HOW TO BECOME A PHYGITAL BANK IN A YEAR
The rapid pace of digital evolution has opened a big chasm between the experiences banks deliver today and what can be delivered. The current possible productivity frontier for the banking industry is far ahead of the delivered actual in the industry. This opens up a land grab opportunity. Multiple new entrants starting with clean slates and big ambition will try and exploit these gaps. Existing banks can either wait for the impact or make the ‘Phygital’ leap themselves to exploit the opportunity.

The Phygital leap is simply the move to a better underlying architecture that will allow you to simultaneously increase customer value and reduce costs. Like any new generation of technology – Internal combustion engine vs external combustion engine, Web 2.0 vs web 1.0, mobile vs landline – the Phygital leap is both inevitable and attractive.

For those who make the move, the reward is an increased “annuity” income from increased market share, better economics and greater ability to cope with disruption. For those who chose to wait, there is the threat of marginalization and perennially bad economics.

The authors attempt to make it just a little bit easier for you by providing seven concrete interventions to make the Phygital leap. You can use them to benchmark your ambition in those areas or as a handy guide to craft your next step. Just as building a dam or bridge requires time and resources, building your new Phygital Banking machinery will require dedicated resources.

Of course, you have multiple options— startup collaboration, strategic partnerships, hackathons, staff augmentation etc. While the choice and mix of these options will depend on your existing maturity, available talent pool, risk appetite and other factors, the survival imperative coupled with the range of options and price points makes inaction inexcusable.

It is not an easy task, but a possible one.
Physical touch points with banks and their ecosystem are not only inevitable but also an opportunity to drive differentiation. These touchpoints facilitate an overwhelmingly large percentage of sales but unfortunately, the experiences they deliver are broken.

Think about how many times you have signed blank application forms that are filled by the agent/advisor or interacted with runners for collecting “physical” documents.

Imagine if you could infuse these frustrating moments with the magical qualities of digital to deliver “instant intelligent” experiences. It would bring a smile to your customer’s faces, eradicate the soul sucking drudgery that your employees need to go through and speed up your organization. It would multiply your conversion rates and reduce your costs. Phygital is about realizing this dream. It is about leveraging the power of Digital across all channels, operations and the way you organize yourself.

The Phygital Bank is not something that is possible at some indefinite point of time in the future, but what is possible today. It allows banks to serve customers better at lower costs today. So re-architecting capabilities and operations to serve customers in a Phygital manner is not a question of choice but of survival. Of course, those willing to act first can alter the long-term market share pecking order.

We share our point of view on “how to become a Phygital Bank in one year” in three parts. We will start by explaining what a Phygital bank is. Next, we share seven strategic programs that change-seekers can pursue. Finally, we discuss the Money on the table.

**Make the Phygital Leap - Deliver higher value at lower costs**

![Graph showing the Phygital Leap]
Current Physical experiences are distorted: Examples of breakages in the user experience

“Static post login experience – No personalized offer, product information on Internet banking” – Tried logging in through multiple ids to check”

“Interaction and recommendations limited to the information entered. No analysis of personal and external data”

“Online expert to handle all the queries before loan application not available”

“Called my RM to open an account; he came home and took pictures of all the documents from the tab but didn’t use the app given on the tab”

“Lead dropped at a Branch – official calls after 4 weeks”

“Asked for a DEMAT account to be opened, branch executive said he would ask someone to come and meet me. Wasn’t able to connect me to anyone instantly or start the process” – “Turns out a DEMAT account was created in my name and a transaction + reversal has already happened on it”

“Personal Loan: Executive not carrying a pre-printed form so all the information had to be given again”

“Physical copy of all documents asked again despite uploading on the site”

“Final approval on the application available only once the application has been logged into the system. i.e. it takes close to a week post online application to get approval”

Bank Executive who came to help complete my home loan application offered Home loan from other banks with better rates. I took it.

“I had given all the physical documents for my credit card despite having an account with Bank. 1 month and still waiting for my credit card”

Source: Mystery shopping by Accenture Team
‘Phygital’ is about being inherently digital across all channels (physical and digital), operations and the very way banks are organized and manage their business. Let us spend a moment on each of the three defining characteristics of a Phygital bank.

First, a ‘Phygital’ bank interacts with their customers digitally across both Physical and Online channels. All interactions are powered by Digital to have intelligent context aware conversations with the customer as a bank – and not as siloed individuals or channels. In each interaction the Phygital Bank of today, embeds artificial Intelligence (AI) powered bots and intuitive user Interface (UI) to break the cognitive, language and literacy barriers to increase end-to-end seamless interactions for all customers.

