

Performance Management for Enterprise Wide Payments

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A perfect storm is brewing in the global payments market. Regulatory changes, cost and efficiency pressures, and customer demand for more information, are all combining to force change in a business that is long overdue. Innovation around payments products and processing came with the credit card (Diners Card in 1950 and American Express in 1958) and the implementation of magnetic ink character recognition (MICR) over forty years ago. Thus, it seems appropriate that the next wave of new thought around payments should be initiated with the global move to substitute an electronic image for exchange and settlement rather than a paper one.

CHANGE IS ALREADY HERE

Checks volumes are decreasing at an average rate ranging from 2 to 4% annually in favor of Debit and Credit card transactions that currently are the leading payment instrument. Credit card volume escalated with the introduction of loyalty programs from the airlines and other affinity groups. Debit cards also benefited from these types of co-marketing programs, but also became the payment product of choice for consumers wanting to reduce their debt and, to manage their cash flow more closely. All card-based products have grown as a result of the consumer demand for convenience, especially over the Internet. Additionally, convenience for currency exchange, security in the event of a lost or stolen card or fraud, and cost reduction for employee expenses are other reasons cited for increased use of card products and services.

Payment products, in total, account for 40 to 60% of banks total revenues, and 33% of their operating costs. As customer behavior changes, and with it transaction volumes, a bank's payment business must change with it to continue to maintain, or eventually increase payment revenues. Volume declines squeeze margins. The challenge is assessing the impact on revenue and margins across all payment channels, understanding and modeling the cause and effect of these changes to the business model.

A Global Concepts study found that a majority of the respondents (banks, intermediaries and networks) believe that an enterprise view of payments is necessary to ensure future payments profitability. However there are many issues that are perceived obstacles:

- Silos of business units are driving decisions that are being made for their unit versus for the entire bank collectively. As a result each silo has its own systems, operational support, payments information.
- Payments are not managed as a business, but rather as a series of departmental systems.
- Realization of the inherent conflict between the Retail bank, which wants new products and capabilities and tries to measure soft value and Transaction Services, which are charged with getting (the payment) operation down to the lowest possible unit cost.
- The existing payments systems infrastructure is fragmented and costly for participants in terms of membership fees, transaction costs and liquidity requirements. But “customers” expect technology to deliver the same services at lower cost.
- As banks compete for market share by providing outsourced processing services to other banks and financial institutions, they help to drive processing costs down further; while assuming ever increasing levels of systemic and operational risk.
- The Internet has lowered the entry barriers for non-bank competitors who aim to “cherry pick” profitable customers and services. Banks, meanwhile, struggle to make legacy environments deliver new-style services.

The challenges the industry faces include organizational boundaries, fragmented yet redundant processes and heterogeneous systems and data. But perhaps, most importantly, banks will need to be able to protect and even improve revenue streams during any transition to the enterprise level. The business plan of a bank must be linked to its enterprise strategy, but how?

Increased Focus on Risk Management

The impact of the failures of: Enron, Global Crossing, MCI, Tyco, Parmalat and other global corporations intensified the need for improved risk management and monitoring. Highly publicized corporate governance measures such as Sarbanes-Oxley in the United States, the USA Patriot Act, and the Basel II Accord have increased the pressure on financial institutions to integrate the data residing in their disparate systems, eliminate duplication, and, expand the effort to get data consistency across the enterprise. Payments are a key part of an enterprise wide risk management program. The more that banks can consolidate and integrate payment processing and information, the easier the risk management task.

Enhanced Customer Service

An additional benefit to be gained through an enterprise view to the bank’s various payments products and systems is self-service for customers. Where today most institutions must have a customer-service representative involved in many customer requests for payment-related information, integrating views across the enterprise facilitates a single interface. Banks with many payment systems no longer have the challenge of providing a customer-friendly interface to each of the individual systems. Increased and enhanced customer self-service results in happier customers and reduced staffing for the service operation.

ERP for Payments

In many ways Payments should be treated similarly to Human Resources, Accounting, Inventory Management, Customer Relationship Management and other business functions categorized under the heading Enterprise Resource Planning (ERP). It is a business function that requires integration to deliver the greatest value to the corporation. Data synchronization and corporate reporting are dramatically improved with integrated solutions versus relying on the “knitting together” of old legacy systems with point solutions from different vendors. Applying ERP analytics and management tools provides a standardized approach for managing the payments business, which in turn leads to improved control, maximum productivity gains and better bottom line cost reduction.

