“Chris’s theorem of why digital banking is not only here to stay, but critical to the survival of the retail bank as we know it, starts with some pretty basic assertions, but is backed up with his usual scholarly approach. Chris compares the likes of Apple and other industries and businesses that have adapted to digital by taking a revenue-led and customer-led approach to reform and innovation. He starts off by saying we have to wipe the slate clean.

“The key problem for retail banks right now is that they don’t capture revenue effectively through mobile, web, tablet and other channels like most other industries. While there is a role for the branch moving forward as Chris points out, the bias that exists in serving and selling to a customer through the branch is still alive and well. That distribution channel is hopelessly inefficient and overburdened with a ton of process and complexity that simply adds to the cost structure. However, there is strong defensibility of that model because there’s no commitment to alternative revenue streams.

“Chris defines the causes of this intractability well. From the problems of skill sets (‘...you firstly need to rehire’), through to the design of processes and interactions, and the very understanding of consumer behaviour. I think Chris has added tremendously to the conversation with this book and I highly recommend it.”

Brett King,
author of Bank 2.0 and founder of Moven

“It’s always tough to read and review a book where (a) you know the author and (b) you read his daily blogs fairly regularly. Liking him slightly diminishes his authority and daily reading means you’re sure you know what he’ll say.

“Well, Chris Skinner has done a great job here. This is very much an up-to-the-minute look at the challenges banks face as the information age goes into overdrive. And it’s not pretty. Banks are unprepared, incapable and slow... If banks can’t handle information—the core of money—then perhaps they should get out of the game. A genuinely valuable read for anyone who thinks banks can return to the same old after the financial crises since 2007.”

Michael Mainelli,
Emeritus Gresham Professor of Commerce at Gresham College, London

“There are very few people in the financial services industry who can cut through the complexities of the business to provide truly valuable insights. Chris has a strong track record for understanding the present and accurately predicting the future in financial services. The combination of his knowledge of changing customer preferences and his understanding of the strategic priorities of the financial services industry results in highly valuable insights.”

Debbie Bianucci,
president and CEO of the Bank Administration Institute (BAI)

“Chris is perhaps the first writer I know who successfully captures the pulse of the financial services industry not from a European or American but from a truly global perspective.”

Emmanuel Daniel,
founder and editor-in-chief of The Asian Banker
“Chris is renowned in London for his provocative and deeply insightful views on the future of financial services in its various forms. His presentations always challenge the status quo and open minds to the possibilities that the future brings. Likewise, his writings articulate a true vision of a rapidly changing world where industry-standard assumptions fall to pieces. If you really want to understand how the financial world is changing, you must read this book, which you will enjoy for its irreverence and earmark for its brilliance. Good luck!”

Roy Vella,  
mobile services expert, speaker and entrepreneur

“Chris Skinner is a leading expert, media commentator and blogger on technology in finance. In this book he brings together his thoughts on how the delivery of financial services will change as banks realise their ‘digital future’. Drawing on three decades' experience of developments in banking technology, he provides an invaluable guide entertainingly illustrated with an array of fascinating case studies to the changes we can expect to see in this fast-moving and vital industry.”

Annie Shaw,  
Daily Express columnist and money expert for Radio London

“Digital Bank is a welcome contribution to the study of emerging digital trends in financial services by a writer who has long distinguished himself in this field. Chris Skinner is well known in the industry for his perceptive observations on how technology is changing the business model in banking. As always, his commentary in Digital Bank is couched in clear, direct language—with a nice touch of wry, Monty Pythonesque English humour—that readers of all levels of expertise will find accessible. You don't have to be an academic or even a banker to appreciate his work! While one can debate any particular point that Chris makes, the depth of his knowledge and research always shines through to enrich the discussion and provoke the reader's engagement with the topic. All in all, a must read for anyone interested in the future of financial services.”

Kenneth Cline,  
managing editor of BAI Banking Strategies

“I have been reading Chris for a long time and I can certify his great ability to understand and anticipate well in advance what banks should and should not do. Whoever reads this book full of great insights, without swiftly moving to action, in three years' time may regret it!”

Guido Poli,  
head of Market Intelligence, Banca Monte dei Paschi di Siena

“I am glad to be able to thoroughly endorse him as a person who has both the intellectual acumen as well as the drive and dedication to his industry, which is so sadly rare in the business world today.”

