



# (ERS) EXTENDED RETAIL SOLUTIONS

## 2005 COMPUTERWORLD HONORS CASE STUDY

### BUSINESS

INTEL WORKED CLOSELY WITH CAPGEMINI, CISCO, AND MICROSOFT IN A JOINT INITIATIVE TO DEVELOP “EXTENDED RETAIL SOLUTIONS”, AN INNOVATIVE IT FRAMEWORK THAT RETAILERS CAN USE TO PUT TECHNOLOGY IN PERSPECTIVE, IMPLEMENT SOLUTIONS THAT WILL DELIVER IMMEDIATE BUSINESS VALUE, AND POSITION THEIR BUSINESSES FOR THE FUTURE. [20055200]

*A Search for New Horizons*



### SUMMARY

Enabling retailers to confidently begin and support the transformation of their retail businesses is the mission and philosophy behind Extended Retail Solutions (ERS), a joint initiative from Capgemini, Intel, Cisco, and Microsoft. Leveraging the power of these four industry leaders, ERS provides a framework retailers can use to put technology in perspective, implement solutions that will deliver immediate business value, and position their businesses for the future.

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### APPLICATION

To collaborate is to capture the exponential power of cooperation. Our world today is too fast-moving, too complex, and too demanding for any other approach to business to be successful over the long run. Even organizations that have a good understanding of modern information technology find themselves straining to keep pace with contemporary demands for innovation and the effective application of technology.

The ERS (Extended Retail Solutions) program leverages the collective information technology abilities and retail industry knowledge of four global technology leaders, Capgemini, Intel, Cisco Systems and Microsoft. The four companies have combined their respective strengths to assemble and deliver tailored business and technology solutions to the retail marketplace. Even though we refer to ERS as a program, it actually is more of a unique collaboration framework aimed at combining and refining best known methods, tools, and expertise from each of the partners into one collective effort to be shared and leveraged by all four partners.

Intel supplies the computing and communications industries with chips, boards, systems, and software building blocks that are the "ingredients" of computers, servers and networking and communications products. These products are used to create advanced computing and communications systems in support of information systems for point-of-sale, back office, in store, customer service management, and supply chain management.

Cisco Systems, Inc. is the worldwide leader in networking for the Internet. Today, networks are an essential part of retail industry, and Cisco Internet Protocol-based (IP) networking solutions are the foundation of these networks. Cisco hardware, software, and service offerings are used to create Internet solutions that allow individuals, companies, and countries to increase productivity, improve customer satisfaction and strengthen competitive advantage.

Microsoft Solutions are used by thousands of organizations around the world —helping to level the competitive playing field with the large chains. These include solutions for the store, corporate and back-end offices are all focused on promoting successful growth and continued viability for small to medium-size retailers. Microsoft offers a portfolio of enterprise-wide solutions combined with first-rate financial resources and the technical expertise to improve those systems over time.

Capgemini provides consulting, integration and implementation experience to retailers who want to transform their businesses by driving revenue, margin and shareholder value while adapting to market volatility. Capgemini is a leader in collaboration practices, adaptive business and IT, and IT services architecture implementation. These four market leaders in combination form the bedrock of the ERS Framework.

During the first year of the ERS program engagements were initiated with a wide array of customers in the US and Europe in areas of point-of-sale refresh, global data synchronization, RFID, customer self-service technologies, and future store technology planning. Just recently, new customer opportunities are underway in the areas of supply chain management, retail ERP, and loyalty systems. Our engagements have included business studies, business planning, technology pilots, proof of concepts, and solution deployments.

The Capgemini Accelerated Solutions Environment™ (ASE) is one example of an ERS unique capability used to enable organizations to make better, faster business decisions when senior executives, program/project leaders, and innovators are faced with complex, business challenges. The ASE event is typically a one day event held with an ERS customer prospect. The ASE combines a world-class facilitation team, patented, decision-making process, global knowledgebases and innovative workspaces to accelerate the life cycle processes associated with complex business and IT solution understanding, acceptance, solution definition, implementation, and adoption.

