Human centric design for Finance

Four perspectives provide a clear view into the value and pitfalls of perhaps one of the most powerful, yet misunderstood and inappropriately applied trends in business — design.

Within banking and finance, one of the greatest challenges to the ever-present drive for improved operational performance and regulatory compliance is the human workforce. Tremendous risk exists within this most valuable and simultaneously most expensive aspect of business operations. Traditional methods of process analysis, systems deployment, change management and training have been the de facto means of organising better methods of work, and despite recent moves towards more lean or agile approaches, real operational transformation is rare and operational risks persist.

By appropriating skills and methods normally reserved for products and services targeted at consumers, financial operators can expose opportunities that have gone untapped in large, part due to the absence of a unique and powerful discipline — design.

First, discovery: accurate problem definition

When a major investment bank's New Product Approval process was jammed with hundreds of items that were in fact not new products needing thorough review according to the demands of a regulated process (<5% of items were actually new products), the problem was initially thought to be: keep people from putting non-new product items in the approval queue. A closer look at the motivations of the people placing unwanted items in the workflow revealed that a workforce fearful of violating rules within a highly fluid regulatory environment was seeking safety in the rigorous review environment of the New Product Approval system, despite the fact that the New Product Approval pipeline was a review process intended only for developing new products, and that these additional items created an expensive and risky logjam.

Problem definition is where designers begin their work by asking why there is a belief that something needs to be created or a problem needs to be solved, and the human context is where designers begin. Ask anyone what problems they have, and you will likely be asked in turn, "How much time do you have?" Human beings are not challenged in their ability to inventory and describe perceived challenges. This is no different in business operations where problems can seem to be everywhere. Rushing to a solution based upon our impressions of challenges can leave us solving the wrong problem or missing an opportunity.

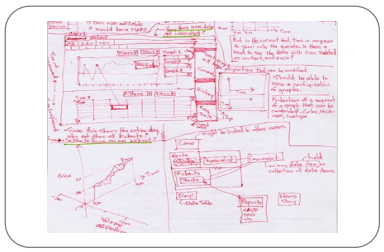
For that investment bank, the New Product Approval process and system needed to be smarter — to account for human behaviours that were not going to change with any amount of change management, training or policy. The pipeline needed to be smart enough to manage new product materials and route everything else to an appropriate destination — alleviating the logjam while respecting the needs of the workforce in a tough regulatory environment.

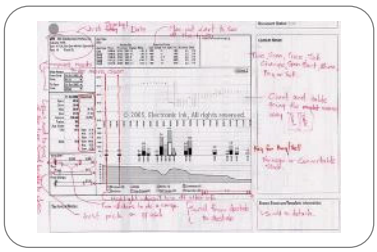
The problem was not getting the workforce to do something the right way, but delivering an operational model that could deliver on business needs while reflecting the needs of the workers. It was design that defined the correct problem, or opportunity — depending on how you look at it.

Next, invention: solution exploration

With an accurate problem definition in hand, possible solutions are explored, and things start to take shape. Think about an architect's model and drawings. Miniature in scale, representational of materials and economically created, the designer uses these techniques to bring multiple disciplines together, to encourage collaboration, to understand possibilities and to rapidly drive to a proven, informed solution.

In Finance, data access is critical. A design-driven approach to this persistent need does not ask what data is needed by the business. Instead, designers frame this challenge in terms of what effect can, and should, data have on the business, and what narratives people need to see in data. Minute by minute, daily, monthly, quarterly and year-end financial reporting, each in their own way, represent significant storytelling events. Giving form to the information that will reveal the stories within data, requires agility, economy and collaborative nature of design's exploration methods.



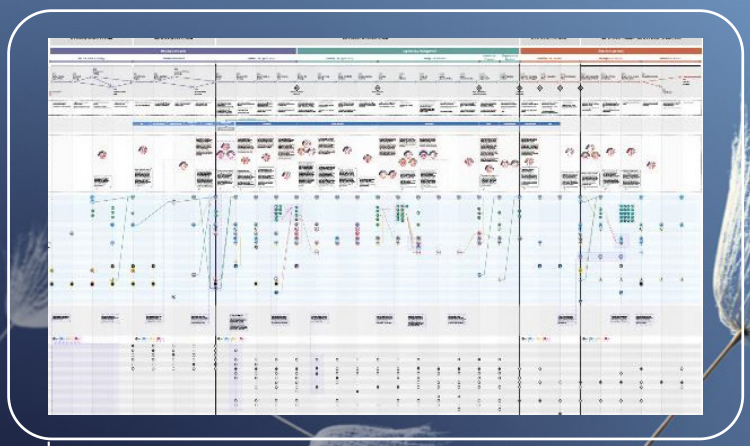


A designer's record of a conversation with business experts and cognitive scientists about decision-making and information needs (above left); a low fidelity interaction model of possible visual narratives (above centre); the at-a-glance current-state status and planning dashboard (above right).

Use case

Data access is also a service — an event that incorporates human context with technology, business process, and data science including machine learning and AI.