Steve Edwards MBE,  
head of Fraud for eBay Europe
“In *Digital Bank*, Chris Skinner shows why he is considered the foremost financial industry scholar. As the banking world is being transformed from a world of branches to digital financial experiences, with new partnerships, new forms of commerce and even new currencies, Chris captures the scope and impact of these changes in an easy-to-read format. While nobody can be sure exactly how all these changes will impact tomorrow’s financial landscape, Chris combines his perspectives with interviews of some of today’s most innovative FinTech leaders into a book that no traditional or digital banker should ignore.”

**Jim Marous,**  
Senior Vice President at New Control

“Way too many business books blather on about how the world will be different because of emerging technologies. Way too few go into details about the how and why to create that future vision. This book belongs in the latter category. The depth of examples the Skinner offers up on how digital technologies is transforming banking is staggering. More importantly, though, is the in-depth analysis of how banking will change from how data is the new competitive battleground to the impact of data on bank processing to the new economics of banking. This is not simply a must-read book for financial services execs. It should become a discussion tool for management teams, who should be assigned to read chapters to be discussed in management meetings.”

**Ron Shevlin,**  
Senior Analyst, Aite Group and author of the Snarketing Blog

“Chris’s call to arms for the banking industry to embrace its digital future. What does the future hold for existing banks and can they transform their operations and relationships to compete successfully against digital newcomers? Will legacy bank customers trust them with their data and permissions, given the lack of confidence and trust in banks and bankers, and the search for a new banking? *Digital Bank* brings these, and many other dilemmas out into the open. One of the greatest strengths of the book is the wealth of examples and case studies from around the world, showing just how much of the future is already here, now. A very useful resource for bankers, would-be bankers and business students alike.”

**Simon A. Thompson,**  
Chief Executive, Chartered Bankers Institute
DIGITAL BANK
STRATEGIES TO LAUNCH OR BECOME A DIGITAL BANK

CHRIS SKINNER
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THIS BOOK IS DEDICATED TO MY MUM,
SOMEONE I’VE NOT SPENT ENOUGH TIME WITH
OVER THE PAST TWENTY YEARS BUT
SOMEONE WHO NURTURED MY SUCCESS
AND HAS BEEN MY INSPIRATION.
ACKNOWLEDGEMENTS

This book is an amalgam of ideas, insights and thoughts written on my blog since 2007. The blog is fed by lots of news from around the world thanks to the Financial Services Club, a business I created with my business partner, Andy Coppell, in 2004. It is because of Andy that this club exists and I am forever in his debt for his stalwart support.

So first and foremost, my utmost thanks to Andy Coppell and his family Margaret, Heather and Lynn. Without their unfaltering support of the Financial Services Club and our activities, I would not be doing what I am doing today. Equally, thanks to Michael Baume, Thomas Labenbacher, Lydia Goutas and Sandy Davison for all of their efforts in keeping this network alive. Words cannot say enough.

A specific group of people who are real movers and shakers are the guys at Moven, a bank start-up in the United States led by my good friend Brett King, author of Bank 2.0, Bank 3.0 and more. Brett, alongside Alex Sion, Richard Nearn, Scott Bales and the team, is launching something really interesting and I am excited to be a small part of it.

Another group that has fed me so much good content are the guys at SWIFT who created Innotribe, an innovation stream within the industry group. I specifically would like to cite Matteo Rizzi, Mariela Atanassova, Konstantin (Kosta) Peric and Peter Vander Auwera for including me in their efforts.
There are a number of people in the banks that I would like to pick out but the list is too long. Given the chance, I guess I would start with the following as they have been particularly supportive in recent times: Amanda Brown, Andy Hutchinson, Darren Armitage, David Ellender, Ian Lloyd, Mark Mullen, Jim Marous, Jeffry Pilcher, Paul Smee, Roy Vella, Ruth Wandhofer, Tim Decker, Aden Davies, among many others who help me with my work.

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Finally, I would like to give a big thank you to Kamila Nosarzewska, my partner, for putting up with me and my passion. Yes, banking and technology and the future are my passion, and I hope this book will provide you with some useful insights.
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I've called this book *Digital Bank*. I did want to call it *Data Wars* but this book is about banking. Nevertheless, calling it *Data Wars* would have made more sense. This is because the book is about the battle for the future of banking, which is all about data. In fact, it is already about data, it’s just that some banks are yet to realise this. I find this somewhat surprising as the battle over bank data has been bubbling away for over thirty years.

Around thirty years ago, a visionary bank CEO articulated what we all knew then but many dared not say: “Banking is just bits and bytes.” John Reed, the then chief executive of Citibank, is credited with this quote and over the past three decades we have seen the import of this statement become clearer and clearer.

