DESIGNING THE DIGITAL BANK OF THE FUTURE

Jeremy Bryson

Van Haren PUBLISHING

Designing the Digital Bank of the Future

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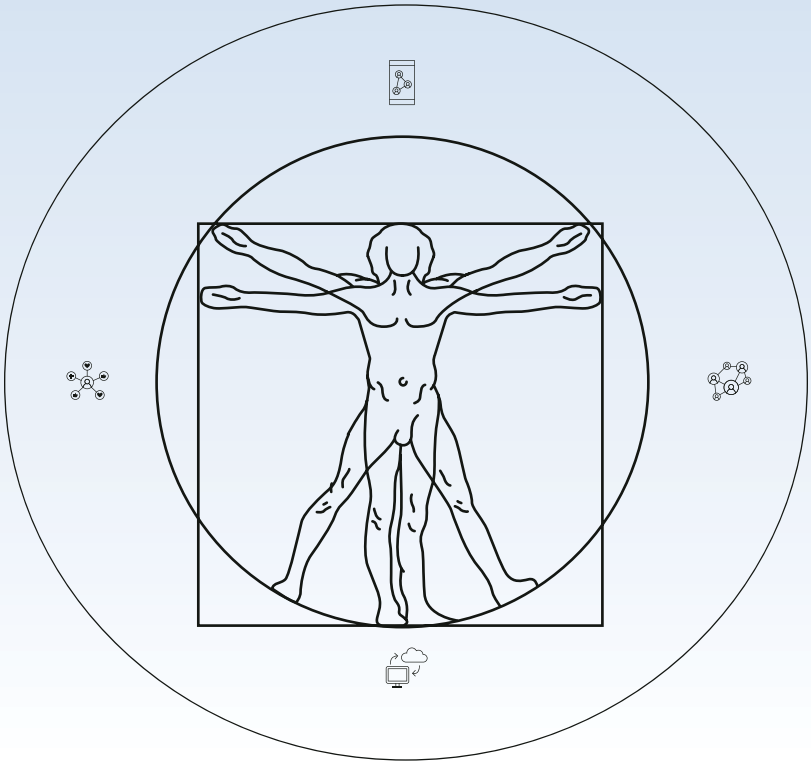

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Colophon

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Preface

Much is written about digitalization and the agile approach that has been used to develop it over the last 15 years and more. This theme has become key for business success because every company is now a software company. In addition, every bank is now a data management company as well, given the contribution that data makes to the value-adding to financial services. These trends promote connections within and between organizations, making success ever more difficult to achieve in such a complex environment. Financial services is an industry going through a profound restructuring on the back of the lessons learned from digital giants in their journey to digitalization. It is, however, useful to look at this restructuring in a bit more detail to draw some conclusions. The technology adoption, particularly in the form of cloud computing, is moving at pace based on ground-breaking innovation with its roots in the mid-2000s. Such developments matter because they do not just automate what is already being done, they allow new activities and create services for customers that were not possible with older technologies. Therefore, delivering to businesspeople what they actually want from technology is becoming more difficult as they are not familiar with the 'art of the possible'. What most organizations, and particularly financial services, are actually doing is 'combination innovation', bringing together solutions to do something new. There is much noise about this trend, and it is important to identify what organizations are talking about and what they are really changing as these do not appear to be the same.

Whilst we talk about innovation in technology, what underlies this are some structural factors about what financial services does and its position in an ecosystem-based economic model. The business issues that banks are using this new technology to address are enduring, hence the need to look at a) how banks exploit the opportunities created by this new technology and b) how the banks will function. These business issues are faced by both established banks and the relatively new Fintech sector. Fintechs have the advantage of being end-to-end designed from the outset but do not have the brand or depth of data available to established players.

Central to dealing with all this change is the role of the designer, in both business and service, to ensure that connected impacts lead to synergies through a strategically designed operating model. The design of the business is thus the means to making success happen and the designer role is, therefore, key to linking strategic intent to practical change. This book addresses how to exploit business and service design techniques for business advantage, not through the theory but rather through how to deal with the enduring business issues mentioned above and a number of practical problems.