Model making is not limited to the display of data but extends to the exploration of how data will be delivered and used. Seeing the event of data use, the storytelling and its effect is another opportunity for the use of the designer's model-making ability and the efficiencies it affords.



Model making extends to the delivery of service (above, Zenda's operation model). – how data will be collected, accessed, used and ultimately affect the context of work within the business operation.

Then, risk reduction:
Also known as proof

The designer's reason for iteratively creating many models of potential solutions is twofold. First, models draw a variety of stakeholders into a collaborative event that allows them to see, understand and influence the maturing ideas — each from their unique perspective with particular goals and objectives. Second, as the evolving solution develops, it can be evaluated against its target environment in order to test whether it is fit for purpose — answering the question 'will this solution deliver?'

Master data management within Finance operations is a perennial challenge. Operationally, the transactional environment maintains and updates the master data itself. Those updates are driven by what can be a barrage of requests coming to the master data team from across the business. These requestors make errors in their master data requests more often than not — primarily because they cannot form their requests completely or accurately. When requests have errors, the work of the master data team is no longer master data management, but error handling. The remedy to this problem required a significant operational change, but would it work and could it be tested without tremendous expense?

What if the requestors of master data updates never saw the term 'master data'? What if the request form simply asked them to explain their situation and the form itself would translate this description to the appropriate master data request? The designer's prototype of this questionnaire and the logic of the model behind it sped this financial organisation to the proof necessary to commit to implementing an intelligent master data request form that sees master data requests arriving for processing with near-zero errors.

The designer's proof of concept model built necessary consensus within the project team and proved that target audiences would perform as needed — delivering immediate and measurable results.

Human centric design for Finance (cont.)

Finally, speed: to construction, and to adoption

Look at the thick stack of construction drawings delivered by the architect to the construction site and you will see a set of instructions that are undeniably clear to a wide audience of executers. The designer has captured in this set of pictures the agreed-upon details that everyone must execute upon. Within these drawings is not just the collective vision of dozens if not hundreds of stakeholders, but the proof, before a spade goes into the ground, that the building /end result will live up to the requirements that drove its definition.

Agile and lean methods that employ user stories and other prose-based methods for describing what software developers need to build in order to get a passing grade are a far cry from crystal clear instructions that designers hand to the individuals responsible for creating our built environments. It may be argued that the construction of a building is a 'waterfall' process and that 'agile' offers tremendous advantages over this older means of developing systems. In the present race to 'lean' practices, there is the misconception that less documentation and more, agile creation of code is the better way. Perhaps it is a question of what documentation is needed. The designer's documentation builds consensus, proves a vision and guides construction.

Way back when the first automated teller machines were being rolled out to the public, many lessons were learnt. The bank boasting the most successful deployment on the high street improvised the manner in which it would tackle this unique business and technology challenge. Designers were seated next to developers, both of whom answered to bankers. Designers drew pictures that bankers reviewed for accuracy and developers analysed for feasibility, while the behavioural scientists passed them on to customers to gather their reactions. This was as agile as it gets — and this kind of success was only possible with a designer in the room.

Delivering on design's promise

While interest in design within the definition of business operations, services, and tools is no longer novel, examples of meaningful design impact are sporadic and remain elusive. Design teams bemoan the fact that schedules and budgets do not create space for meaningful effect within projects despite often referenced metrics related to design's value. The fact is, for skilled design professionals, having impact often means jumping onto moving trains and 'showing rather than telling' project teams the value and impact of design skills and methods — by delivering value immediately, incrementally, and continually.

Within a programme that will see the replatforming and operations redesign across a global finance organisation, dozens of workstreams have organised around their consulting partner's operational best practices and platform recommendations. Subject matter experts from the ranks of the finance organisation are busy defining business and functional requirements that will define the future. Rather than fighting for space within the already tight timeline of programme activities and deliverables, design and designers have been incorporated into this programme as workstream members — availing teams with unique human perspective, communication skills, techniques and design artefacts.

Designers are not present within projects to magically make the complex simple, as design is often described. Frequently, designers bring clarity to complexity. They do this when driving the framing of complex problems, leading the exchange of thoughts and ideas among large and diverse teams, inviting audience into the evaluation and refinement of concepts and overseeing the execution of a vision. This is not new work; it is centuries old, but only recently being applied within the workings of our business institutions.

Co-author:
Harold Hambrose
Chief Design Officer,
Zenda LLC

Over a 30-year design career, Harold has focused on the delivery of design's impact to business enterprise systems and operations. He is the author of 'Wrench in the System: What's Sabotaging Your Business Software and How You Can Release the Power to Innovate'.

Co-author:
Steve Suarez
Global Head of Innovation,
Finance & Risk, HSBC

With a track record of over 27 years of transformation experience in consulting, telecommunications and financial services, Steve is a strong advocate of design thinking and its application for customer solutions. He is passionate about Innovation and the Growth Mind-set which drives his continuous learning. Most recently Steve took part in the Innovation and Entrepreneurship programme at Stanford and Innovation and Leadership at MIT where he became an MIT Sloan Alumnus..