Back in the 1980s, when John Reed made this statement, banks did not have call centres or Internet banking, just branches. Even then, the processing of data and the importance of data to the bank were prescient. This is because banks had moved through the 1960s and 1970s automating back-office functions using mainframe computing and were heavily processing data in the back office.

The first—and largest—processor of data about money was Visa, the commercial organisation spawned by BankAmericard, the credit card that
stormed the United States in the 1960s. The company automated the paper and carbon billing processes that hampered the industry back then. Fast-forward to today and Visa processes billions of trillions of bytes of data every day.

Things changed very slowly, from the large-scale mainframe automation of Visa and the banks in the 1970s to where we are today, and are all a result of revolutions of compute power. Bear in mind that the automation that put a man on the moon in 1969 was more basic than the automation you now hold in your hand in the form of a smartphone, and you can pretty much see why.

Compared to forty years ago when banks were automating the back office and becoming large-scale data processors about money, Visa is now processing 100 billion transactions a year whilst currency traders trade over $5 trillion¹ a day, and this amount of trading is growing exponentially.

These numbers reflect the explosion of data around the world thanks to the ubiquity of technology. The fact that the majority of people on the planet have a mobile telephone, tablet computer, laptop or other form of technology in their possession is part of the reason for this change.

Today, we talk about more data being produced in a year than in the whole history of mankind but what does this actually mean? In practice, it can best be illustrated by thinking about the complete works of Shakespeare.

William Shakespeare, the bard and playwright, produced magnificent plays, dramas, tragedies, sonnets and poems. If you were to look at the total output of his work as a computer file, his complete works would amount to about 5 megabytes of data. Today, we produce 500 billion works of Shakespeare every day. Yes, that’s right, 500 billion works of Shakespeare or, if you prefer the computer number, 2.5 exabytes of data per day. An exabyte is a 1 with 18 zeroes after it, or 1,000,000,000,000,000,000 bytes. That’s a staggering amount of information!

Much of this data is erroneous or irrelevant, coming in the form of updates on Facebook, Twitter, Tumblr, Flickr and other social media.

¹ Unless otherwise stated, the currency used throughout this book is the US dollar (US$).
Nevertheless, the rise of the Internet to the mass deployment of mobile telecommunications has resulted in a world where every single one of the seven billion people living on the planet can now communicate, share, transact and trade with each other electronically, one-to-one, globally.

That is the transformation of today. It is the reason why exabytes of data are being produced every day and why data is the new battleground for commerce. From retailing to banking, every aspect of how we live is being targeted by data. Data analysis, data mining, data leverage and data detail is the criticality.

It is the reason why data is described as the new oil, greasing the flow of business, commerce and economics the world over. It is the reason why thieves target the theft of data as data is where the money is. It is the reason why data is the gold for everyone trying to win mindshare, wallet share and attention from their target audience.

We live in a world where everyone is data rich but time poor, and that creates the real issue: How do you sort through all of this data to find the gold? How do you analyse all of this information to provide insights? How do you find the unknowns from the data in order to provide knowledge? And how do you wrestle with all the bits and bytes to find wisdom?

Again, this is not new. As Michael Douglas noted when he played Gordon Gekko in the 1987 film *Wall Street*, “The most valuable commodity I know of is information.” The difference today is that data has just become far more of a centrifugal force for change thanks to the rise of the mobile Internet where ubiquitous technologies connect everything everywhere.

As we all move towards wearable computing through the Internet of things, we see a fundamental transformation of society, government, economies, business, commerce and banking.

This book focuses upon what these changes mean to banks but it could equally apply to any other business being transformed through digitisation. For example, the revolutions in retail through the rise of Amazon and in entertainment with Apple have resulted in the death of traditional retailers
such as HMV, Jessops, Comet, Blockbuster and more. This is the challenge we now face in banking.

In banking, these changes mean a complete rethinking of customer relationships and the method of delivering value to meet customer needs. It has created non-stop debate about whether banks need branches, whether there will be a cashless society, how to bulletproof banks from cyberattacks, how to keep up with customer demands as they move to mobile and tablet banking and so on. In fact, digitisation has meant that banking is no longer about banking money but about banking data and keeping data secure.

All of this is radical change and requires radical action in order to keep up with such change. Unfortunately, this is where banks are failing. They are too slow to change and, in some cases, downright resistant to the changes demanded by the digital age. In fact, for some banks, it is plain scary as it is hard to change when you do not know what you are changing into.

For those banks floundering with the future and for those engaged in change for the future, this book provides a blueprint guide to the journey. It provides direction and guidance as how to re-engineer products, services, processes and structures in order to become a Digital Bank.

