



ARCHITECTING PROJECT MANAGEMENT

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Title: IT the Indispensable Tool in the complex world of Financial Services.

Theme: Leverage of Technology

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CONTENTS

- 1. Abstract..... 3
- 2. Introduction 4
- 3. DETAILS OF THE PAPER 5
 - 3.1 Challenges Facing Banking Industry 5
 - 3.2 Growth Drivers of Banking Industries 5
 - 3.3 Role of Core Banking Solutions in invigorating the Banking Industry 6
 - 3.4 Benefit Analysis 9
 - 3.5 Progress Report of a Large Commercial Bank..... 10
 - 3.6 Key Milestones achieved by the bank post CBS rollout. 11
 - 3.7 Key Factors to Consider While Implementing Core Banking Solutions 11
- 4. CONCLUSION 14
- 5. REFERENCES 15

1. ABSTRACT

Globalization, together with uncertain economic cycles and ever changing customer needs has resulted in an increasingly fierce, unpredictable, and unforgiving marketplace. The adage - "Survival of the Fittest" - propagated by Darwin for the animal world, is now finding increasing relevance in the corporate world.

It's in this context that enterprise agility is gaining increasing significance. This is to not just ensure survival and sustenance, but to predict the winds of change and cash in on the ensuing first mover advantage.

Taking examples from the financial services industry, this paper attempts to discuss applications of Information Technology in an organization's ability to sense and respond appropriately to the changing environment.

It examines its direct impact on customer fulfilment, and also its indirect impact in streamlining business process to build a more robust, scalable, integrated, cost effective, and regulatory compliant infrastructure by critical assessment of the transformation brought about to a large commercial bank by a well-conceived and well executed core banking implementation along with its associated sub-systems.

2. INTRODUCTION

For nearly 3 decades prior to the financial meltdown in 2008, banks have enjoyed high growth and profitability with an average return on equity (RoE) in the range of 14% to 16%. This was seen as stand out performance in comparison to most other industries; this growth was largely facilitated by liberalization of banking regulations and favourable economic conditions.

Post 2008 debacle, as the banking system is gradually finding its feet, the regulators across the globe , are bringing in tougher measures for capital adequacy in form of Basel III and other GRC norms to make the system more resilient and robust ... add to that the changing customer behaviour brought about by a distinct demographics shift especially in the vast emerging market; into the mix comes more intense competition arising chiefly from new market entrants, putting pressure on pricing at the same time raising cost to serve; subjecting the profitability of the banking system under huge stress and driving down the RoE.

Amidst this challenge brings new opportunity especially in the Indian context with burgeoning aspirational middle class and an emerging economy with potential to be a real power house; its the banking sector which has a primarily to make this dream into a reality.

To meet these challenges and exploit the opportunities, the banking industry needs to exhibit a more innovative and flexible operating models which would ensure responsiveness; and they are increasingly relying on technology to provide that cutting edge, especially that of core banking with its ability to offer complete sales and service platform, supported by the business insight of analytics, real time and straight through processing. This is turning to be a real enabler to create a cost effective, scalable and reliable operating environment that could be the potential game changer in their quest for sustenance and growth.

3. DETAILS OF THE PAPER

3.1 CHALLENGES FACING BANKING INDUSTRY

From a Customer Serviceability perspective, some of the key challenges faced by banking Industry are:

- **Personalization.** Customers expect tailored solutions to their needs, and hence banks are increasingly focused in segmentation of client categories as is the case in retail industry to identify needs and aspiration specific to each segment so as to devise product and service specific to each category.
- **Convenience.** Increasingly with changing demographics especially in critical emerging markets, the customer expect convenience of banking and hence anytime anywhere banking is gaining increasing traction as never before.
- **Trust.** Post the financial crisis, though the Indian banks were relatively unscathed, given the interconnectedness of the financial systems across geographies on account of globalization, customers are demanding a more rigid and robust financial systems and banks are responding to that expectation through increasing investment in appropriate processes and technology to tightening their governance, risk and compliance infrastructure.
- **Cross-sell.** Recent customer behavior pattern indicates that there is a growing demand to get majority of their financial services needs fulfilled by their trusted bank, which in-turn is compelling banks to enhance and integrate their processes and supporting IT systems to extend their portfolio of services beyond traditional banking to Investments, Insurance and lending & leasing.
- **Newer Entrants.** With increasing liberalization of banking regulations in emerging markets, new players with proven business acumen and smart startup leveraging the power of technology are entering the market with innovative product and service. This is posing serious competition to established players compelling them to devise innovative ways to optimize their cost of operations through while enhancing their delivery capabilities.