The US market’s recent enactment of the Checking for the 21st Century legislation. Check 21, as it is nicknamed, provides a practical example of where applying an ERP approach to payments can result in tangible improvements to the business. Image ennoblement will allow many banks to justify to their Boards the expenditures needed to transition their businesses from checks and cash to cards. While this change will result in efficiency and cost reduction gains, it also results in reduced fees. An institution cannot eliminate revenue from overdraft accounts and check processing fees with out replacing it with new sources of income. But before creating new products and services, banks must understand their existing infrastructure costs and integrate those into the individual products producing a true cost analysis. With an accurate product cost, an improved assessment of profitability can be performed. Profitability must be understood and assessed at the product, customer, region and country levels while applying a risk weighting based on Risk Adjusted Performance Management (RAPM) standards.

Empowered with this level of information about the enterprise, banks can determine the products and channels that are the most profitable and move customer transactions to those products and services through incentives and pricing. To manage these products and services to desired performance levels, a bank must establish a set of key performance indicators (KPIs) that are managed through an executive dashboard. These provide controls that enable a “just in time” management approach to changing market conditions.

The Vision: An ERP Solution for a Bank’s Payments Business



Using this methodology of infrastructure costing and profitability/risk analysis a bank can develop and analyze enterprise wide costs for each payment product and service across the bank. Once these costs are understood, profitability needs to be assessed at the product, customer, region and country levels while applying a risk weighting based on Risk Adjusted Performance Management (RAPM) standards.

Armed with this information, an institution can develop an enterprise budget and plan that helps to assess what staffing and sales costs it needs to plan for in rolling out special offers, new product pricing, which products for which customers, etc. KPIs must be very focused and few in number allowing executives to monitor and manage the performance of their institutions across the enterprise. Thresholds for desired performance levels must be set and monitored through a Balanced Scorecard as defined by Robert Kaplan and David Norton.

Enterprise Payments System

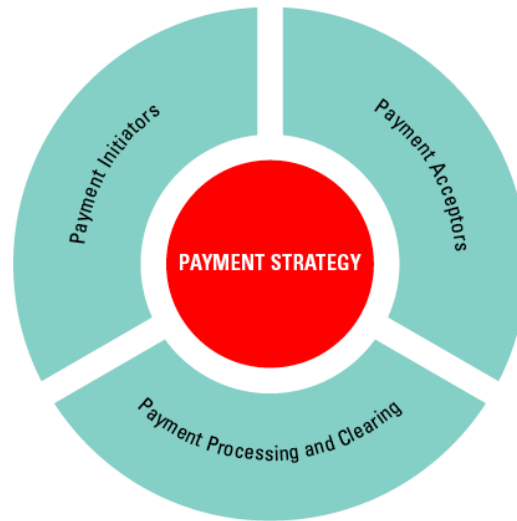
Industry surveys found that while retail and wholesale banking operate as two separate businesses, many are actively reviewing overlaps in transaction services (e.g. ACH) and internal processes (e.g. fraud detection, exceptions handling, returns) and future infrastructure requirements. These activities are in their early stages and therefore provide an opportunity for thought leadership to bridge the transition gap. While for the near future it appears that the payments verticals will maintain separate P&L's and will continue to make decision on pricing, channels and linkages independently, now is the time to plan an enterprise strategy and to identify the changes necessary to make it a reality within an institution.

To achieve real productivity, cost and information availability gains, the industry must be able to capture the incoming transaction *once*; and instead of moving this data from application to application, and from one repository to the next, *to change the "state" of the payment*. These state changes are the result of business rules that automate operational process from capture through item processing, exchange, settlement, historical storage, and ultimately delete the item when it is no longer subject to regulatory retention. The more a financial institution knows about a transaction, the more intelligence it can apply to predicting the future state – such as whether a check is likely to clear or if there are any indications of fraud. State-based processing provides the ability to apply a “results-oriented” approach to payments systems.

