The Cognitive Enterprise for Oracle ERP Cloud in Banking

Powered by IBM and Oracle
The Cognitive Enterprise for Oracle ERP Cloud in Banking

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Executive Summary

What is the Cognitive Enterprise Business Platform?

The Cognitive Enterprise™ is IBM’s vision for the next-generation business model.

As a new era of business reinvention dawns:

- Organizations are facing an unprecedented convergence of technological, social and regulatory forces.

- Artificial intelligence (AI), automation, Internet of Things, blockchain and 5G are becoming pervasive, and their combined impact reshape standard business architectures.

- The “outside-in” digital transformation of the past decade is giving way to the “inside-out” potential of data exploited with these exponential technologies.
IBM Cognitive Enterprise Business Platform for Banking

The banking and financial markets industry continues to face many competitive pressures and regulatory challenges. The priority for CFO and overall finance function is to support business growth strategies while addressing ongoing regulatory and cost pressures.

Our analysis of the Banking and Financial Market industry identified 6 key strategic objectives to support growth and tackle disruption within the industry.

1. Growth through new Business Models and M&A
2. Reducing Cost and Improving Margin
3. Manage Risk Mitigation
4. Improving capital and liquidity
5. Respond to Regulatory Change
6. Increasing business simplification

These six strategic objectives expect a specific contribution from the finance function. Our Cognitive Enterprise is aligned with those expectations and business drivers.
IBM Cognitive Enterprise for Oracle Cloud in Banking

IBM differentiates itself by offering a business platform, centered around Oracle ERP Cloud Applications, configured to maximize business performance. This platform is called Cognitive Enterprise for Oracle ERP Cloud. IBM is able to design and deliver an optimal target state operating model blueprint using this platform.

The platform delivers an industry-tailored solution that recognizes the differentiation within financial services business. It comes pre-configured allowing for an immediate deployment of a fully operational system containing up to 70 intelligent workflows, 100 operational KPIs, 350 pre-configured Level 4 processes, 500 localizations and 150 business controls. IBM’s experts work with clients to validate that solution, in the process demonstrating the industry leading experience that has been embedded. This approach essentially removes the need for costly bottom-up design.

IBM’s vision for enterprises, enabled through Oracle Cloud technology, orchestrated through IBM’s intelligent workflows, delivered through the application of emerging technologies to elevate business performance.

A suite of offerings from business case definition to value realisation, capturing the generational shift in business architectures, transforming the way that enterprises generate business value and sustain differentiation.

Through RapidMove, an IBM methodology to assetize all stages of implementation in order to deliver a robust, accelerated, and quality solution.

What are the benefits?

Industry differentiation
Leading practice attainment
Business outcome led processes
Faster delivery and lower risk

Incremental and Accelerated Business Value
A new era of business reinvention is dawning in the Banking industry. Organizations are facing an unprecedented convergence of technological, social and regulatory forces. As cloud, artificial intelligence (AI), automation, Internet of Things (IoT), blockchain and 5G become pervasive, their combined impact will reshape standard business architectures and business as usual. IBM calls this next-generation business model... 

*The Cognitive Enterprise*
The shift to a Cognitive Enterprise
Radically changes how organizations create, deliver, and capture value

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW</th>
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<tbody>
<tr>
<td>Early information technology improved efficiency by applying technology to individual resources or processes</td>
<td>Digital transformation digitizes whole aspects of a business producing customer experiences that support what individuals need or want</td>
</tr>
<tr>
<td>• Paper tracking</td>
<td>• Process automation point solutions</td>
</tr>
<tr>
<td>• Lift and shift</td>
<td>• Design thinking principles</td>
</tr>
<tr>
<td>• Limited use productivity tools</td>
<td>• Enterprise adoption and change management</td>
</tr>
<tr>
<td>• Labor arbitrage</td>
<td></td>
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<tr>
<td>• Localized practices</td>
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<tr>
<td>• Labor arbitrage limited</td>
<td></td>
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<tr>
<td>• Globalization of practices</td>
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</table>
What is a Cognitive Enterprise?

To understand what a Cognitive Enterprise is, it is important to understand a fundamental concept called **Business Platforms**.

As banks around the world describe their strategies in terms of platforms, they are anchoring to the idea of a “stage” or “field of operation” — an area where a range of unique capabilities can be deployed and where the companies can seek to establish a control point over a range of value-creating activities.