3.2 GROWTH DRIVERS OF BANKING INDUSTRIES

Whilst the Banking industry per se faces some challenges as mentioned above, there are silver lining in terms of growth opportunity especially in context to India some of which are discussed below:

- **Economics:** According to the World Bank projections, India's economy is projected to grow at over 7% until 2030, transforming her to the 3rd largest economy in the world. This is likely to drive tremendous growth in the banking system.

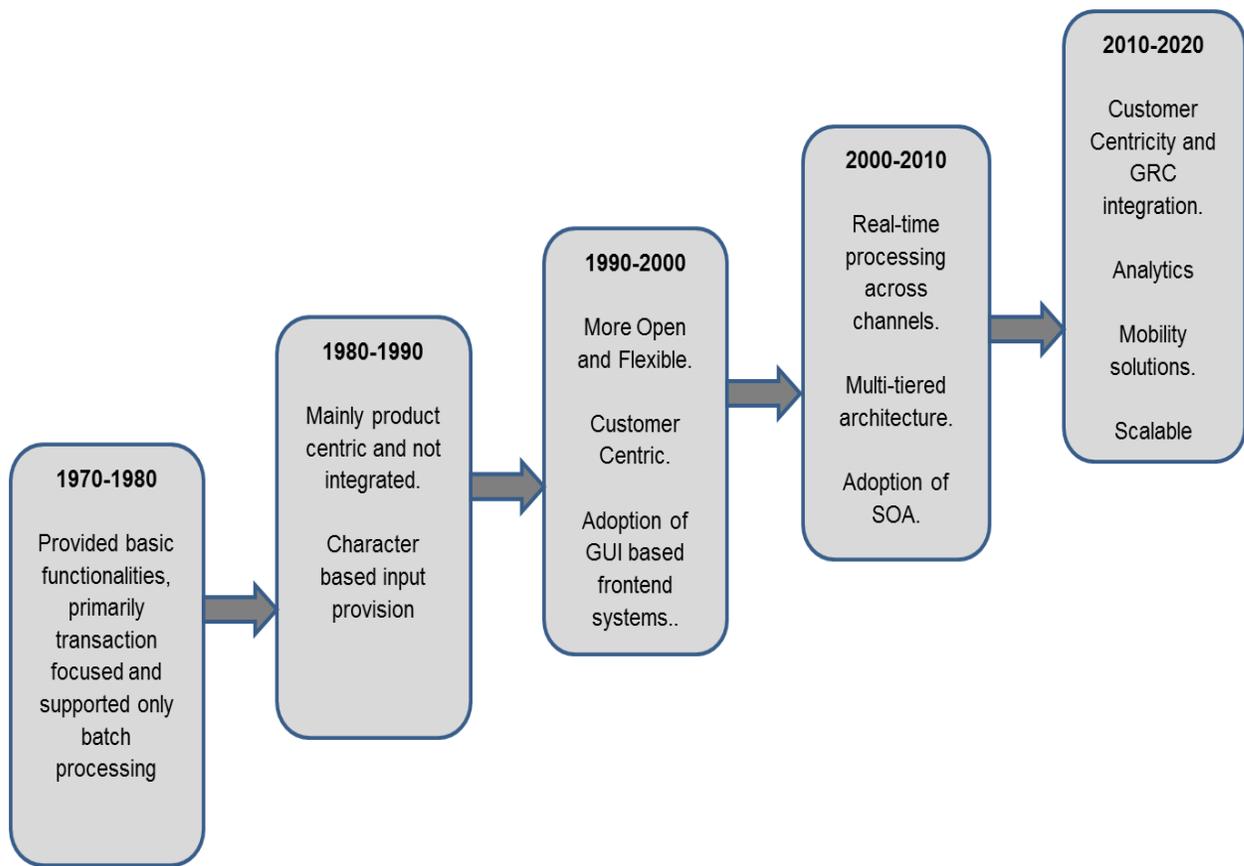
- Demographics: Whilst India is saddled with a huge population explosion, a vast majority of them are youth below 30 years, which presents a huge potential customer base for the banks with enormous business growth opportunities.
- Financial Inclusion: Whilst a lot of progress has been to expand banking network in the country, still a vast majority, approximately 40% of the population aren't covered by the banking system and hence presents a mega opportunities for existing players to expand their network and for new players to open their services to this large untapped section of the population.
- Infrastructure Development: India needs huge investment in infrastructure to realize its full potential for economic growth and projected allocation in the 12th plan by various players such as
- MSME Sector: This accounts for nearly 45% of nations' industrial output and contributes about 11.5% of GDP, but faces shortage of institution funding; hence presenting a big opportunity for flow of funds by the bank to service this unmet demand.