Payment Initiators Focus

- Support a broad range of payment access vehicles (paper to electronic, physical to virtual) for all customer segments served, regardless of channels

Developing a Payment Business Vision
The payment strategy should seek to address these drivers holistically and incorporate into the overall payment processing and clearing strategy



- Incent customers to use more effective and less costly vehicles and channels to improve performance
- Optimize customer service and management, leveraging technology, including image

Payment Acceptors Focus

- Support a broad range of payment acceptance capabilities (paper to electronics, physical to virtual) for all customer segments
- Incent customers to use more effective and less costly acceptance methods
- Optimize customer service and management, leveraging technology, including image

Payment Processing and Clearing Strategy

- Leverage technology to reduce processing and clearing costs, reduce errors, and improve overall service
- Streamline end-to-end processing, taking advantage of regulatory changes that allow the reduction or elimination of paper handling

Payment Processing and Clearing Strategy

Furthermore, the information associated with payments is domain knowledge of the financial institution... knowledge that can be used to competitive advantage from both a service and sales perspective; ...knowledge that can be acted on to reduce the cost of payment processing and improve risk management and customer service. This highly privileged information is a clear market differentiator with new market entrants. Therefore, it should not be outsourced. Competitive advantage can be gained by viewing this information through a customer-centric "window". With the customer specific knowledge, financial institutions can customize products and services for each customer, increasing customer satisfaction, but more importantly, reducing overall cost required to deliver products and services that a customer does not want.

This shift from a business that is focused on operations to one that is focused on customer service will necessitate a transformation to a new payments processing model that simplifies the workflows for deposit automation, item processing, exchange services and historical retention for all types of payment. Consolidation of payments systems to a common infrastructure and aggregation of payment information to a shared data model will provide an enterprise view of the business. The transformation will enable financial institutions to manage operations and risk across lines of business to achieve corporate performance and governance goals. It will also empower customers to view their activity in new ways and improve their ability to make choices about how they spend or make investments. FSP's, who take on this challenge proactively, will take a leadership position in bringing new products and services to the market quickly.

Lastly, this customer-focused approach will enable financial institutions to accurately identify and integrate customer level data vital to customer profitability analysis, plus, provide an understanding of where the payments products are gaining traction with customers and where they are not. The concept of a "customer hub" aids the transformation of large volumes of customer data from disparate systems into accurate, consolidated, integrated profiles that are more accurate, actionable and complete.

An additional, "unintended consequence" of consolidating and integrating the payment data in a single place, is the creation of a repository for payments related risk management information. This data can identify the intraday exposure on a per customer, and, multi-lateral and bi-lateral bank basis. It can also provide a comprehensive view to the values being exchanged across various payments systems – ATM, POS, Check, Credit Card, ACH, Wire Transfer, etc. This puts the financial institution in control of how its intraday liquidity is allocated, facilitating the flexibility to move liquidity to where it is needed, when it is needed at the most reasonable cost.

The Financial Services Supply Chain

In addition to all of the benefits mentioned above, integration of payments information across the enterprise address another key challenge for the financial services industry globally – the supply chain. Financial Services Providers (FSPs) have automated portions of the financial-institution side of the supply chain, but until there is complete visibility into all parts of the supply chain, they will not be able to adequately respond to customer requests for information. While full automation of a services-based supply chain is more difficult than traditional supply chains, technology improvements now make it the right time—for both FSPs and customers—to gain value from end-to-end automation and integration. Integrating the payments information with a corporate customer's back office processing of accounts payable, accounts receivable and expenses can result in identification of additional working capital that can be deployed more effectively.

ORACLE'S SOLUTIONS FRAMEWORK FOR ENTERPRISE PAYMENTS

In any business context, when new standards, legislation or technology drive a transformation from “business as usual” to a new vision, the change is an intimidating prospect that often appears to be disruptive. The roadmap to the new vision can be full of pitfalls and the benefits of the future state elusive. Whether an enterprise chooses to be an early adopter or takes a more conservative approach, there are always gains to be achieved from establishing a solution framework and a set of principles to guide the strategy early in the transformation. Having a framework in place enables an enterprise to make proactive decisions based on a strategic plan, rather than reacting to market pressure late in the game.