Second, just as the interactions with customers are digital so are its operations. Once again, this is not to say that physical operations are not required but that all operations are powered by digital and a Digital First approach is adopted. For example, before a residence verification is conducted – the bank relies on digital sources like CIBIL, Aadhar etc. Similarly, before mailing the physical documents there is usage of scanned images. Wherever possible digital APIs are used to eliminate the need for the physical documents. Similarly, use of Robotic Process Automation for repeatable tasks, IOT in hypothecated assets, drones for verification in insurance etc. help in significantly reducing costs and simultaneously creating experiences that command a disproportionate market share.

Finally, a Phygital Bank is inherently digital as an organization. Everything in the organization including its leadership, culture, the way organization collaborates to deliver its services and how skills are leveraged, acquired or developed is attuned to the digital era. It is inherently agile and leverages digital tools like living dashboards, algorithms, social and crowd to multiply productivity and evolve rapidly.
7 strategic interventions

Banks can pivot to a new architecture that enables them to become Phygital, simultaneously increasing customer value while reducing costs by acting on 7 strategic interventions.

The first of these intervention is about re-imagining your customer journeys. Just as the airplane does not follow the road route, the Phygital journeys cannot mimic those of our pre-digital past. As these journeys change the network (collection of physical touch points across branches, business correspondents (BCs) and even ecosystem partners) must adapt too. This defines the second intervention - Re-imagine your network. The third intervention is about Banks opening up to create or embed themselves in the ecosystems – to make the ‘car happen’ not just the ‘car loan’ – Setup your ecosystem.

The next three interventions relate to the underlying capabilities required to make these journeys a reality. Layer your Architecture, the spaghetti bowl of interconnected individual point applications with conflicting redundancies has to go. Similarly, the Enterprise Data Warehouse (EDW) based data landscape is dated and must be upgraded, so Build your data lake, setup Hadoop hot copy and Machine Learning based analytics. Once the architecture is layered and the data landscape upgraded, build zero cost marginal workers. AI is the new UI and customer dialogue machine can bring the best of Bank’s sales and service capability to each customer every time without fatigue while getting better with every interaction. Similarly, the tedious automatable tasks like entering data in systems, reconciliations etc. are best done by (Ro)bot colleagues. Empower employees to focus on the value adding tasks by building customer dialogue machine and bot colleagues.

Finally, as activities of the banks change so must the operating model. Update your operating model to Organize for new activities, Invest to address skill gaps and Re-orient the surplus manpower released.
Establish your Digital First Phygital Journeys

Current customer journeys typically suffer from three critical design issues:

a. These are often extrapolated from manual processes and fail to take advantage of current technology possibilities resulting in a sub-optimal experience. For example, applications for new products continue to be through paper forms which are usually filled by bank employees. This is still in practice despite an Aadhar authentication based data pull for filling forms is functional since 2014. Similarly, Banks continue to collect stamped bank statements for assets even when the technology for pulling bank statements directly online has been in existence for multiple years and now will get further democratized with the India Stack’s Digital Consent Architecture.

b. The Journeys are typically not architected for all stakeholders. Designing an experience, for the role an employee plays in any journey is critical. They typically do the lion’s share of work especially in acquisition and yet designing an experience for them does not even feature in most c-suite conversations. Similarly, stakeholders who don’t play an active role in the customer journey but need to make important decisions expect configurability in the products and journeys to adapt to changing regulations, market dynamics and customer expectations.

c. Third, the customer journeys are not modular enough. This lack of modularity is most apparent in our treatment of differing risk levels with the same process and our lead times to change in the face of inevitable and increasingly frequent technology and regulatory changes. For example, banks continue to ask salary statement even for customers for whom they hold salary accounts and routinely ask for the same documents whether the customer has an 800+ CIBIL score or 650+. Similarly, as we move from a password or pin based authentication to finger print, iris & voice based authentication the underlying engineering needs to be liquid enough to enable enterprise wide roll-out in days and not years.

By addressing these design issues Banks can change the shape of their acquisition funnel. See Sidebar: Funnel to Pipe. Not only will fixing these issues improve conversion rates but will also reduce costs. Once designed Banks need to bring these journeys to life with technology, policies, process and content.