3.3 ROLE OF CORE BANKING SOLUTIONS IN INVIGORATING THE BANKING INDUSTRY

The modern day core banking system is one which provides complete integrated customer centric banking services through multiple channels, thereby enabling anywhere anytime banking. It also supports multi-currency, multi lingual operations, international banking, treasury and cash management functions, analytics and both MIS and regulatory reporting capabilities.

The first set of core banking solutions appeared in the 1070s and was largely bespoke development initiatives. However over the period of last 4 decades, it has moved leaps and bound and with advent of technological development has evolved to be a mission critical platform for the banks.

Exhibit 1: Evolution of Core Banking

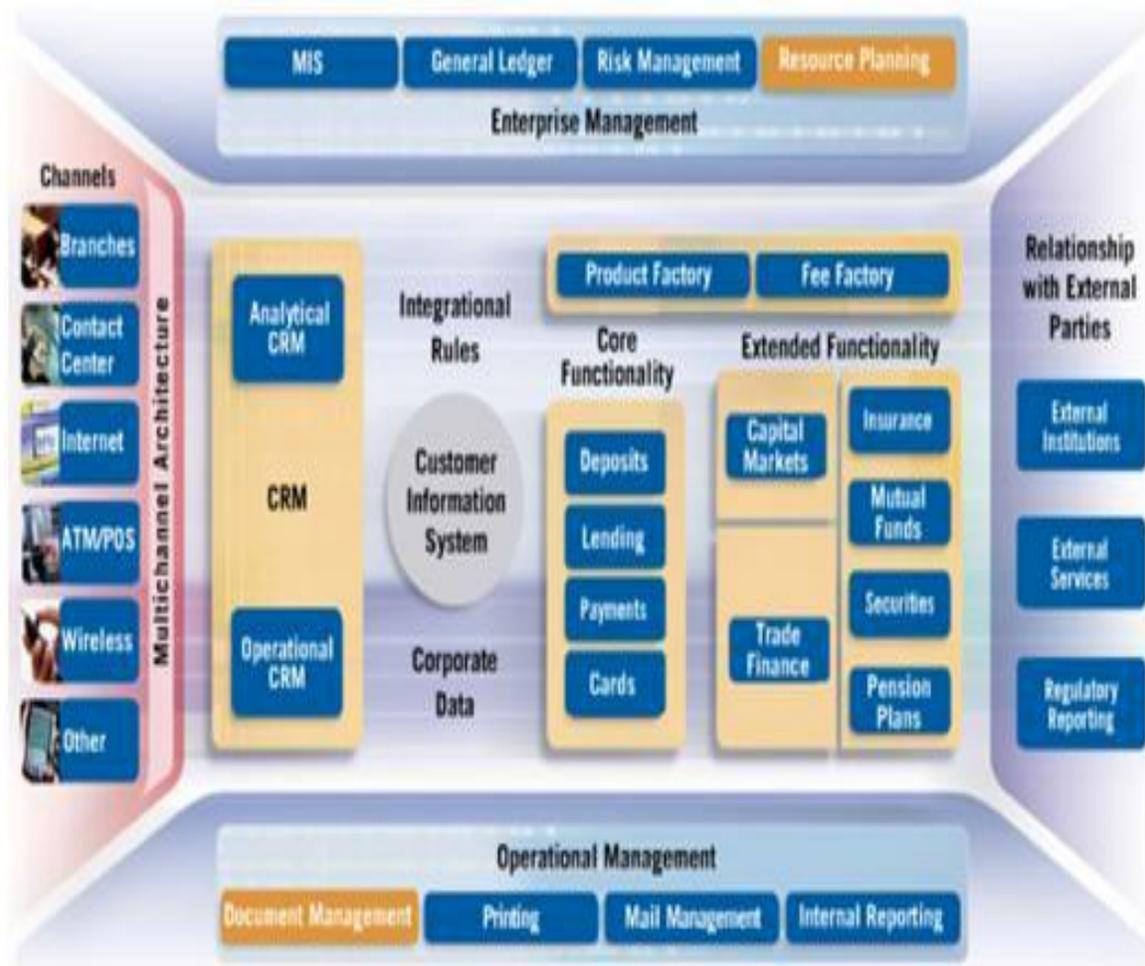


The core banking solutions of the future will be truly global so a bank can easily deploy a system across multiple geographies. New core banking solutions will be more scalable, adaptable, and process-centric than before and will be lean and fast to be economical to deploy over the cloud and enhance the banks' agility in responding to competition and changing business requirements.

Core banking transformation is driven by the need for responding to

- Internal business imperatives, such as growth and efficiency.
- External business imperatives, such as regulations and competition.
- Transformational objectives such as decreasing operating cost, improving operating efficiency, and growth in business.

Exhibit 2: Typical Core Banking Functional Map



3.4 BENEFIT ANALYSIS

The business case for core banking transformation should be based not only on the financial analysis, but also on the qualitative or non-financial benefits of transformation, such as increase in operational efficiency, improved sales and service capability, and enhanced regulatory and risk management.