The ERS program is designed to shepherd organizations along the path to business transformation where incremental steps along the way yield business value. Business transformation involves a three step process of adopting IT solutions, adapting to the solution, and transforming the business. This three step process is repeated as new incremental solutions are successively implemented while establishing an “adaptive IT” platform build out as a part of the ongoing process. An adaptive IT platform serves as a platform for adaptive “agile” business.

The ERS partners fund collectively ASE events, customer solution pilots, and technology proof of concepts. All four partners have found this investment a win-win in tackling the retail marketplace.

## **BENEFITS**

Capgemini, Intel, Cisco and Microsoft have a clear vision for ERS and a commitment to making ERS a coordinated, complimentary and evolutionary answer to the technology challenges facing today’s retailer. ERS provides practical solutions that are sensitive to retail margins, costs and project time horizons, while preparing retailers for sustainable competitive advantage.

Instead of requiring retailers to rip-and-replace systems, ERS brings a palette of standards based technologies that can be implemented more rapidly at a lower TCO, because they are pre-integrated, designed to work together and fully tested in the real-world retail environment. ERS leverages available assets and technologies, while providing retailers with the opportunity to seamlessly incorporate new technologies where the returns justify the investment.

ERS solutions take into account the retailer’s existing technology adoption culture, history, and consumer demographics to recommend the “right” amount of technology and the right implementation timeline. By creating a flexible, adaptive architecture, ERS allows retailers to take a phased approach to the introduction of new technology.

### **Collaboration Model is the Key ERS Discriminator**

The term “collaboration” has the connotation of willing cooperation and interchange, a spirit of mutual support and synergy. We define collaboration as the act of working together in the spirit of willing cooperation and interchange to achieve a shared objective. Our shared objective is to maximize value for our customers through between the four ERS partners and our customers.

Collaboration has been well established within the cultural DNA of each of the ERS partner organizations. For Microsoft, Intel, and Cisco our partner ecosystem is key to each of our business models as we each have strong relationships with suppliers, OEMs, and ISVs. Capgemini likewise has strong relationships with their technology alliances and are leaders in customer collaboration. We utilize the Capgemini collaboration model as the basis for our ERS collaboration strategy.

Capgemini have defined four basic tenets for successful collaborative relationships. By addressing the tenets of collaboration we are able to bring significant value to customers while maintaining a strong win/win bond between the ERS alliance partners. The four tenets are as follows.

**Targeting Value.** The motive for collaboration lies in the possibility that the parties involved can improve their individual and collective performance by joining together in working with customers. We use the ASE process to work with customers to identify a compelling common vision of what is possible through working together in the spirit of willing cooperation and interchange. We quantify the value that parties aspire to achieve and to identify clear metrics of achievement.

The ASE process is a means to quickly target value, identify customer relevant potential solutions, and obtain stakeholder buy in. The ASE creative workspace coupled with a unique approach enables rapid business decision-making and the creation of innovative solutions.

**Mitigating Risks.** Streamlining operations, reducing costs, and leveraging the power of technology to run a more efficient and effective organization is often beyond the wherewithal of the typical company. For these reasons, the ERS program partners work together with our customers in identifying new business and IT solution opportunities. The ERS partners invest in customer solution pilots and technology proof-of-concepts (POC) as a means to mitigate risks. During a customer ASE we can identify areas where a pilot or POC may be useful in addressing potential areas of concern.

**Optimizing Capabilities.** The next step in creating the conditions for collaboration involves understanding what value and capabilities each party brings to the enterprise and creating a clear understanding of who does what. Collaboration is only possible when the parties involved have a clear picture of what each is contributing.

No company possesses the full range of expertise and operational capability it needs to succeed. Optimizing capabilities is paramount to the ERS value proposition given the ERS ecosystem consists of three leading technology companies and a systems integrator that have proactively joined forces in collaboration to drive best practices, knowledge, and resources.