I offer the material as a book rather than a series of articles, which could have been published in a different format, because of the enduring nature of the designer role, the design methods to be used and the business issues to be addressed in the industry. It should be treated as a guide both for design methods and as a prompt to design out business problems. I expect you to sample its content rather than read it end-to-end.

I would like to thank the review team who diligently critiqued this book and provided such insight and guidance: Jean Aw Peng Mei of Fermion Silverlake, Stefan Buxton of HSBC, Steve Heron and Matthew Perry, both of Lloyds Banking Group, all of whom have my deep thanks.

I would also like to mention the support and sponsorship of Raymond Kwong formerly of Silverlake Axis and Cyrus Daruwala of IDC without whose foresight this book would still be just a collection of thoughts.

Jeremy Bryson

July 2023

Endorsements

Business design is about working in collaboration to solve problems and shape initiatives to meet the needs of the customer, colleagues, and sponsors. The discipline ensures that business capabilities are harnessed and exploited to maximize value.

Victor Weigler
Chief Technology Officer, Lloyds Banking Group

Insightful, holistic design thinking is needed to systematically address the 21st century challenges of businesses and their complexity. This allows enterprises to thrive and grow sustainably, creatively, and orderly.

Raymond Kwong
Former CEO and Deputy Chairman, Silverlake Axis

Business design acts as the bridge between a myriad of complex business issues and the digital transformation agenda.

Saghir Khan
Risk Transformation Lead, EXL

This subject has moved from the detailed designer's desk to the boardroom, the design of new operating models is a necessary condition for success in the digital age.

Cyrus Darawala
Managing Director, Global Financial Services @ IDC

Connected impacts as managed by business designers have never been more important as in this digital age.

Steve Heron
Head of Experience Design, Lloyds Banking Group

This discipline is the binding force which drives synergies in an effort to function in more complex and difficult operating environments.

Stefan Buxton
Head of Data Quality, Global Risk and Finance, HSBC

Business design is a discipline that helps bridge execution and strategy in a holistic manner. Business designers help connect the dots between people, processes, systems policies and procedures and every other component of the business into an operating model that is designed for success.

Vidhya Rengiah
Associate Director, Product Management, Publicis Sapient

Contents

Introduction

Design is everywhere. As you read this book look around you and everything man-made you see will have been designed (unless you are looking at a loved one, pet or plant). In fact, most things you see will have been redesigned as well. I can extend the analogy to include architecture of the building that you are (probably) in. If you are in a room, the contents of the room have been positioned to fulfil a purpose and this is a form of design as well. Design therefore operates at the macro level (the room) as well as the micro one (the furniture and fittings). Like other businesses, financial institutions have been designed, mostly at a micro level and in response over time to changing external needs from customers, regulators, shareholders etc. After a while, the detailed design layered on top of a previous design starts to look inflexible and gets harder to change. Over time, poor design of the business will start to show in the complexity of implementing new technology and the ability to change the business. This occurs because the role of the business designer to think strategically and to apply design thinking has only recently been understood. Previously design results have not been well connected even if they would be good in the detail of what they were doing.

Business design has developed strategically in response to a number of influences. These include the recognition that designing the business is difficult and unlocks immense value, that traditional banks and Fintechs are in a race to progress, and strategic thinking has to be more closely linked to how the business is designed.

Similarly, service design dealing with how customer and colleagues, experience the business is seen as a key skill set to make change effective. There are many examples of well-designed services that stand out and this is needed for a financial services business to be successful.