From a Sales Funnel to Pipe enabling greater, faster and smoother conversions

FROM

Funnel

EXPAND THE FUNNEL
Design for customer moments of truth and enable interactions from the identification of needs

IMPROVE CONVERSION RATES
Anticipate customer journey paths, behavior and design conversations for faster decision making

MAKE ACQUISITION FRICTIONLESS
Create instant product design and distribution mechanisms

TO

Pipe
When we think about journeys, we also have to think about the physical network where customers interact. These include branches, BCs, ATMs and even partners. Often, it is not about the hardware but the software and applications that are used to deliver the experience. For example: Biometric scanners are already embedded in many banks branches and ATMs but the software is just not there to fully leverage the hardware. Also, aren’t account opening kiosks that cannot do Instant SIP, give personal loans, instant car loans etc. anything but lost opportunities?

Similarly, the role of the branch is changing from a transaction hub to service & advisory destination. Further, globally the average branch network size is shrinking as banks and customers embrace digital. All over Western Europe Banks have been forced to shut down as much as a third of their branches. Indian Banks can avoid this pain by starting to think about the role Bank branches will play in the future and re-orienting the new branches they open or branches that are up for renovation / lease renewal.

To succeed Banks must first envision their constraint free to-be network and then operationalize it by developing a living playbook for different branch types and scenarios to be able to execute at speed through their frontline.
Re-imagine your network to leverage on the efficiencies created by digital

| Average branch size is shrinking – less staff, more automation (mobile and internet banking for transactional roles) | Staff roles moving towards ‘universal banker’ model. Movement from an administrative to advisory role | Traditional one-branch-type-fits-all model no longer appropriate | Banks learning from supermarket multiple store formats and GAAFA experiences (Amazon) | Flexible branch sizes key to adapt to new customer banking patterns |

Holistic branch and network strategies required to be effective from a cost, customer service and acquisition perspective

Different types of branches

Clearly differentiated zones

Facilitating a new relationship model.

INTERCONNECTED WITH OTHER CHANNELS (traffic generation, engagement, advisory, servicing)

PHYSICAL EXPERIENCE EQUAL TO THE DIGITAL (using also onsite technology)

OPEN TO OTHER PARTNERS
Layer your architecture

The current Enterprise Architecture at most Banks is a web of interconnected individual point applications with often overlapping areas of work specially around infrastructure services like security, intelligence and governance. Most Banks have identified a few common services and with the wave of SOA and API at least forced their core to expose services. However, the synergies possible with a neat-layered architecture for the bank as a whole have not been realized.

Untangling the spaghetti bowl for a neat layered architecture built on principles of liquid, intelligent and connected applications will provide Banks with pace, predictability and reliability as they make those continuous updates which are now a matter of life. It will help Banks move from looking at Technology as the challenge to leveraging it as a competitive advantage.

Layered Architecture

- **TOUCHPOINTS**
  - Digital Channels
  - Third Parties
  - IoT

- **ENGAGEMENT HUB**
  - Omnichannel
  - Customer Exp.
  - Liquid CRM
  - Digital Process & Services

- **INFORMATION & DATA HUB**
  - DWH
  - Advanced Analytics
  - Big Data

- **MANUFACTURING & EXECUTION**
  - Core Banking
  - Payments
  - Product & Pricing Factory

- **PARTNERS ECOSYSTEM**
  - FinTech
  - Social, payments
  - Loyalty/Products/Deals

- **CYBER SECURITY**
  - Standard ID
  - Advanced ID
  - Prevention methods

- **INTELLIGENT INFRASTRUCTURE**
  - Scalable Platform
  - Automated Housekeeping
  - Anomaly Alerts
The data environment in most banks is scattered and disaggregated. Typically, data resides separately in databases for each application and largely the transaction data is pooled together in the Enterprise Data Warehouse. Multiple sources of data like in-app analytics, location, IMEI, browsing history, logs etc. which hold a treasure trove of information are often excluded.

A data lake allows Banks to pool all its structured and unstructured data including external sources to create an unparalleled view of reality. It allows banks to centrally log all touchpoints of customers with the bank in a Customer Journey. Coupled with Hadoop hot copy techniques based on log file replication and streaming technologies, the Bank’s data lake is up to date in real time with sub-second delays.