**Aligning the Organization.** Companies underestimate the importance of building consensus among all stakeholders and gaining their input early on in a transformation project in order to minimize confusion, error, and resistance in later implementation phases. Experience shows that the use of collaborative techniques can cut the time it takes to deliver large transformation projects by 20 to 50%.

The ASE process is a unique and innovative approach to align project stakeholders. The net result of these building blocks is to create an atmosphere of trust. Trust is the essence of collaboration, its foundation and source. The ASE helps to address cross-functional, geographically dispersed issues by developing strong sponsorship for our ERS solutions across the set of stakeholder participants while generating momentum and energy necessary in tackling new business and IT solution opportunities.

#### Results to Date

We have held over 30 ASE events in the US and Europe. Over half of the customers attending ASE events have engaged in a post ASE business studies, pilot projects, POCs, or solution implementation initiatives. Our customer engagements to date have been in the areas of point-of-sale refresh, global data synchronization, RFID, customer self-service technologies, and future store technology planning. Meanwhile, new opportunities are underway in the areas of supply chain management, retail ERP, and loyalty systems.

Our current ERS solutions focus on improving store associate productivity and improving labor management to quickly enable more efficient control of labor costs and less overtime. Rich-media in-store advertising that up-sells, cross-sells and provides product information increases customer satisfaction and drives sales.

Self-service devices speed customer checkout, lower labor costs and reduce returns. Analytical tools and data synchronization capabilities between CPG suppliers and retailers help to improve real-time data flow and supply chain efficiencies while reducing shrink by quickly uncovering theft and fraud. The ERS standards-based architecture helps position retailers for future technology advances at a lower total cost of ownership.

#### How does ERS Change the Game

Retailers are faced with the need to establish bilateral relationships with a number of technology partners that may have conflicting agendas. Through ERS, we have established a built-in network of complimentary partnerships between Capgemini, Intel, Cisco, and Microsoft that extend to the multitude of the ISV and OEM partnerships within each of our respective companies.

Our four companies invest in excess of \$12 billion in combined R&D. In addition, each of our organizations established the retail industry as a vertical market priority. We call this the "Power of 4". The power in the "Power of 4" consists of an extended ecosystem network of companies that support Intel, Microsoft, and Cisco compute platform. These ERS ecosystem collectively has the power to drive business transformation in the retail industry as the ERS solution components combined over time on an adaptive IT platform that enables the adaptive retail enterprise.

The development and implementation of an effective business transformation plan involves complex considerations and collaboration among diverse stakeholders. An ERS ASE is the first collaborative step designed to explore issues and decide which solutions best fit a customer's needs and based on business and organizations priorities.

The intensive, highly collaborative ASE event designed to meet the unique needs of the participants. During focused “ASE knowledge bursts,” thought leaders and subject matter experts from Capgemini, Intel, Cisco and Microsoft address specific business and technology issues centered on the needs of the participants. The process is dynamic and evolutionary, working outward from the business problem to the most appropriate, cost-effective solution.

ERS ASE knowledge bursts are selected from a menu of retail industry IT topics such as, including real-time POS analytics and integration, RFID, Store-as-Media, Store of the Future Technologies, Real-Time Retailing, and the Global Commerce Initiative/Global Data Synchronization. After a customer is exposed to the knowledge bursts, customer “aha’s” surface through a series of brainstorming and breakout team exercises. A customer specific transformation map is the final deliverable of the first ASE event. The transformation map is a visual plan that outlines business issues and a clear set of projects and initiatives aimed at addressing the business and technology issues.

## **IMPORTANCE**

ERS is designed to give retailers access to real-time information to enable faster decision making, increased supply chain efficiencies and rapid response to changing customer demands. There are three ERS business transformation themes. Each of the three transformation themes have associated solution set options from ISVs compatible with the Intel, Microsoft, and Cisco platform.