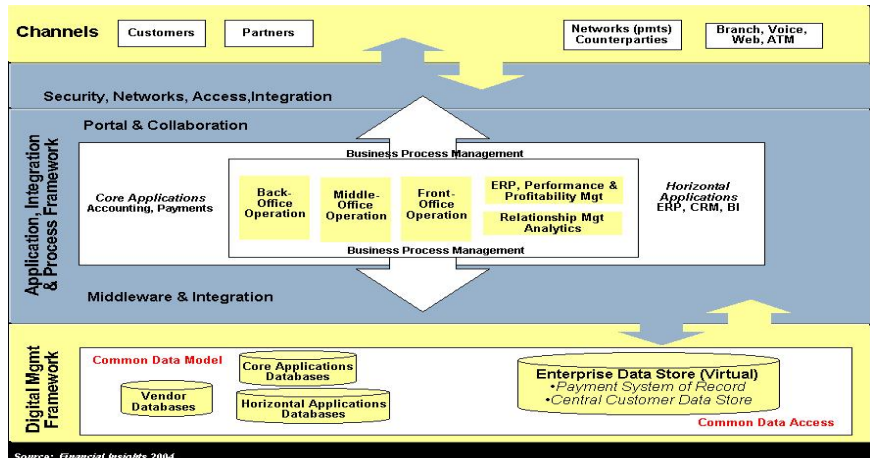
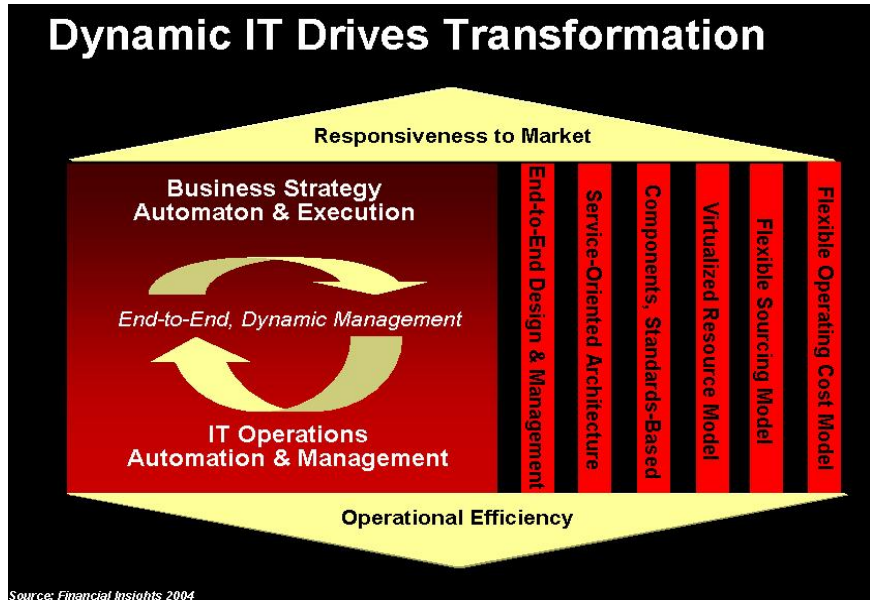
Fortunately, there are already a number of solution providers and systems integrators who have either developed process automation capability, or have documented new operational process workflows incorporating check processing into the overall enterprise flow for payments. What may still keep bankers awake at night is wondering how to leverage this diverse set of solutions and workflows into an integrated framework, and, determining the cost. The platform flexibility that empowers customer focus may be elusive.

Business leaders agree that a proactive business model drives decisions from the top down, but an effective technology solution framework builds from the ground up. Oracle's strategy gives you the best of both worlds.

The business goals for an Enterprise Payments Solution include a broad range of initiatives that will require a comprehensive technology infrastructure. In fact it is the dialog between technology innovation and business goals that will create the ability for financial institutions to differentiate their services and sustain competitive advantage. The goals should be prioritized in such a way that as a strategy for each is developed and implemented, it accelerates achievement of the next. With this in mind, Oracle believes the strategy must evolve towards the following strategic goals:

- A plan outlining the changes and their impact, and the corresponding business flow changes, is required to support an enterprise approach
- An extensible framework that supports the evolution of new products and service, increasing customer self service
- Incorporation into a comprehensive risk management approach
- An end-to-end payments process that enables straight through processing
- Process automation and decision support driven by a dynamic rules engine
- A non-disruptive transition from legacy operating environments to new systems
- The ability to layer business intelligence across all payments to provide customer insight

Two charts from Financial Insights Illustrate the criticality of integration for achieving transformation of the payments business



A Non-disruptive Transition from Legacy Operating Environments to New Systems

The challenges of evolving to a consolidated payments business model from the proprietary applications and archives in place today will be an evolutionary rather than an evolutionary process. In some cases there may not be sufficient cost benefit to replace existing systems. The transformation will require an integration strategy or roadmap that over time connects an all payments data store to payment information from both internal sources and external archives.