Once all the data is in one place and always updated, one can unleash event management and machine learning based analytics on it to power use cases across fraud, risk management, cross-sell and even complaint management. It can help banks to cut down thousands of false alerts, track risk measures in real time, power contextually relevant conversations and drive zero contact resolution for most service breakages. This kind of new data environment also allows to serve read only queries to low cost data environment rather than the expensive mainframe core banking systems.

Accenture Insights Platform (AIP) - Big Data and Analytics Cloud Platform

*Accenture Asset for rapid execution of Big Data based Analytics Services
Bots backed by artificial intelligence can help in both front end customer interactions and automating key front, middle and back-end processes.

The Customer Dialogue Machine delivers on the hitherto impossible triad of multiplying customer interactions, improving their quality and reducing their cost. Virtual assistants, agents & chat bots armed with capabilities like Natural Language Processing, Interactive Video and Machine Learning make it possible today to create a great experience irrespective of the channel chosen to communicate or the stage of customer journey. The customer dialogue machine can be the expert advisor, recommendation engine, service support agent, personal assistant, and even the sales coach. It can drive zero contact based resolutions reducing costs and improving on the customer satisfaction significantly. Think about it – if Banks could harness intent, knowledge and charm of their best relationship manager on his best day and embed it into all of Bank's interactions – where would customer relationships go? The Customer Dialogue Machine cannot be built in isolation – the raw data, the questions, the answers, the nuances etc. will all come from your current interactions. This human robot collaboration is both the necessity and the secret recipe.

Conceptual schematic for Customer Dialogue Machine
Bot colleagues help drive front, middle and back office processes improving the turnaround time and reducing costs significantly. Large parts of a variety of processes including service desks for employees or customers, verification for KYC and AML, reconciliation and accounting, reporting and audit checks etc. can be automated. Obviously, most existing processes may need to be re-imagined and the newly designed Digital First Phygital Journeys will be your starting point. The bot proposition is not only about saving costs by way of headcount redeployment but also about improving accuracy, reducing turnaround time, improving customer experience and multiplying organizational productivity.

Several banks are starting to use robotics and AI on impressive scale and seeing results up to 40% reduction in cost of operations

**MINIBOTS**
Tools and applications to automate Tasks and activities primarily based on XL, AutoHotKy

**ROBOTICS PROCESS AUTOMATION (RPA)**
Consolidating data from multiple sources into a single view to complete a process

**DIGITAL/VIRTUAL ASSISTANCE**
Computer-generated character that simulates a conversation to answer questions or queries and provide guidance

**AI/COGNITIVE COMPUTING**
Technology that is adaptive, interactive, understands context and can apply what is learned in upcoming situations

**BOT COLLEAGUES**
System generated workers who accomplish repetitive and automatable tasks on behalf of bank, thereby reducing costs and improving turn around times
Banks need to curate three distinct ecosystems

First, the End Needs Ecosystem. Financial services exist at the intersection of needs of the customers and the goods that fulfill those needs. Customers are constantly looking to fulfill these needs in their everyday life both as things they do on a regular basis like payment for daily use goods or making life decisions like buying a House or a Car. Businesses also have similar transactional as well as aspirational / growth related needs. See the sidebar for an example of how developing a home buying and post move-in ecosystem has helped banks and digital disruptors alike.

Second, the services delivery ecosystem. This is typically mature in most banks and comprises of the various partners including valuators, lawyers, RTO Agents, DSA, Collection Agents, Payment and Aggregation service providers etc. who are integral to the delivery of bank’s products and services. Most banks continue to treat them as exclusive vendors despite evidence to the contrary.

Third, the Fintech ecosystem. While some banks have experimented with hackathons and one-off partnerships in select categories especially around payments, we are yet to see most Banks leverage Fintech to accelerate and innovate. Fintechs provide a great opportunity specially in newer areas like AI and Big Data where most banks have extremely limited skills. Banks can curate this ecosystem to solve difficult business problems with limited investments.
The key to enabling the ecosystem are the revolutionary APIs. APIs are a game changer, enabling Banks to deliver services that can be composed also by third-parties and partners. APIs enables the Bank to integrate easily with Third-parties and Partners, leveraging their products or using their channels to further augment distribution. An API Management Layer allows self-serve registration and instant API access, sandbox testing environments, documentation, usage analytics and much more.

The story of Apple and Google have made clear that Ecosystems are the new unit of competition and not the firm. Banks that are able to make this shift will see their interactions multiply and acquisition costs dip.