Rich with case studies, commentary, knowledge and facts, this book is indispensable for anyone working with strategies for dealing with the digital age—not just banks—as it will give you the critical insights required to understand how money, value, commerce, trade and economics are being reshaped and re-engineered for the digital age.

I hope you find this useful and look forward to engagement in future dialogue.

Chris Skinner, March 2014
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PART 1

DIGITAL BANKS
WHY WE NEED DIGITAL BANKS

For half a millennia, retail banks have worked on the basis of physical distribution. For half a century, that model has been challenged to move towards electronic distribution. At the end of the first decade of the new millennium, we have finally reached the point where electronic distribution has matured, works and is proven. Unfortunately, most banks are stuck in the 20th century. It’s time for banks to turn their model on its head and focus on electronic platforms, where physical distribution is the cream on the cake, rather than the other way around.

This occurs regularly as a debate around the future of retail banking. The discussions go something like this: “So are things like Second Life and Facebook just passing fads or are they really important to the future of retail banking?” My response is that the question is flawed because it shows that the person who asked the question is a digital alien.

“Digital aliens” and “digital natives” are terms coined by Marc Prensky and refer to different generations of digital usage.2 In Prensky’s definitions, a digital alien is an adult who is comfortable using the newest Internet-based technologies whilst digital natives are the younger generation who have grown up with the Internet as an integral part of their lives. The people

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2 Prensky, Marc. “Digital Natives, Digital Immigrants.” On the Horizon 9, no. 5 (October 2001)
who fall into the category of digital natives are Generation D, the i-Pops ... whatever you call them. They don't think of the Internet; they just get on with their lives and see online, mobile and all other digital channels as being seamlessly integrated into their world. These people do not think about branches, call centres, the Internet and so on. They just think of these things as life, and this is where retail bankers are getting it wrong because they are run by digital aliens or immigrants who do not get the digital life.

For example, retail banks have a historically strong branch network. They added ATMs in the 1970s, call centres in the 1980s, the Internet in the 1990s and are now adding mobile in the 2000s. Each channel is added as an extra layer on the foundation of the branch distribution cake. Branch networks are the foundations whilst electronic distribution is the cream on the cake.

This is why retail banks talk about multichannel strategies whereby they try to integrate their call centre channel with their Internet channel. They attempt to deliver mobile banking interoperable with the call centre channel. They mess about with customer relationship management (CRM) to ensure consistency across branch and Internet channels.

My problem is this: banks only have one channel. They do not have multichannels, call centre channels, Internet channels, mobile channels and so forth. They just have an electronic channel that underscores and provides the foundation for all end points: mobile, telephone, Internet and branch.

The electronic channel is based on Internet protocol (IP) technologies, as is the branch as it happens. And this is the big change: banks should stop thinking of channels and just recognise that they are digital enabled. Call centres, ATMs, the branch, Internet, mobile ... everything is digital enabled and, therefore, the bank has become a Digital Bank based on digitised platforms that reach into every nook, cranny, sinew and synapse of the bank.

Thinking this way demonstrates the fundamental flaw in much bank logic because many banks still have everything built in layers of complexity and legacy. The ATM, call centre and Internet channels were all built as layers of cake and created when the physical branch was the foundation. The
electronic channels were built as ancillary to the core branch channel. That is why they were often separated and have this chasm of non-integration between each other, as banks were built on a physical distribution model where electronics were layered on top.

However today, and certainly tomorrow, the population has moved to a world in which the majority are digital natives. As this Digital Generation grows up and matures, and as the world becomes populated solely by digital natives, what role will there be for banks that have been built upon the basis of a physical distribution model with electronics layered on top?

It’s time to turn all of this on its head. It’s time to think about banking as an electronic structure. It’s time to bite the bullet and admit that retail banking is not a physical distribution structure with electronic channels on top but, instead, an electronic distribution structure with electronic and physical channels on top. It’s time to become the Digital Bank.

This means wiping the slate clean and starting afresh.

How would you build today’s bank if digital networking is its foundation, and call centre, Internet, mobile and the branch are just the cream on the top of the cake? Where would you build branches, and how would you build them, if the branches are ancillary and perfunctory to the electronic foundations? Who would you employ, and how would you employ them, if the core differentiation of the bank is its digital base rather than its branch structure?

The fact is that any bank launched today as a greenfield operation would think this way and, with the right leadership and implementation, would thrash the weak competition existing in most markets that are based on legacy structures and legacy thinking.