Thus, **business platforms differentiate an organization by combining data, unique workflows and expertise to drive competitive advantage**. Such Business Platforms will often be underpinned by technology platforms and may connect into other ecosystem business platforms as well.

Imagine the **Cognitive Enterprise as composed of multiple business platforms**. One or more of these acts as the core or primary platform(s), providing key differentiation. At IBM, we see companies placing bets on the creation of business platforms to solidify competitive advantage and differentiation. These platforms must be digitally connected from the outside-in and cognitively enabled from the inside-out. Specifically, for Banking companies, we see potential for taking quantum leap in technology and process digitization, ensuring regulatory compliance, and leveraging platform economy to achieve and sustain clear competitive advantages.

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**The Cognitive Enterprise**

<table>
<thead>
<tr>
<th>Culture</th>
<th>Skills</th>
<th>Ways of working</th>
</tr>
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<tbody>
<tr>
<td>Industry platforms</td>
<td>Transaction platforms</td>
<td></td>
</tr>
<tr>
<td>Decision processes</td>
<td>Front-office processes</td>
<td>Back-office processes</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>Blockchain</td>
<td>Automation</td>
</tr>
<tr>
<td>Licensed data</td>
<td>Proprietary data</td>
<td>Public data</td>
</tr>
<tr>
<td>Custom</td>
<td>Legacy</td>
<td>API-enabled applications</td>
</tr>
<tr>
<td>Public</td>
<td>Private</td>
<td>On-premise</td>
</tr>
</tbody>
</table>

A culture of **agile innovation** that embraces new skills, workforces and ways of working, and humanizing the enterprise

**An ecosystem of business platforms,** both industry specific and transactional

**Cognitively enabled workflows** for front- and back-office processes and decision making

**Applied exponential technologies** — for example, AI, IoT, automation and blockchain

**Data that is curated** to support key workflows and platforms

**Next-generation applications** that span new and legacy solutions

Open, hybrid and secure **multi-cloud** infrastructures

Source: IBM Institute for Business Value (IBV) analysis
Three-quarters of CFOs have cited existential threats of some kind to their enterprises’ current business model.

– Six in ten CFOs point to more innovative competitors delivering more compelling value propositions.

– Three in ten indicate new entrants are taking market share, and approximately one in six point to some combination of product commoditization eroding margins, or online and mobile channel threats.

– One-sixth cite their own enterprise’s struggle to scale for growth as a leading issue.

So, Technology innovation, Regulatory compliance, Competitive challenges and Shifting business models are top priorities of CFOs.
The Cognitive Enterprise for ERP in Banking

Digital ERP Finance —
The opportunity

Banks continue to see new threats and challenges from innovative organisations and new entrants. New and exponential technologies—including AI, blockchain, the IoT, robotic process automation—virtual and augmented intelligence are being deployed either within or alongside traditional ERP applications.

The Cognitive Enterprise for Banking sets out the business platforms that allow each business to differentiate through process and enable the exclusivity of its data to create competitive advantages and new business models.
Legacy ERP platforms cannot keep up with these changes. Banks need a modern digital ERP platform that improves their ability to respond to match the pace of change.

The need to create tomorrow's enterprise today is accelerating.

Source: Oracle, 2017
In the context of rethinking mission of finance, we will explain how IBM’s Cognitive Enterprise for ERP Cloud creates value for these seven use cases.

1. Faster Innovation to stay compliant and competitive
2. Enable Growth Through M&A
3. Total Spend and Supplier Risk Management
4. Optimizing Cost of Processing Payables
5. Managing Cash
6. Optimizing Period End Close
7. Intercompany Reconciliations
Faster Innovation to Stay Competitive and Compliant

The financial services industry is facing a number of disruptive forces—ever-increasing customer demand for new innovative products and services, competition from financial technology (FinTech) companies, rising regulatory pressure and increasing cybersecurity breaches.

Venture capital flowing to fintech companies in 2018 increased 120% to USD 39.6 billion.1 At that rate, competition in the financial services industry is expected to remain unusually intense.