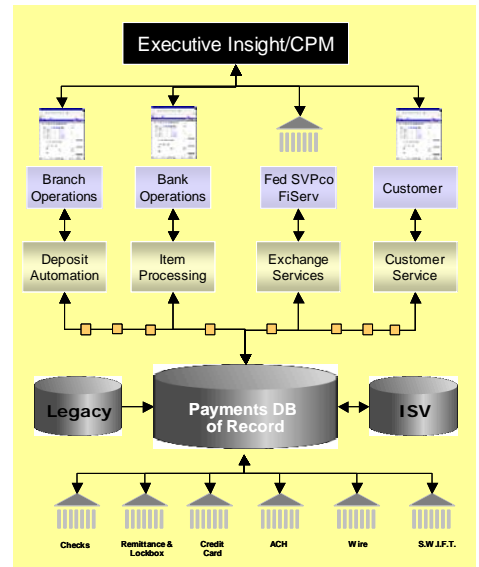
Connect to Any Data—Oracle Application Server 10g provides all the capabilities required to reliably deliver data from different databases and applications to virtually any system, including XML messaging, data transformation and validation, and advanced metadata facilities. With Oracle Application Server 10g, you create a common payment data model that acts as a single hub of information and reduces the cost of future integration projects.

The ability to layer business intelligence across all payments to provide customer insight Oracle's suite of products delivering customer insight and management, provide business intelligence about payment information based on customer views. It includes an integrated analytics platform as well as end-user analysis tools, all of which are accessed via a user-friendly dashboard. The platform provides consolidated customer and payments data from multiple internal and external sources (sales, marketing, service, call centers, wires, ACH, POS, etc.). The data is then stored in pre-defined formats that support reporting and analysis for risk management, performance measurement and customer information.

The benefits gained from Oracle's suite of customer insight and management products include: greater insight into your customers, drill down on the products and services the customer utilizes, customer profitability, customer risk, and customer cost. This comprehensive approach to customer service and support will drive revenue growth as well as improved business agility, lower costs, and reduced risk and liability.

Oracle Enterprise Payments Roadmap

- Enable **straight thru processing** ...capture payment once and use process automation to change the state of the object instead of duplicating it
- Adopt an **all Payments** Data Model
- Leverage standards and a common infrastructure **across LOB's** to reduce TCO
- Integrate to **ISV and Legacy** solutions
- Develop an **enterprise view** of customer and operational payments information
- In turn providing payments information as a fully utilized **enterprise asset**



Oracle Value Proposition

A solution framework enabling a roadmap from older, high maintenance cost, siloed solutions—in place today—to a consolidated, integrated, lower-cost, extensible payments infrastructure

- A single, integrated instance of structured and unstructured data for **all payments**
- Complete, **unified disaster recovery** – zero image and data loss
- **Integrated security** for all phases of payment processing
- Dramatically **lower cost of storage** and administration
- Dramatically **lower research costs** (up to 90% per transaction)
- Single integrated dashboard for managing Key Performance Indicators (KPI's)
- Detailed understanding of profitability both at the product and enterprise levels and the ability to assess the associated risk ratio
- Integrated, consistent, planning and budgeting across the enterprise

Why Implement Oracle Applications?

Oracle's suite of corporate performance management (CPM) products includes the tools allowing banks to manage the risks associated with a transition to enterprise payments.

Incorporating both financial and non-financial performance measurements into a single, comprehensive dashboard provides financial institutions with the control; transparency and accountability needed to meet the ever-increasing requirements of regulators, senior level executives and line managers. Just as with a living, breathing ecosystem where each entity is integrated with every other, financial services executives need to continuously monitor what is going on throughout the enterprise. The dashboard also shows the impact of one aspect of the enterprise on another - what products and services are gaining acceptance with the target audience in each market, what the cost is to deliver them, how long it takes to get a new product to market, which customers are profitable and why, etc. Just as importantly, institutions must understand customer satisfaction, cross selling success, contact ratios and revenue per client. These analytics are all components of a Balanced Scorecard for managing the enterprise. Oracle's CPM suite of products can address the spectrum of these requirements and, can help to define Key Performance Indicators to connect the business critical information that the metrics rely upon.