Start thinking about the bank being a digital network at its core, with layers of distribution on top and branch as the cream on the cake.

It’s time for change.
DESIGNING THE DIGITAL BANK

As banks design their new generation Digital Bank, the starting point has to be customers and employees. Using this as the start, banks then need to consider how to build the processes and organisation structure using digital resources in an optimal way to reach and support those customers and employees. Finally, the bank needs to consider how traditional bricks and mortar fits in with this new digital structure in order to support the physical organisational structure that will be using the digital network.

Banks are trying to do the latter and, with greenfield operations, could do so brilliantly. Instead, due to the fact that they started building using physical structures years ago, they have to find a path to marry the two worlds. They are achieving this by building their digital architectures around the rewiring of the existing buildings that they want to keep in play, as part of this process.

The most important consideration here is the building of the digital architecture. What does this mean in practice? It means that banks need to recognise that they have been deconstituted in the digital process and need to consider how to reconstitute themselves.

As a digital business, all banking can be broken down into pure bits and bytes but, more than that, a bank can be seen as three digital businesses in one. It is a manufacturer of products, a processor of transactions and a retailer of services.

In this context, the digitisation of banking becomes more interesting at a strategic level. First, the products have been deconstructed. Every bank product can be deconstituted into its lowest common denominator of components, and then reconstituted into new forms of use and structure. This component-based bank demands that every bank capability is put into a basic widget form, or object form if you prefer, and then offered to customers to put together as they see fit. In other words, there are no integrated product sets any more, simply banking as apps that customers put together to suit their needs.

Moving onto processing, we build upon the app-based product view and begin to consider processes as open-source code. The open sourcing
of digital processes is rife and has disrupted and changed everything from how operating systems operate, vis-à-vis Linux, to how Google develops its omnipotent reach.

Learning from such open-source processing, PayPal launched X, a developer-based service for PayPal processes as application program interfaces (APIs), or forms of packaged functionality. APIs allow anyone to pick up and drop PayPal into their systems and, like banking products as apps, allow PayPal to be re-integrated by third parties into any code and operation desired. The result is that PayPal’s relevance increased greatly overnight and led to Citi following a similar approach when it announced that its transaction services would be offered as APIs at the SWIFT International Banking Operations Seminar (SIBOS) in 2013. In other words, all bank processing is just open-source coding, offered to anyone to plug and play with their offerings through APIs.

Finally, the customer relationship has also changed. The customer relationships used to be human, one-to-one. Then it became remote, one-to-many. Now it is digitised, one-to-one.

This is where Big Data comes into its own as we are now trying to manage remote relationships leveraged through mass personalisation. Mass personalisation can only be achieved by offering contextual servicing to each and every customer at their point of relevance. This means analysing exabytes of customer data to identify, on a privacy and permissions basis, what contextual service customers may need as they live their lives.

If they are walking past a car showroom, do you promote cheap motor insurance or a car purchase scheme? If they are leaving a casino, do you offer a loan or a referral to an addiction clinic? If they are leaving the maternity clinic, do you offer child investment services or a referral to an abortion clinic?

Some of these may seem controversial but we are already seeing contextual offers through finance coming into play in the form of Google

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3 For more on Big Data, see pages 151–153.
Wallet. And the aim of such contextual offers is to track your digital footprint, using Big Data analysis, to gain intuitive service offers relevant to your point of living.

For example, as Google tracks your searches for plasma TVs, you get an offer for £200 off the TV you spent the longest time studying online as you walk past an electronics showroom. However, the offer is only good for an hour, and only as long as you are in proximity of that electronics showroom.

This is the new augmented reality of customer intimacy through Big Data analysis, and bank retailing will be based on the competitive differentiation of analysing mass data to deliver mass personalisation.

In summary, the digitisation of banking is now mainstream, and all bank capabilities will be packaged as digital structures whereby products will be apps, processes will be APIs and retailing will be contextual, delivered through mobile Internet at the point of relevance.

Having said this, what happens to the physical structures of banking, as the digitisation of everything takes over, will be the biggest challenge of all.

WHAT DOES THIS MEAN FOR THE PHYSICAL BANK?

To become a Digital Bank, with digital networking at the core of the bank, is a real challenge as it means moving fundamentally away from placing branch networks at the core. Some people believe this is purely academic as we have branches today and can’t get rid of them, so the question is how to use the branches we have today. My contention is different.

It is obvious that branches are critical sales centres and, in the future, they will not be transaction centres. However, as they have served as transaction centres historically, this is what everyone is struggling with today: how can tellers be turned into sellers and branches into sales operations?