Since the 2007 – 2008 financial crisis, with newly strict enforcement of regulations, the industry has incurred roughly USD 321 billion in penalties.2 Governance, risk and compliance (GRC) costs account for 15% – 20% of the total operations cost of most major banks, globally.3

In short, considering the large cost of regulatory noncompliance and the need to demonstrate compliance as often as every 6 or 12 months, risk management teams in the financial services industry have a high-priority mission to evolve an IT framework that ensures successful adherence to regulations.

Similarly, while cybercrime continues to plague digital businesses across industries, financial services companies bear the highest cost, with breaches estimated to cost USD 700 billion in losses, globally.4 The priority is equally high for IT solutions that reduce losses related to such theft.

With those combined industry pressures, in order to create new operating and business models that can deliver innovative products and services with competitive speed, financial institutions must find ways to partner with independent service vendors (ISVs), software-as-a-service (SaaS) vendors and fintech companies themselves.

Reference

2. “Global Risk 2017: Staying the Course in Banking,” BCG, 2 March 2017
4. “What will cybercrime cost your financial firm?” Accenture, Finance and Risk, 15 July 2019

https://www.ibm.com/cloud/financial-services
IBM FS Cloud is a public cloud that meets the demands of financial services

IBM Cloud for Financial Services is designed to build trust and enable a transparent public cloud ecosystem with features for security, compliance and resiliency that FIs (Financial Institutes) require. FIs can confidently host their mission-critical applications in the cloud and transact quickly and efficiently. With an ecosystem of multiple FIs and more than 40 ISV partners to start, the IBM Cloud for Financial Services offers a new generation of cloud for the enterprise. FIs can now deploy on public cloud to enable innovation and deliver new, more personalized customer experiences, while managing stringent industry regulations for sensitive data and complex workloads.

Figure 2: IBM Cloud for Financial Services
Enable Growth Through M&A

Banks need ERP solution that takes into consideration complex functional, legal and managerial structure of organization post M&A. A consolidated view of financial performance is critical to measure effectiveness of M&A and track synergies of combined organizations in terms of contribution to higher revenue and lower costs.

The Cognitive Enterprise platform leverages AI and unstructured data to drive planning and budgeting. Cognitive solutions and automation is used to manage and expedite the close of accounting periods. Also, automation identifies and applies intercompany eliminations along with pre-defined frameworks to integrate new businesses.

Key highlights of IBM’s solution are

- **Balance Sheet driven productivity reporting**
  Scrutinize assets for under-performance

- **Profitability Analysis model** - Historical and anticipated product changes and other scenario-based modelling, with complex allocations

- **Automated Group Close Management** - Automate and monitor the process of closing accounting period and account reconciliation

- **Central Accounting Rule Engine** - Automate the treatment of accounting entries

- **Preconfigured Accounting Rules Engine** - Flexible framework to manage the import and migration of data from legacy or acquired companies into a consolidated ledger for reporting
Oracle Financial Close and Consolidation Cloud Service enables a consolidated view of organization

Oracle Financial Consolidation and Close (FCCS) provides a flexible consolidation service that allows you to bring together data from your Oracle ERP alongside other data sources to quickly create consolidated financial reporting across all entities.

The solution provides the following key tools that enable greater efficiencies in managing period end:

- **Compliance Framework** — enables auditing, segregation of duties and configurable calculations

- **Flexible Models** — Accommodate complex legal and internal management reporting business rollup structures with unique calculations

- **Key Performance Indicators** — Track and report on key metrics of the consolidation process and business performance

- **Global Coverage** — Provides GAAP support to enable intercompany and equity eliminations along with adjustments and currency support

- **Analysis of unstructured data** such as news reports and general market analysis to drive decision making
“Using cognitive capabilities embedded within procurement, IBM experienced a $65M saving year on year in 2018”

Cognitive Procurement: Seizing the AI opportunity, IBM Institute for Business Value

Managing supplier risks, reducing operating costs, and optimizing sourcing processes are key priorities in total spend management.

Trust Your Supplier

Supplier IQ is IBM’s procurement insights solution using big data and analytics to measure supplier performance and support sourcing decisions. It enables employees to improve productivity and decision making, by providing:

- Comprehensive company profile assessments based on aggregated data from internal and external sources
- Analytical Insights which provide KPI benchmarking assessments
- Analysis of unstructured data such as news reports and general market analysis to drive decision making
Using Trust Your Supplier can help an organization quickly achieve a more rounded picture of the suppliers. It provides a suite of data that helps procurement professionals make informed decisions based upon market data.
Oracle Supplier Portal

The Oracle Supplier Portal provides a self-service mechanism for suppliers to both receive their purchase orders and raise queries/request changes to them.