Key Benefits/Oracle Solution Components: Overview & Positioning

| Product | Benefits |
|------------------------|--|
| Financial Analyzer | <ul style="list-style-type: none"> • Budget and forecast creation, review, modification, and communication within the same system • Coordinates and streamlines the budgeting processes whether using top down, bottom up or mixed budgeting methodologies • View data across any combination of dimensions – line items, time periods, products, geographical regions, and costs centers • Extensive financial modeling • Seamlessly integrates with Oracle GL |
| Sales Analyzer | <ul style="list-style-type: none"> • Intuitive data selection • Data organized for business use • Inherent intelligence about sales and marketing data • Standard sales and marketing reports to understand sales trends, measure promotional response effectiveness • Examine customer profitability • Perform product profitability and life cycle analysis |
| Budgeting and Planning | <ul style="list-style-type: none"> • Manage the planning, budgeting, forecasting, and monitoring processes • Define the rules, tasks, and schedules • Achieve consensus when looking forward • Monitor consolidated impact on ongoing results • Responsibility hierarchies and data security for holding people accountable • Real time posting of results |

| | |
|-----------------------------|--|
| Balanced Scorecard | <ul style="list-style-type: none"> • Definition and implementation of Key Performance indicators (KPI)s for measuring and managing the business • Pre-Seeded measures are set as the default in KPI groups • Custom view portlet with KPIs and BI measures • Arranges complex scorecard systems into logical hierarchies mapped to organization structure • Provides “Cause and Effect” to pre-seeded measures |
| Daily Business Intelligence | <ul style="list-style-type: none"> • Quantify and manage the implicit rate bet that results from balance sheet management practices • Hold business units accountable for what they can control – pricing and profitability • Account level spread earned on assets and liabilities and earned or lost as a result of interest rate risk exposure • Produce account, customer, product and business unit performance measures |
| Sales Analyzer | <ul style="list-style-type: none"> • Data organized by business users • OLAP calculation engine and data cache • Multi-dimensional data model • Intuitive data selection • Adaptive to changing market conditions and scenarios |
| Performance Analyzer | <ul style="list-style-type: none"> • Links general ledger, customer account, customer transaction and statistical data • Comprehensive profitability information at the customer, product and business unit levels • Top-down or Bottom-Up profitability measurement using business dimensions • Essential profitability measurement data from allocation methodologies • Analyze business from multiple points of view (customer, geography, product, channel, business unit, or customer account) • Powerful modeling capabilities |

| | |
|----------------------------------|---|
| <p>Activity Based Management</p> | <ul style="list-style-type: none"> • Accurate cost information for managers • Model the complexity of costs based on activities, materials, resources, and product or service components in relegation to the drivers of those costs • Recognizes causal relationships of cost drivers to activities • Flexible cost modeling to more accurately map costs to the products, services, or customers that consume resources |
| <p>Financial Intelligence</p> | <ul style="list-style-type: none"> • Pre-built decision support system for Oracle Financial Applications • Compare project costs to multiple budget types • Analyze project by employee • Track enterprise wide capital investments • Easily track assets moving between cost centers • Analyze fixed assets distribution by various classifications • Monitor cash flows, cash position, and net positions from browser • Track daily FX rates to decrease risk exposure • Track cash outflows by actively monitoring supplier invoice and payment information and employee expense information • Analyze cash inflows by monitoring collection indicators |
| <p>Marketing</p> | <ul style="list-style-type: none"> • Automates entire marketing process from campaign planning, budget management and list creation to execution and analysis • Execute targeted marketing with complete analysis • Execute campaigns across multiple customer interaction channels such as web, e-mail, and out-of-the-box telemarketing • Leverages data from across the E-Business Suite • Sophisticated segmentation and list management • Predictive modeling and scoring |

S U M M A R Y

Analysts predict that the payments market will continue to expand. Leaders within the global financial services community will use the opportunity presented with the evolution from paper based payments products and regional legislation, to evaluate their current operations and reassess their future payments strategy. Rather than replicating the current paper workflow with an electronic one, industry leaders will choose to map their future architectures to meet their strategies based on a customer rather than a product focus. While it will take time to fully evolve to this strategic state, financial institutions that map out a plan and begin executing on it now will reap the rewards in the next round of industry consolidation.

The technology has finally met and exceeded the business requirements. There is no longer a reason to maintain an environment defined by duplication, inconsistency, and, lack of integration. Oracle provides a framework of products, tools and business rules/workflow that, in conjunction with ISV applications provides the most comprehensive, leading edge approach to payments. Oracle enables a financial institution to control its payments destiny and provides the business critical enterprise wide information to successfully manage the transition into the future.



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