Exhibit 3: Benefits from Core Banking Solutions

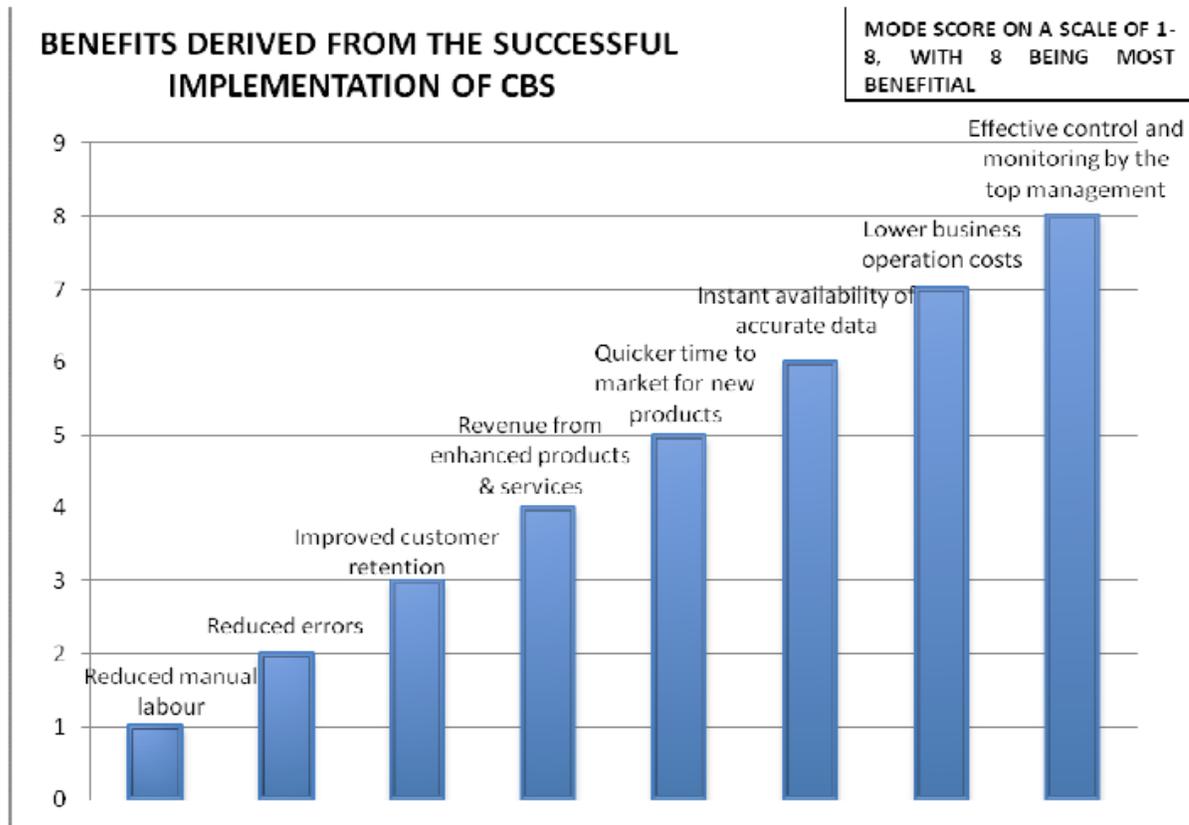


Fig. 9: Benefits of Core Banking Solutions

Core banking transformation produces cost savings through labour savings, operational savings, reduced IT maintenance, and reduction in the cost of deposits. Business gains come from higher revenues through increased sales per customer and growth in customer acquisition.

Labour savings result due to reduced manpower requirements and improved employee productivity. Operational savings come from front-to-back office integration, which enables straight-through-processing and consolidation of customer information. Due to replacement of legacy systems with a new technology platform, the overall IT maintenance costs come down.

Core banking transformation improves competitiveness due to faster rollout of products, product innovation, and product differentiation. This leads to intangible benefits such as increase in market share and enhanced competitiveness due to reduced costs of deposits.

3.5 PROGRESS REPORT OF A LARGE COMMERCIAL BANK

A large commercial bank which was operating a disparate product processor based system undertook the journey modernizing its IT infrastructure by adopting a core banking system with associated subsystems to support its regulatory compliance, internal MIS and analytics driven decision support systems. The rollout was achieved in a period of 3 years with phase-wise staggered rollout.

Exhibit 4: Snapshot for KPI from 2011-2015

Key Performance Indicator	2010-11	2011-12	2012-13	2013-14	2014-15
Deposit (crores)	293437	327054	355856	420723	473840
Advances (crores)	211268	232490	242177	301067	330036
Total Business (crores)	504705	559544	598033	721790	803876
Income (crores)	25752	33778	37231	43480	48300
Operating Profit (crores)	6091	5943	5890	6796	6950
Branch Network	3257	3600	3728	4755	5682
Rural Branch	811	1007	1062	1444	1804
ATM	2216	2858	3526	6312	8533
Accounts (crores)	3.87	4.2	4.7	5.55	6.58
e-transaction %				43.84%	50.21%