It is incredibly difficult to turn tellers into sellers. It’s a bit like turning credit risk officers into customer service reps. It might work with one or two people, but most would rather be tellers. So you first need to rehire.
If you are going to do that then you also need to ask, in the transformation process, if you are going to turn your old transactional branches into sales operations. If yes, do you need so many of them? After all, if you can get rid of the transaction focus and move it to machines, how many branches do you need?

Equally, if you are moving branches away from transactions, which are now managed through remote telephone and Internet connections and other self-service machines, all of which are digitally enabled systems including the branch ATMs, then how do you rethink the network?

This is why some bank strategies are fundamentally flawed as those who think branches are the starting point will throw good money after bad. In contrast, those who think digital networks are the starting point, and then build the end points on top, including bank branches, will be much nearer the right strategy for the future.

So here's the bottom line: those who think digital networks are just layered on top of old infrastructures, networks, distribution strategies and organisations are wrong. Believing this is precisely why we have ended up with silo structures, painful processes and inappropriate skills.

A bank strategy today needs to start around a digitally enabled bank. If you were designing that bank, then here's the question to ask around the branch focus:

How many branches would you layer on top?

- How many of those would be self-service automated branches and how many would be sales centres?
- How many members of staff, and what sort of staff, would you hire for those sales centres?
- What would be the customer demographics for each sales centre, and how would those staff skills fit with those customers?
- What will happen to the existing staff and who do you need to retrain or offer severance to?
WHY WE NEED DIGITAL BANKS

• What are the technological aspects of the digital enabled branch in this context, and how much technology should you put into the branch?
• What is that technology doing and how does it profile against the staff skills and customer demographics?
• Is the technology future-proof and how engaging is this going to be versus putting that service into other channels such as online or through contact centres?
• How does the underpinning of the new digital enabled branch fit with the digital enabled alternative contact points?
• Are they fully consistent with a single electronic digital enabled service?

These are all questions retail banks are asking, and some are answering ... and it isn’t easy. But it has to start with the network being the IP network of the 21st century and not the high street bricks-and-mortar network of the 20th century and before.

BANK DESIGN VERSUS ARCHITECTURE

The reason why the focus on becoming a Digital Bank is such a difficult one is that often people confuse design with emotion, architecture with distribution and channels with infrastructure.

The design of a Digital Bank begins with architecture, which is why I keep referring to foundations. The discussion often gets confused with bank design, which is different. Architecture is about materials, dimensions, frictions and structures; design is about the user experience, customer engagement, the human connectivity and whether it is face-to-face or screen-to-screen. The two go hand-in-hand.

The bank designer would start with the customer and how to focus on customer emotion and behaviours. I call this buyology.
BUYOLOGY: THE SCIENCE OF UNDERSTANDING BUSINESS RELATIONSHIPS

Buyology is a core science for designing banking in the new world of freakonomics, where everyone is struggling to understand the methods to get customers buying, and is defined as the science of understanding business relationships. It is all about knowing why people buy and how to create business encounters where purchases are made that can be replicated over and over. In other words, it is the ability to create long-term business relationships, not just a one-sale stand.

Bankers are learning about buyological processes because traditional selling and advertising no longer work. People don’t want to be sold to and they certainly don’t believe corporate speak. What they really want is to deal with businesses that demonstrate a true understanding of their individual wants and needs. That is buyology. Buyology then targets customer experiences through the customer’s channel(s) of choice.

Banks’ understanding of buyology is a clear strategic imperative because business has become so transparent thanks to blogs, Facebook and other social media. These networks now ensure that any cover-up of any issue is going to be exposed. That is 21st-century Internet-enabled consumer power. Social networks mean that banks must start demonstrating clear integrity that can be trusted or the truth will come out.

In effect, you cannot have a relationship without trust, so banks that don’t demonstrate clear integrity will only have the one-sale stand or the partner abuser. Buyology is therefore the sharing of a meaningful trust.

Bank relationships are based on trust and trust is easily broken. This is just as true in the investment markets as in retail for, in the investment markets, buyology has been moved to another extreme. Buyology for investment banks means creating services that the customer needs and wants but doesn’t understand.

Consequently, the relationship has become one in which the trust is in ignorance. A little like a father-child or priest-confessor relationship, the institutional buyer has to believe the broker-dealer is looking after their best
interests. Unfortunately, this is being called into question thanks to the new regulations around best execution and transparency, which implies broker-dealers don’t always act in their clients’ best interests (really?!).

