

PARIVEDA SOLUTIONS' VIEWPOINT

ON THE EDGE OF A BREAKTHROUGH

John Humphrey and Steven Rogers
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ON THE EDGE OF A BREAKTHROUGH

Organizations that emerged relatively unscathed from the recent economic downturn demonstrated an ability to maximize existing IT investments while delivering increased value for employees, customers, partners and shareholders. To obtain and maintain a competitive advantage at every stage of the economic cycle, companies should explore how to redirect their IT investments from core ERP systems, to “the edge.”

BY JOHN HUMPHREY and STEVEN ROGERS

Trying economic times do not provide the luxury of ignoring business objectives or business demands. Economic cycles come and go, and how organizations responded to the challenges over the past several years revealed a number of important lessons.

By and large, companies were forced to react to recent economic pressures by slashing budgets, reducing staff, and postponing needed IT infrastructure upgrades. Frequently, these decisions were based purely on cutting costs, and with little consideration of how those actions would impact business and revenue growth goals.

During times of economic uncertainty, needed IT infrastructure upgrades and transformations are regularly postponed. In spite of this re-prioritization, businesses frequently fail to determine how to proactively direct resources towards maximizing the value of their existing IT systems – simpler, less expensive options designed to improve productivity, deliver a faster time to market and speed to value. This can be accomplished by re-directing IT investments from the “core” infrastructure and applications – such as Enterprise Resource Planning (ERP) solutions – to extending those enterprise applications and solutions with technologies that deliver value at the “edge”.

Edge IT applications include portals, eCommerce platforms, mobile applications and distributed business intelligence platforms that enable real time (or near real-time) interaction with employees, customers, suppliers and other stakeholders. By design, edge IT applications improve the customer and employee experience, reduce costs and maximize efficiencies at investment levels much lower than what would be required for core enterprise system customization. Organizations can quickly adjust edge solutions to address the evolving demands of the business – without additional infrastructure investment, and regardless of the economic cycle.

Focusing on the edge directs investments towards solutions that create customer and shareholder value in a quicker timeframe; this strategy also prepares businesses to address future economic downturns. To determine how to maximize IT investments to ensure that consistent, incremental value is delivered to shareholders, stakeholders and employees even in the most challenging economic circumstances, executives need to consider how *the industry*

value chain, economic cycles and the choices in *IT application architectures* impact their organizations.

THE INDUSTRY VALUE CHAIN

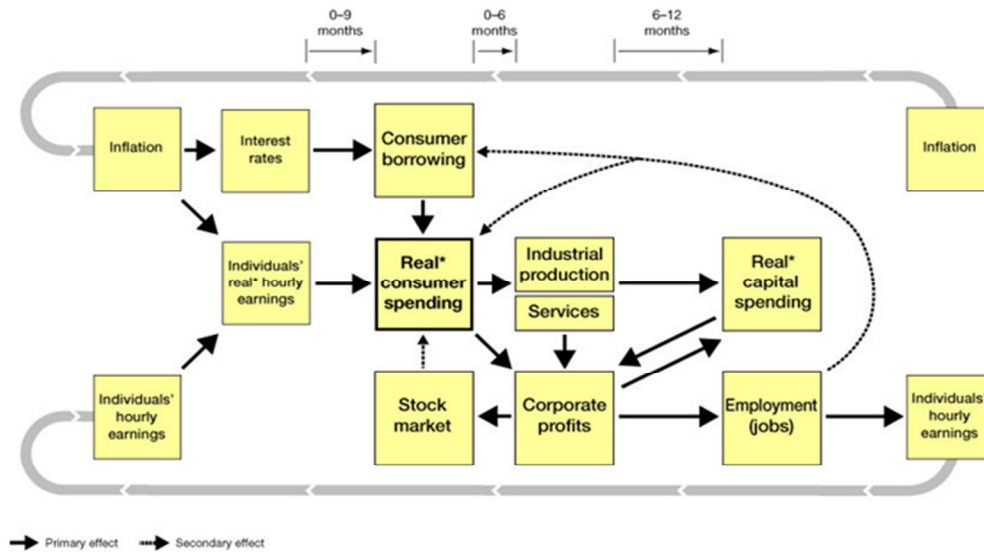
Throughout history, economies have changed along with theories about *value chains*: the combination of participants (both suppliers and customers) that come together to create, purchase and sell materials and finished goods to the customer. If you go back to the “value chain” inception, businesses like Ford Motor Company had their entire value chain integrated within the organization – Ford owned the foundry that manufactured the steel, the factories that built the cars and the dealerships that sold them. When increased competition from international steel companies and foreign car manufacturers drove companies like Ford and GM to specialize in order to drive efficiencies and improve the quality of their vehicles, value chains were forced to evolve. The value chain within almost every industry was affected in a similar fashion, as component manufacturing became outsourced to specialized organizations.

During both good and bad economic conditions, companies are looking for ways to reduce the length of time it takes for a product to reach the customer by collapsing the value chain. In the past, enterprises would spend billions of dollars on core ERP and EDI systems, as they represented the soundest investment possible given the alternatives. This is no longer the case – organizations now have tremendously rich enabling technologies that can be used to improve the experience and create additional value for stakeholders. Changing the IT investment approach to edge solutions supports rapid time-to-market and reduces cost of development, while still delivering on business requirements.