Staff strength	43397	42272	42693	48794	53984
Business/Staff (crores)	11.63	13.24	14.01	14.79	14.89
Advance to MSME	37684	34893	37016	50040	60604
Foreign Business turnover	124095	144662	143795	166036	176274

3.6 KEY MILESTONES ACHIEVED BY THE BANK POST CBS ROLLOUT.

- Continuous growth in all KPI in the past years.
- New Product and Facility launched
 - 2010-11
 - Mobile banking introduced.
 - Co-branded cards
 - Funds transfer through Visa Cards
 - Cash withdrawal at PoS
 - Electronic Bill payment
 - 2011-12
 - Introduced 29 biometric ATM to facilitate banking for rural illiterates
 - Under ICT model, introduced 6.5 lakhs No frills ac as part of Financial inclusion
 - 2012-13
 - Mobile Banking with IMPS
 - FTS through RTGS and NEFT
 - IVRS based enquiry
 - E-Lounges
 - 2013-14
 - Under Mobile Banking, Loan and Term Deposit Enquiry, Cheque Book request
 - Fingerprint based biometric login solutions for internet Banking
 - Electronic passbook facilities in 4 regional language through Mobile banking
 - 2014-15
 - During the year 2014-15, the Bank has successfully covered all the allotted 10049 unbanked villages across the country. The Bank opened 270 Financial Inclusion (FI) branches during the year in unbanked villages, taking the total tally of FI branches to 806 under branch model.
 - The business of FI branches reached a level of `8670 crore as at March 2015. The CASA deposits of these branches stood at `2149 crore, constituting 54% of total deposits

3.7 KEY FACTORS TO CONSIDER WHILE IMPLEMENTING CORE BANKING SOLUTIONS

- Core Banking Solutions is a complex mission critical system for a Bank and hence brings in its own challenge at the time of implementation. The failure rate of such programs are reasonably high and given its high cost of implementations and its disruptive effect to the existing system, the cost of failure could be catastrophic for the business. Therefore it's imperative that certain critical

factors as listed below are taken into account while planning a rollout to avoid disappointment of a failed project.