This trust has also been tested by companies like Enron, WorldCom and Parmalat and is being tested again in the credit crunch. In fact, the recent admission by the Bank of England that it no longer understood the financial markets, in light of the Northern Rock collapse, is shocking. When the regulators and coordinators of the financial markets lose their understanding, something has to change.

Buyology therefore means knowing the why, how, what and when ingredients of buying, and ensuring you position your business to always be there at the right time, with the right words ... there’s a song with those words and the next line is “and you’ll be mine”.

Creating strong relationships is a tough call. Future buyers will not buy from anyone they do not trust or understand. They will instead use the power of social networks to find the truth and will morph towards those who deal with integrity. In other words, buyology means knowing your customer so well that they are no longer a customer, they’re a partner.

In relationships, you cannot have one side treated unfairly. Although you may not know each other on the first date, if you don’t get to know each other well sooner or later, the relationship will end. That’s the one-sale stand approach to business. It’s a bit like a one-night stand. If you have no interest or empathy, then the relationship stops there.

Relationships are based on understanding and compromise. We talk CRM, but you don’t have relationships with customers. Customers are sold to; partners have relationships.

Banks that turn tellers into sellers or have big swinging dicks in the dealing room will soon find that the truth will come out. Instead of sustainable sales, they’ll get lots of one-sale stands. The real partnerships based on fair dealings with trust will prove to be the long-term sustainable relationship businesses.
DIGITAL ARCHITECTS REQUIRED TO BUILD DIGITAL DESIGNS

If you accept that the future of banking will be based on whichever banks are the best buyological scientists, then that is the premise that the bank designer would use to build the Digital Bank. The bank would be based on digitised techniques of customer understanding in order to build processes from the customer viewpoint. At the end of designing, they would then go to a digital architect to build the digital design.

This goes to the core of business process re-engineering (BPR), which is why we talk about process redesign when we’re designing, and process implementation when we’re architecting.

The architect has been called in recently because the bank’s foundations are suffering from subsidence. The foundations were built on bricks and mortar, and those foundations have cracked due to the revolution of technology in the last fifty years. Most banks got away with painting over the cracks but, today, they are finally saying they want to replace the brick foundations with technological foundations in the form of digitised architectures. The architect is there to replace the physical foundations—process implementation—and the designer is there to work out what the new bank house should look like—process redesign.

Likening this to the building trade illustrates the point well. A house or building has foundations. My point is purely to say that the bank architects of the last few decades used branches as those foundations but today would use IP infrastructures.

This does not mean that branches or people are irrelevant. The branch and face-to-face discussion is more to do with what type of house you want to build. In other words, it’s the design, the vision, the interior decoration, the furniture and all the other bits.

The designers may say, “I want to build a high net worth house, with sales advisory centres for people who want face-to-face engagements.” In this case, you would build your bank house with IP foundations and lots of snazzy advisory centres, or branches, in the physical world. Others may say,
“I want to build a low-cost high volume processing house, with minimal physical contact” in which case you would build your bank house with IP foundations and hardly any branches in the physical world. Either way, the IP is the foundation, and that is where the architect will start.

There may be some confusion about the fact that I am starting with a technology focus, rather than a customer focus. As an architect of today’s bank, an implementer, I would start with technology because technology, especially IP networking, is my raw material for the building. As a process designer, I would start with customers and staff because people are my core differentiation for populating my building.

From an architecture and implementation viewpoint, I would look at the IP network and how to build upon that network. From a design and process redesign viewpoint, I would start from the statement: “Design for the customer experience you want to deliver to the customers you want to engage by creating processes and touch points that those customers want to engage through and with you.”

In other words, work out what customers you seek and what those customers want. Build your bank and design it based on desired customer experiences. Build those customer experiences to appeal to the customer behaviours of your targeted audience. Address the needs of digital natives and digital immigrants or aliens, and work out how your designs address this mixture of customer types. What experiences and behaviours will these different audiences require and how is it best to deliver them?

These are all designer questions and nothing to do with architecture. Once you have your design, you can then give this to the architect to work out how to build it ... and the architect will begin with a base design using IP as the foundation.

So we have a critical segregation between the designer, who will focus on processes, interactions, people and customers, and the architect, who will focus on building materials, infrastructures, networks and technologies.

The fact that people get confused about this segregation—the channel mix, the house design, etc. versus the foundations of the bank—is because
they mix up process redesign and process implementation. The channel strategy is the house design; the building strategy is the architect’s digital materials.

The focus must move to a strategy whereby the architect lays the digital foundations, rather than tries to maintain the old brick foundations. It’s to do with the materials at the base of the bank and the fact that these materials are fundamentally different today because they are digital rather than brick-based. This is why banks need to fundamentally redesign.