THE ECONOMIC CYCLE

According to economist Joseph Ellis, as economies grow and people and companies have more money, they increase the amount of money they spend. To address the resulting demand increase, companies increase their production, driving corporate profits that are invested back into the business in the form of capital projects such as new call centers, back office automation or innovated systems to improve customer experience. (Joseph Ellis, [Ahead of the Curve](#)).

Figure 1: Chronology of the Economic Cycle



Source: Joseph Ellis – *Ahead of the Curve*, 2005

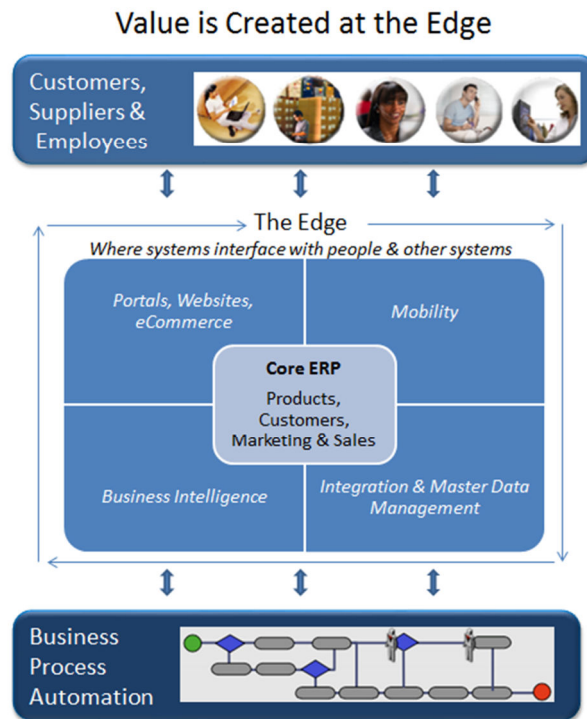
A common error that organizations make during an economic growth phase is to direct the majority of available funding for capital IT projects in one primary direction: towards core IT infrastructure and ERP. However, this model is changing, based on lessons learned both during the recent downturn as well as from the new planning that is taking place during the economic recovery. As core IT systems require tremendous capital investment and time to implement, directing a majority of budget towards these solutions takes the focus away from more nimble, lower cost alternatives. Organizations that thrived during the downturn captured as much value as possible out of the systems they already owned. These results challenge the traditional line of thinking that IT investments in core systems and business applications are required in order to increase efficiencies and productivity.

While focusing on how to use existing IT investments to improve productivity and delivering a faster time to market may not feel transformative, investing in capital projects that yield incremental value for stakeholders frequently provides organizations with competitive advantage. Organizations benefit from a greater number of solutions that can be delivered during all parts of the economic cycle, as well as developing a more cost effective enterprise architecture that can continue to adapt during the downturns. In the process, dynamic IT cultures are created, with resources being incented to seek out opportunities to quickly deliver solutions to market and rapidly react to changing business demands.

IT APPLICATIONS: THE CORE VS. THE EDGE

If the core is about transactions, the edge is where the biggest opportunity exists to improve the customer and employee experience, increase automation and accuracy, and collapse the latencies in the value chain. Edge applications move transactions closer to the “moment of value” – the expedited exchange of goods, services and/or information between value chain participants (employees, suppliers and customers).

Figure 2: Value Created at the Edge



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Investing at the edge enables efficiencies that promote better decisions (business intelligence), deploy solutions to employees, customers and suppliers (eCommerce, portals), drive those efficiencies deeper into the value chain (mobility), and deploy data and integration through various web services across the value chain. Edge applications are also more self-contained and allow organizations to rapidly deploy and/or adjust as business conditions change.

Increased investments in core applications result in intensive and expensive labor demands; projects can last for years and cost tens of millions of dollars. Conversely, edge applications can be delivered incrementally and create new value in a very short period of time. During economic ebbs and flows, organizations cannot afford high implementation costs and must seek the type of productivity that comes from technology investments that offer a faster time to market or speed to value. Edge applications accomplish this goal.

If the core is about transactions, it is difficult to argue that substantially more value can be extracted, unless an organization has ignored technology investments over the last 10 to 15 years. The edge is where the biggest opportunity for return exists – transactions move closer to the “moment of value” and increase automation among value chain participants.

MAXIMIZING THE EDGE

When economic tides turn, there is little time to react. The best-prepared organizations will have the ability to quickly respond and deliver new solutions to meet the needs of its customers, partners and employees. As we enter the beginning stages of an economic recovery, companies should explore how to direct capital investments to the edge. The delivered solutions will drive latency from the value chain and allow the kind of efficiencies that will promote reductions in labor costs in the future. Maximizing the edge also addresses the “moment of value” and mitigates the risks associated with attempting to deliver all business needs with core IT applications. Speed, value, and flexibility – each are addressed through the edge.

ABOUT THE AUTHORS



John Humphrey is a Co-Founder of Pariveda Solutions and currently serves as its Chairman of the Board. Mr. Humphrey has more than 20 years of experience in business operations and technology working around sales strategy, marketing and application software.



Steven Rogers is a Vice President at Pariveda Solutions based in Houston and has extensive experience with web technologies and service-oriented architectures. Mr. Rogers has 20 years of information technology experience through a variety of roles, including enterprise software sales and marketing, professional services, and system design and development.