design falls to a team that is not professionally trained in systems design.

With many new systems, development, maintenance and data are taken out of the control of IT functions. Procurement organisations should ask themselves if they are set up to do this. If companies put IT development in the hands of the end users, they need to understand what is required and must apply rigour in the UX design and development. Companies who find the right balance between this flexibility and the required discipline will find results that significantly exceed those of their peer group.

When a company implements a new technology, people engage with it at different rates. Typically, 15 per cent are early adopters, 15 per cent are laggards and in the middle are two cohorts: the early majority (35 per cent) and the late majority (35 per cent). Companies need to spend 80 per cent of change management budgets and time focusing on the early majority - understanding what their needs are and making them heroes in the use case stories. The late majority will witness the success of the early majority and will accelerate adoption of procurement applications and software.

Case study: A self-service shopping portal

Genpact worked with a leading global provider of medical technology and diagnostic solutions with operations in more than 140 countries. The use case was field biomedical technicians placing orders for parts and services for delivery to medical facilities. Typically, they would use the call centre when placing these orders due to very limited selfservice capabilities and a poor online experience.

This poor experience was compounded by high volumes of suppliers, locations and products and legacy systems which had not been integrated. This made the experience complex for both the technicians and the procurement team and limited the number of user experience improvements possible with the legacy system. A foundational change was required.

The solution started with deepening our understanding of the typical field technician and the dynamics of their day:

- What technology did they have access to?;
- Could they access it from the client location?;
- Were part numbers readily available or did the user need to work from descriptions?;
- What were the most important parts of the process, and which were the moments of truth?;
- What feedback did they need through the fulfilment process?

Based on this, we deployed a workflow technology as a system of engagement for technicians in the field and procurement agents in the back office. We provided a shopping portal for biomedical technicians that they could use for both on-catalogue purchase and off-catalogue intake forms. This provided them with a self-service solution that allowed them to place order for parts and services online rather than by calling a call centre. It also gave them visibility into the end-to-end order management process. A purchase requisition workflow was also deployed with business rules and validations. The solution also included an integration into the enterprise resource planning (ERP), which meant procurement agents no longer had to chase carriers or suppliers.

The project resulted in an almost immediate increase in employee productivity and satisfaction, for both the technicians and the procurement team, while simultaneously increasing governance and control. As demonstrated in this example, control and user experience are not necessarily trade-offs as is often thought.

FINAL COMMENTS

High-performing procurement organisations leverage UX in the design and selection of their processes and technologies. Their users are more productive, retained longer, rate higher levels of staff satisfaction and the businesses are more profitable. Procurement organisations should think about employees in the same way a marketer thinks about customers. What they measure may be different, but how they solve the problems is not.

Any starting point needs to be agnostic of technology, focused instead on the best way for a user to participate in the procurement process. Technology accelerates the solution to a business problem. And the solution to a business problem starts with human behaviour and interactive design.

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