It is also fair to say that anticipating the future design of an organization usually fails. This happens because predicting the future is so hard. I am writing this in May 2023. Could we have predicted what has happened in the world between 2020 and 2022 in 2019? Rather, the designer should adapt through changing the individual

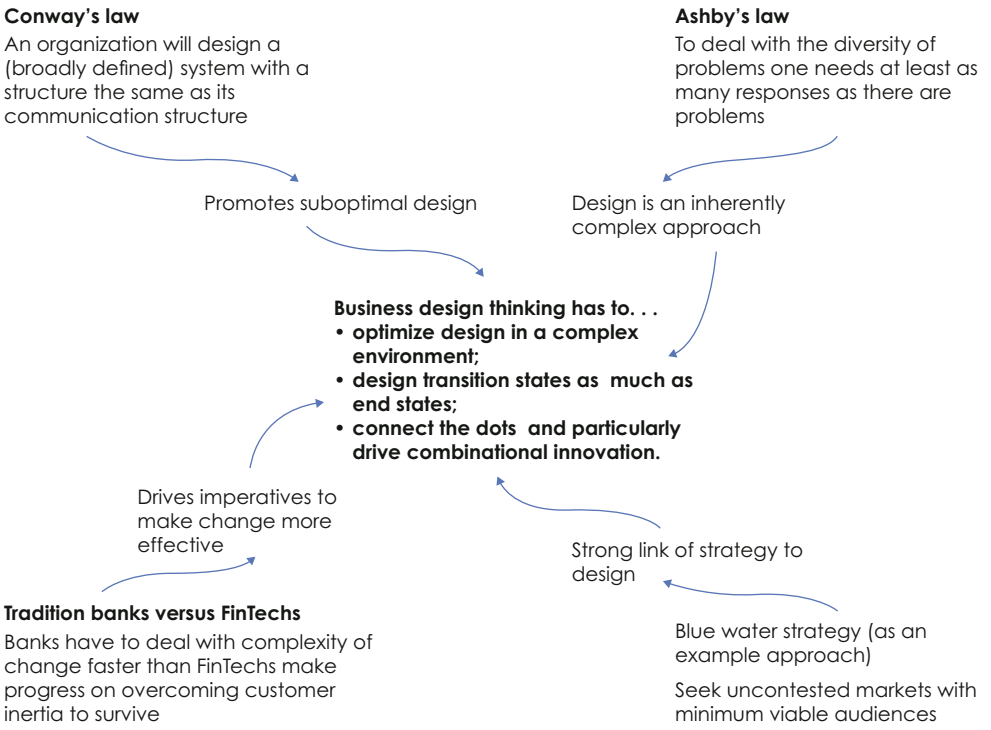

Figure 1 The reasons that business design matters

components of the business model, instead of everything at once. Combining those components flexibly adds more value to customers and shareholders than second guessing the business environment in a few years' time. The result is a discipline which is central for the future success of organizations and is becoming increasingly important to the CXO suite.

With the widespread adoption of agile techniques comes the realization that the business design discipline acts as the bridge between business strategy, technology strategy and business operations. This is coupled with the acceptance that every business is now a digital business, and every financial services company is also now a data management company. These big trends need to be managed strategically to unlock value, as doing it piecemeal has not relay delivered.

Part of design thinking is to see the business as a whole, not just the sum of its parts. Section 1 of this book deals with business design method-related topics which make a difference to the effectiveness of the approach.

Much is written about this subject from a 'how should we do it' perspective. However, these topics provide a practical guide of what matters and what doesn't. We therefore avoid the curse of the chirpy futurologist who naively pushes the benefits of new technology which we see too much of. There is a build element in

the approach which gives us the design thinking to visualize a problem. From that point, we break the problem down into its components and then be pragmatic in customizing the method to solve a particular challenge.