The Portal also includes several other self-service functions helping reduce the burden of administration and addressing queries. The Oracle Supplier Portal provides the supplier the capability to:

- Maintain your catalog data
- Submit Advance Shipping Notifications
- Request changes to their data (e.g. changes in address)
- Submit AP Invoices
- View the status of their invoices and payment

Accounts Payable is often overburdened with
Optimizing Cost of Processing Payables

time consuming processes. Invoice matching and payment processing are some examples of such mundane processes.

Sorting and management of supplier invoices often leads to a large amount of paper being handled by accounts payable, procurement teams, local stores and warehouses and approvers.

This can lead to delays in payment, lost paperwork and a frustrating experience for internal stakeholders as well as the suppliers. Multiple invoice contact points for suppliers and a manual workflow for each invoice incur a significant cost of processing of each invoice.
Integrated Invoice Imaging Center

The Integrated Invoice Imaging Center from Oracle is a Machine-Learning enabled functionality that provides primary options to enable the automated receipt, match and workflow of invoices:

- Suppliers email their invoices to a common address from where it will be imported directly into the ERP
- Where suppliers still send paper copies, scan the invoice locally to create an electronic record and have the invoices automatically imported into the ERP

According to a recent survey for the Accounts Payable (AP) Association:

- 57% of all invoices were just received loosely on pieces of paper
- 54% of businesses said invoices were being sent to the wrong place
- 36% said they were concerned with late payments due to process delays

**SOURCE:** AP Association (Accounts Payable Association)  
www.ap-association.com/facts-statistics

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Blue Prism® Robotic Process Automation

The Blue Prism Automated Matching solution provides the opportunity to significantly reduce manual intervention by simplifying matching of invoices with purchase orders and receipts.

Whether scanned or received via email, Oracle’s Intelligent Character Recognition reads the invoice, creates an invoice record, attempts to match to a Purchase Order (where appropriate) and send any exceptions for resolution.
IBM implemented Blueprism to automate the booking of receipted Purchase Order invoices from workflow to the ERP and achieved the following results:

- Reduction in manual intervention: 70%
- Accuracy of output: 100%
- Increase in productivity: 28%

IBM Watson® Agent Assist

The Watson Agent Assist in Accounts Payable provides a Guided call assist for Accounts Payable and Travel and Expense helpdesk agents via cognitive question and answer support. It has proven to support higher client satisfaction through better first call resolution and reduced call center resolution costs in dealing with supplier and internal queries.

- Reduction in service call re-open rates: 25%
- Increase in user satisfaction: 20%

Oracle Intelligent Payments

The Oracle Intelligent Payments application is part of Oracles adaptive intelligence suite. It helps automatically apply agreed discount rates for enrolled suppliers or one-time special situations.

Automated and data driven payment application helps recapture missed savings opportunities, optimize working capital, and improve cash conversion cycle.

Figure 6: Oracle Intelligent Payments
Management of cash and hedging of currency risk is a key consideration for banks.

**Integrated Cash and Treasury management** application helps manage the risk. Whilst Oracle has not yet released a treasury function as part of its Fusion capabilities, it does continue to maintain a strong **Cash Management** application. However, banks typically have more complex requirements to hedge, track risk and exposure, and monitor advanced cash requirements.

Reval, a Oracle partner, provides solutions in the following areas:

- **Seamless integration** with Oracles General Ledger to allow data to flow between the two
- **Cash and Liquidity Management** tools to support forecasting and liquidity planning and intercompany netting
- **Financial Risk Management** enabling exposure risk to be monitored and evaluated. Data from Oracle can be supplemented with 3rd party data to provide a powerful set of analysis and reports
- **Hedge Accounting and Compliance** to allow hedge strategies to be assessed and executed and ensure regulatory compliance
Optimize Period End Close

In an example case study, IBM helped deploy IBM Period Automation Tool for Oracle ERP Cloud and Period End for a global manufacturing company with an annual revenue of $7.5B.

Decision support and issue resolution is now powered by chatbots and machine learning to resolve system and data issues.