- **Identifying Tangible and measurable business benefits:** Given its complexity, enterprise wide core banking rollout usually spans across several years and hence it's important that its business objective is well articulated at the inception in order to ensure continued management and budgetary support, even in a situation of impending change in leadership midstream during the course of its implementation.
- **Release Content:** Since the core banking impacts all functional areas of the bank, there is often a tendency to introduce frivolous functionalities by individual functional heads that could potentially derail the rollout schedule and impact its critical success factor. Hence, it's important to identify what's critical for launch at every phase of a release and obtain a buy-in from all stakeholders to ensure timely rollout of the essential set of deliverables at each stage to influence a positive business outcome. This needs to be managed through a well constituted release management board chaired by a senior professional with necessary authority to influence desired outcome.
- **Importance of Business Process Re-engineering:** Study shows that in many cases, the business is unable to leverage the full potential of the core banking system, as its seen as a tool to mimic the existing inefficient work practice through automation. Hence, it's imperative to invest resource in optimizing the existing business process and workflow keeping in view the features of the new system in order to maximize the benefit from the same.
- **Governance:** Banks usually operate in a functional organizational structure (e.g. Consumer Banking, Business Banking, Investment Banking etc.) which is often detrimental for smooth functioning of an initiative which has enterprise wide impact. Hence it's important to adopt suitable organization structure, preferable a matrix with an experienced head to oversee the program so that diverse pull of each of the functional areas can be managed appropriately without compromising the basic objective of the rollout program.

It's also critical to carry out a thorough stakeholder analysis to ensure appropriate communication plan in order to ensure continued support of all that matters and also create an appropriate project organization structure and escalation matrix for quick dispensation of any issues that may raise during the life cycle of the project.

- **Rollout Strategy:** Given its mission critical nature, core banking is all encompassing across all functions of the bank. Hence its disruptive impact needs to be managed carefully during various stages of its implementation to ensure under no circumstances the existing functioning of the banks operation is hampered whilst the new system is being introduced. Hence a careful

consideration is essential at the planning stage to assess appropriate rollout strategy, be it staggered in the lines of branch or product line, or all at one go.

- Data Migration:** Data is the essential element to establish integrity of both financial take-on and overall operation of the banking system, it's therefore important to ensure that a rigorous and exhaustive data migration process is put in place. The task assumes added significance given that often times there is inadequate information about the legacy system coupled with the fact that data element in the legacy system is shallow in content and hence warranting significant validation and enrichment during the conversion process.
- Acceptance Testing:** Since core banking is a mission critical system, dealing with people's money, supports real time transaction with global ramification, offers multiple delivery channel, access to anytime anywhere banking, it's important that as part of testing, a well-defined acceptance criteria is established and validated for functional features, performance and scalability, system availability in the event of outage through a well-documented business continuity plan, data and financial integrity, and most importantly security from cyber threats, before its certified as production ready.

Exhibit 5: Linkage to PMBoK

Key Implementation Factors	Process Group	Knowledge Area
Identifying Tangible & Measurable Business Benefits	Initiation	Integration Management
Release Content	Planning Monitor and Control	Scope Management
Importance of Business Process Re-engineering	Sub-project	
Governance	Planning Execution Monitor and Control	Integration Management Stakeholder Management Communication Management
Rollout Strategy	Planning Execution Monitor and Control	Integration Management Risk Management
Data Migration	Planning Execution Monitor and Control	Integration Management
Acceptance Testing	Planning Execution Monitor and Control	Quality Management Risk Management

4. CONCLUSION

Given the current market dynamics and extrapolating into future, it's evident that the competitive fervor of the market place is here to stay and so is the concern and expectation of the community for a robust and secured operating environment

Also the demand for more innovative and flexible offerings will only increase as players exhibit more matured understanding of technology and leverage its power to provide better product and service to entice customers.

As technology evolves, the modern Core Banking platform will stay in tandem to adopt the emerging technologies such as SMAC (Social Media, Mobility, Analytics and Cloud Computing), biometric, NFC and newer delivery channels to make its offering even more compelling,

However, given its complexity and overall outlay, it's imperative that a careful business benefit exercise is carried out prior to embarking on this journey and due consideration is accorded to its rollout strategy to harness the full potential of providing a lasting improvement in operations, customer service and a strong ROI.

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