Digital pioneers (e.g. GAFA) will re-imagine the mortgage journey to bring back joy in the experience

DREAM
- Sigfig like experience to set goals and visualise achievements for home buying
- Amazon like experience comparing “people like you” to provide personalised recommendations

SHOP
- Google Maps like experience to showcase properties based on geolocation, with embedded videos using Youtube and pre-approved credit using past credit history
- Alibaba like platform for buyers and shoppers to list properties
- LinkedIn like agent recommendations based on social relevance

BUY
- Facebook messenger like social collaboration capability between advisor and buyer
- Apple like online versus offline integration, including Genius Bar like appointment booking and integrated seamless bundled checkout with insurance and non-fs products for the new house

MOVE
- Groupon like discount vouchers and coupons for moving to the new house
- Google calendar like functionality to remember key tasks, stay up to date and remind you when required

LIVE
- Google Docs for integrated doc management capability
- Oculus like virtual reality capability for interior design and home up improvement ideas
The above 6 interventions will fundamentally change the activities that the Bank needs to do and the skill sets required. The Digital Operating Model will need to be re-looked at for the following:

**Organize for new activities**

Just as running and maintaining horse-drawn carriages requires completely different activities as compared to running and maintaining a fleet of taxis. Banks need to organize for the new set of activities that they are required to do like building community or algorithms and new methods for doing them. One of the most critical of these shifts will be the transition of the organization from waterfall to agile. It will require organizations to break down their current barriers and re-orient their cultures. Agile is not something that their IT team needs to do.

**Invest to address skill gaps**

New activities require new skills. A digitally powered bank which operates in an agile manner will need many new roles such as story tellers (experience design), behavioral psychologists, scrum masters, algorithmic risk specialists, community advocacy builders and data scientists. These roles are not in existence in most banks and they need to think hard and long about their talent and learning strategies to bring these roles to life in their organizations.

**Re-orient the surplus manpower released**

As some of the current activities the Bank undertakes become redundant, the surplus manpower will need to be re-oriented towards other value adding or revenue generating activities. There are typically three areas where you can re-deploy them - sales, human-cognitive workforce and new digital skills that we highlighted above.
Update your Operating Model to adapt to the transforming organization – New things cannot be done the old way

New Customer Journeys and Customer Expectations

Omnichannel ‘Phygital’ Experiences

New Offerings & Ecosystem Partnerships

Old way to do things !!!

As the 6 key interventions are introduced resulting in efficient and productive operations, the existing operating model will need to adapt to the changing expectations

Organize for new activities
Invest to address skill gaps
Re-orient the surplus manpower released
Imagine, that you have become a Phygital Bank. Three things will start happening. One, you will start saving resources on what you are already doing leading to improved Cost Income Ratio. Second, fewer breakages will improve fulfilment rates and lead to higher feedback velocity increasing your revenue with higher conversations and conversions. Third, your credit costs improve driven by your improved understanding of consumer segments, better credit management and improved ability to select your risk due to higher customer preference.

The net effect is multiplicative and a 5% improvement in CIR, Revenue and Credit Costs can add 30% to your bottom line or about INR 350 crores every year for a small bank with billion dollars (~ INR 6,700 crores) in revenue. Similarly, for the large players with revenues in the range of 5 billion dollars a 5% improvement in the three metrics can add about INR 1,750 crores annually to the bottom line.

The quantum of these benefits makes breakeven within 12 months a likely scenario even for the smaller banks with INR 2,500 crores in annual revenue. However, as with all things digital there are significant scale economies.

Scatter Plot of Banks Income vs CIR
(All Banks with Revenue > INR 2,500 crore except SBI)

*Based on FY 2016 data from RBI Statistical tables*
Going ‘Phygital’ is one of those rare propositions that break the cost-differentiation trade-off and allow to simultaneously increase value delivered and reduce costs. For a survival imperative, banks couldn’t have asked for a better business equation.

This transformation is not for the faint hearted. This is about fundamentally architecting your business. Just as constructing a dam, or a piece of machine takes time and resources, so it will take time and dedicated resources to build your own Phygital banking machinery.

As banks go through this transformation, they have help available from all quarters – turnkey partner like Accenture, strategic alliances with OEMs, collaboration with startup ecosystem, hackathons as accelerators etc. While the choice and mix of these partnerships will depend on the organizations’ current maturity, available skill sets and Management’s risk taking ability, the survival imperative coupled with the range of options and their price points make inaction inexcusable.

As we said earlier, it is not an easy task, but it is a possible one.
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