This has led to an estimated reduction in cycle time of 3 days in each month end and annual savings of $2.5M.

- Period End Close routines often involve multiple participants liaising around the closure of subledgers and the General Ledger itself to complete reconciliations and address exceptions.

- The touchless process can automate many of the time-consuming administrative activities in what is typically a highly pressurized, time sensitive period of the month.
IBM Period Automation Tool for Oracle ERP Cloud

IBM’s *Period Automation Tool for Oracle ERP Cloud* automates a significant amount of the month end process, thereby reducing the overall time consumed and providing visibility across the life cycle of the close via dashboards to validate the outcome.

The solution can be configured to provide a flexible model based upon:

- **Business Rules** — define the range of activities to be completed as part of the month end cycle
- **Activity Definition** — the relationship between each activity and how it should be enacted
- **Task Structures** — allow manual intervention points to be included if necessary

Once configured the touchless close provides a simple execution process that can be run and monitored centrally. Tasks, communications and reporting is automated to allow freeing finance teams to focus on value added tasks.

<table>
<thead>
<tr>
<th>Faster closing cycle</th>
<th>Easy reconciliation</th>
<th>Reduced cost</th>
<th>Operational efficiency</th>
<th>Dashboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a 70% improvement in the time needed for financial</td>
<td>Automating repetitive task reduces manual efforts by 90%</td>
<td>40% reduction in cost</td>
<td>Resources utilisation is increased nearly 80%</td>
<td>In-depth review and analysis</td>
</tr>
</tbody>
</table>

*Figure 7: Oracle Intelligent Payments*
The solution has been scaled to work across large organizations including those with hundreds of companies and legal entities.

The solution enables efficiencies to be recognized through:

- Analyzing historic requests and trends in intercompany requests and transactions
- Establishing how these can be consolidated
- Enabling common repositories and data sharing mechanisms for receiving and saving intercompany requests and their results
- Automating the processing of the intercompany transactions
In a recent report based upon research by the Mckinsey Global Institute:
40 percent of finance activities (for instance, cash disbursement, revenue management, and general accounting and operations) can be fully automated, and another 17 percent can be mostly automated.


- Typically, banks experience many intercompany transfers resulting from collaborations among various units such as retail banking, commercial banking, wealth management, and corporate

- Labor-intensive month end procedures typically associated with reconciling those entries can be optimized using automated process

<table>
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<tr>
<th>Productivity gain based upon automation of intercompany</th>
<th>Accuracy in the results recorded</th>
<th>Reduction in the number of journals being raised to support intercompany</th>
</tr>
</thead>
<tbody>
<tr>
<td>31%</td>
<td>100%</td>
<td>28%</td>
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</table>
Delivering Business Value through Our Cognitive Enterprise

Let us summarize key business outcomes delivered by our Cognitive Enterprise.
Deliver greater process maturity through leading practices

To summarize, IBM’s Cognitive Enterprise for Oracle Cloud in Banking delivers greater process maturity through leading practices. The platform delivers an industry-tailored solution that recognizes the differentiation within financial services business. It comes pre-configured allowing for an immediate deployment of a fully operational system containing up to 70 intelligent workflows, 100 operational KPIs, 350 pre-configured Level 4 processes, 500 localizations and 150 business controls. IBM’s experts work with clients to validate that solution, in the process demonstrating the industry leading experience that has been embedded. This approach essentially removes the need for costly bottom-up design.
What’s next?

The ability to manage the needs of your customers, regulators, suppliers, workforce and stakeholders to drive efficiency and optimize the finance and procurement functions are paramount to the success of banks.

The opportunity to harness Oracle’s vertically integrated ERP Cloud with IBM’s Cognitive capabilities has the potential to accelerate organizational transformation into intelligent automation via the implementation of the Cognitive Enterprise.

To learn more about or request for a demo of IBM’s Oracle ERP Cloud capabilities with Cognitive for Banking, please reach out to your IBM client executive.
Why IBM

IBM is one of Oracle’s largest and most experienced systems integration partners jointly helping customers for over 35 years:

- Oracle Partner
- 10,000+ dedicated Oracle consultants
- 2,000+ Oracle Cloud certifications
- 375+ Oracle Cloud go-lives
- 10+ Oracle-specific delivery centers
- Oracle Cloud Garage

Learn more about IBM Services for Oracle
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