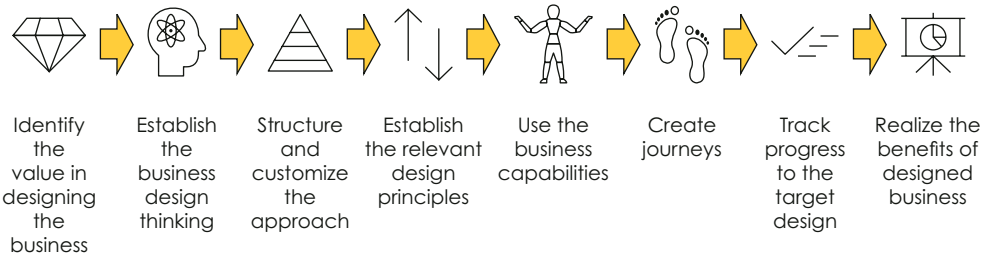

Figure 2 The design process in summary

A method has its place but needs to be flexibly applied, avoiding the dogma of over-adherence to a manual. The method centers around developing a target operating model (TOM) to address the problem statement and shows the change to be made. The TOM is to an organization as an architectural blueprint is to a building and becomes more important as complex change is applied to the organization.

The second section is how business design has been applied to hot, but enduring, banking topics and what practical learnings can be gathered about these subjects. There is much hype in the industry and this section addresses what is really happening and how business design should be put into practice. Tips and hints will help accelerate the design thinking in these topics.

Section 3 has a number of specific case studies which show, by example, how business design can be used to transform particular topics.

To aid the discussion it is useful to present a lexicon of design terms which we will refer to in the rest of the book.

Design Term	Description
Agile change	A development method emphasizing the iterative and incremental approach to change based on continuous feedback and adaption. It uses sprints to address the individual aspects of a problem and deal with its consistent parts.
Blockchain	Blockchain is a decentralized, distributed ledger technology which allows secure transactions without the need for intermediaries such as banks. At its core it is a database which stores information as a series of blocks linked chronologically.
Business design thinking	The discipline of looking at a problem and seeing how design methods can be applied to solve the problem for a successful outcome. It combines design thinking and business strategy principles.

Design Term	Description
Co-creation	Designs are developed with the customer or colleague in mind and allow these roles to provide feedback throughout the change process. Co-creation allows many different stakeholders to work together to come up with a solution.
Combination innovation	The process of combining existing ideas, technologies, services and products into new and innovative solutions.
Connected impacts	When design occurs in the detail of the business, connections between the outcomes are not always understood. Connecting the impacts is a way in which business design becomes strategic. Innovation in one area can have a ripple effect throughout the business.
Design collaboration	The process of bringing together designers, businesspeople and technologists to design a solution to a problem. It therefore brings together diverse perspectives and expertise.
Design governance	These are policies, practices and standards used to manage the design activities. Its objective is to ensure that design is aligned to overall organizational goals and values.
Design patterns	Originally applied to software design, these patterns are reusable solutions to a problem centered around what supports a business capability.
End-to-end thinking	The perspective on a problem which sees the start and the end of a solution, not just the immediate symptom.
Enterprise architect	The enterprise architect creates the end-to-end design of how applications and infrastructure support the business outcomes. This work forms part of the operating model.
Fintech	Financial technology companies use technology to provide financial services. Being new, they start with the advantage of exploiting new technology across the business model from the outset and they design their business model end-to-end from launch. This contrasts with established banks. This different starting point to established banks does, however, suffer from the lack of depth in data available to refine customer offerings.
Joining the dots	Looking at a problem statement and seeing it in the context of wider business design considerations. It is of most value in connecting different ideas, concepts and information to create a meaningful whole. Verifying these connections is often done through prototyping.
Large language models	These are machine learning models designed to generate natural language text and are typically trained on massive amounts of text. They are unsupervised learning models which identify patterns and relationships between data.
Moments of truth	The event which occurs, typically experienced by a customer, that determines what impression the customer takes away. These moments are not all of the same value to the customer.
Operating model	This shows how the business functions in terms of its processes, data, applications, infrastructure, and organization design. There are several versions of this artifact being: 'as is', target and a number of transition states.