This redesign is to replace the building foundation. In replacing the foundation, the strategy for the design of the house itself may also change, but this is still very much open to the designer’s competitive strategy. It is a separate discussion that has nothing to do with architecture.

The architect is purely working out how to replace the foundations with IP. Therefore, the designer’s role is to tell the architect what the designer wants to build on top of the foundations—branches or multichannels or electronic connections.

The two roles—architect and designer—go together but are very separate and distinct roles. The reason why the redesign started in the first place, however, is because the foundations are crumbling—the branch bricks-and-mortar model—and need replacing through a new architecture, namely IP networking. And, as I keep saying, architecture is related to, but separated from, design.

In conclusion, the issue today is that most banks have their foundations in branches as the raw material, and that is forcing them into poor designs that do not match the way they want to behave. That is why they are hiring architects to replace those foundations with IP. The architects are then asking the bankers, “What design would you like to have on top of these foundations?”

Some bank designers want redesigned branches. Some want to close down branches. Some want to integrate branches onto common platforms with their electronic channel connections. Some just want electronic connections.
It’s all a matter of choice but, as you have to replace the foundations, you might as well rethink, re-engineer and re-energise to exploit the new foundations effectively.

THE DIGITAL AGE DEMANDS A DIGITAL BANK

Throughout this chapter, we have focused on designing the Digital Bank, evolving from the Physical Bank, and recognising that the new bank is very different. It is deconstituted and needs to be reconstituted. It is modular and plug-and-play and no longer integrated and end-to-end. It is remote and human rather than local and face-to-face. And most of all, it has digital at the core and the flow of logic flows from that core.

This then leads us to a very different but clear challenge for the future Digital Bank. This bank has the challenge to turn a vertically integrated business—one that owns the customer process end-to-end and organises itself around products and channels—into a horizontally structured business. The new business is designed to provide functionality to the customer at their point of need and organises itself around the customer’s data.

That’s a big problem for many. As it is so fundamental to the subject matter, it would be beneficial to break it down step by step.

First, banks were created to look after all the financial needs of people and businesses. They were licensed to live in their own segregated world of operation and completely owned that piece of turf. Everything from taking deposits to giving loans was the banks’ domain and they were organised to do just that. As a result, most banks created operations based around products: money transmissions, mortgages, cards, loans, insurances, etc. These were delivered through one channel, the branch.

Over time, another channel appeared, the direct sales representative. These sales people resided in branches and were served by the branch system. Then, a new channel emerged, the call centre.

The call centre was like one massive remote branch and required a new structure to operate. But the underlying data could be delivered through
the branch-based systems so the new structure was primarily designed to sit on top of those systems, offering scripts into the various products the bank offered. The call centre people struggled with this, sometimes operating six or more windows of screens at any one time to get a competitive picture of the customer’s needs, but they lived with it.

Then, another channel popped up—the Internet. At first, banks thought this could lead to branch closures and started to invest heavily in moving from branch to Internet services. However, the underlying data was still held in product silos and the Internet was not responsive to customers’ views of the world. Broadband had yet to appear and customers were reluctant to lose their branch connection.

So, the banks left the Internet as another layer on top of the branch-based systems, alongside the call centre spaghetti. Banks had become locked into vertically integrated processes, structured around product silos that were ill-suited to the multichannel world they now served. But it was okay. Using middleware, fudge, smoke and mirrors, it did the job.

Then this perfect storm of mobile, cloud (a large number of computers connected through a real-time communication network such as the Internet) and Big Data appeared, augmented by customers tweeting and socialising 24/7 and most bankers went, “What the hell?”

Now here’s the challenge. The bank cannot leverage data; it’s locked in product silos. It cannot serve the customer’s needs. Banks layered channels over products. Now, they need to leverage data over mobile. And banks lost the end-to-end process as customers moved to apps and pieces of process and functionality as needed. Now there’s a need to organise the bank around the customer’s data and then leverage that data through the cloud to mobile devices as apps.

No way. Way. There is a way.

The way is to completely rip out the old systems and replace them with new core banking that can service the bank, and therefore the customers, in the way that is appropriate for the 21st century. How do you do that?
Changing core systems is like changing the engines on an aircraft at the height of 9 miles ... you just don't do it. Well, more and more banks are doing just that. Some are having problems, but that is precisely why banks are changing the core systems. You cannot restructure a bank around customer data if that data is locked into legacy systems that are product siloed and channel handcuffed.