Design Term	Description
Persona	A persona is used to show how a type of person behaves when dealing with the operating model. Personae are typically customers or colleagues but can be extended to wider members of society who can be affected by the actions of a bank.
Prototyping	The use of a design pattern to see if a viable solution can be developed and tested to assess, not just that it works, but it also meets the outcome set.
Service design	The design of the actions which a customer, colleague or other stakeholder experiences, often centered around a problem which the person wants to fix and expressed in terms of outcomes.
User testing	The assessment of whether a solution addresses the fundamental problem statement and meets the outcome sought.
Waterfall approach to change	This is a linear project management approach using sequential steps such as: user requirements, design, build, test, deploy and maintain. It provides more structure and predictability than the agile change method, however it does not manage feedback flexibly to accommodate changes.

Section 1

Using the design method

1 Where does the designer fit?

Evolving roles

The role of the business designer or service designer was not prominent in the origins of agile development. That is partly because traditional systems development was based around the business analysts' function. This activity generally focuses on gathering and synthesising business requirements from users and also capturing non-business requirements. The business analyst's role also tends to lean towards the implementation of technology systems and does not focus on how the business will alter as well. The result was that the traditional systems specification document in its various forms often centered around use cases and actors.

There has also been the external management consultant role which has looked at strategy and focused its efforts on problem solving. In many respects the business designer role has evolved from an attempt to bring consulting skills in-house and provide the link to the business analyst which is still needed. These skills are combined with those of the service designer to focus on the customer and colleague.

Design in the organization

Our designer therefore has an interesting position in the organization, not just in the agile method but really at the intersection of strategic thinking, design thinking and innovation.

Whilst the exact specification for the role will differ between organizations it is probable that it will include some or all of the following:

- Linking design work to the big strategic picture and join the dots to create a more impactful solution.
- Creating and shaping innovative business models which should be both feasible to implement and profitable for the organization.
- Working with business management to shape and scope ideas into design, taking the strategic intent to the next level of detail. These ideas can be strategic and tactical and maybe disruptive or well planned.

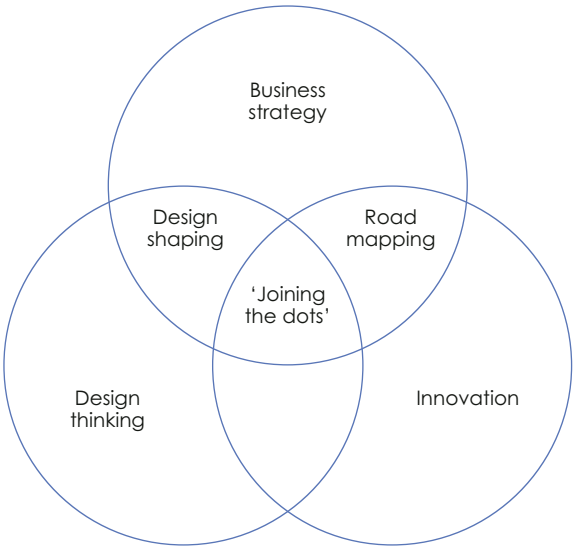

Figure 3 Positioning the design role

- Working with the management team and the change function, shape the solution and prioritize it in the roadmap of change. This may be a scheduling role, or it may develop the business case. This case can either be a financial analysis and / or a story selling the change.
- Facilitating the solution development in the agile process, typically early on, and making sure that what is designed and built remains relevant.
- Designing out complexity at all levels in the operating model. This should be the quest that this role has. Many organizations seem to have unnecessary complexity, but this is not necessarily sloppy management. Mergers, new business line launches and new regulations all work against the business because of the stressed timescales to 'get it done'. Redesigning the business seeks to rebase line the operating model and get rid of this complexity.

Is the designer role part of the agile change function? The fact that I raise this question means that design does not always have to be in such a function. Given the designer operates at the intersection of strategic thinking, design thinking and innovation, design can be placed in the change function, in a strategy function, or separated out completely. All of these options are viable depending on what the business decides is important in making design effective.

Designers and their stakeholders

More than other roles in the business, the designer should be working with different types of stakeholders. Communication, facilitation and influencing skills are key to making the role work. Let us look at different personae of the stakeholders and how the design function works with them.