### Transforming Store Operations

Real-time retailing enables organizations to use their valuable point-of-sale data in real time to address major improvements in their operational capabilities. By migrating batch processing to real-time UPC and, eventually, toward the future of radio frequency identification-electronic product code RFID-EPC just-in-time information processing potential begins to unfold.

This potential enhances the capabilities and performance of people, another key factor in transforming store operations. Instead of trapping employees at the register, ERS allows a mobile workforce to be deployed where they are needed, when they are needed, with access to the information and tools they need to better serve customers.

Through constructing support systems that “sense and respond” to changing business conditions, ERS increases agility and improves retailers’ responsiveness to customer needs. Enhanced functionality, including automated alerts and exceptions, a performance dashboard, and wireless capability improve managers’ productivity by providing continuous updates on store operations.

### Transforming the Value Chain

The goal of this solution set is to provide visibility across the supply chain, to enable maximum availability with minimal stock. Transforming the value chain involves introducing technologies such as RFID to track inventory, reduce supplier lead times, control costs and minimize human error. Rather than relying on batched data to forecast sales and purchase inventory, retailers can use RFID to gain access to current information through real-time data-flow.

Supply chain transformation aims at producing better data to improve decision making and reduces mismatches between inventory supply and customer demand. Stock outs and overstocks are avoided, improving customer satisfaction and reducing costs. RFID even provides the lynchpin for vendor-managed replenishment systems, which offer distinct cost and competitive advantages. But the full potential of RFID is even greater.

ERS solutions optimize the dynamic flow of information captured from RFID readers and integrated with back-office systems to optimize the supply chain, warehousing and store execution, from the vendor to store operations. Demand signals are directly linked to supply chain execution for rapid replenishment at minimal cost. ERS can also make the supply chain more responsive to merchandising requirements by providing visibility and analytics to unique customer, product and movement patterns at the local store level.

By creating a platform for automation and Web services for data interchange, ERS provides both the foundation for RFID implementation and the solution for integrating real-time data to improve business value.

### Transforming the Customer Experience

Today, successful retailers compete based not on price, but on innovation. Creating differentiated customer experiences is the key to driving greater economic value for retail businesses. ERS helps win market share, customer wallet share, and life-time value where the battle is fought – in the store.

Many retailers are already finding rapid customer acceptance and adoption of self-service solutions such as self-checkout, rich-media customer terminals, kiosks and smart screens. Self-service solutions empower customers to find their own answers to questions about products and pricing, and can lead to bigger shopping baskets by suggesting complimentary items and delivering special offers.

Extended point-of-service (POS) solutions allow customers and sales associates to access product and price information anywhere/anytime via mobile devices. Sales associates don't have to be thoroughly versed in the store's entire inventory, because they have access to information about every product instantly from anywhere in the store.

ERS utilizes the latest in dynamic digital signage, rich media and interactive displays, and flexible content management solutions aimed at transforming the retail store into a media center aimed at delivering interactive multi-media product information, capturing customer loyalty information, and promotional material that are valued, enticing and effective.

#### Services Architecture (SA) as an IT Blueprint

For each ERS transformation theme we have a predefined solution set mapped to a packaged software options from various ISV partners. This extended ecosystem of ISV partners supports the Intel, Microsoft, Cisco standard platform. The SA integrates the services required within the ERS ecosystem and defines the interrelations and required collaboration between all types of services. So in effect, SA is used to define the comprehensive ERS platform consisting of hardware and network building blocks, application and support software.

SA eliminates hard connections that traditional systems have put in place over the years are de-coupled and existing investments re-deployed as standards based shared services. The services can then be configured and managed without the massive effort required to change today's applications. IT responds more quickly to business change at a much lower price while maintaining or improving the quality of services.

Application integration is an important facet of the vast majority of IT projects given application connectivity and information sharing forms a foundation for business process automation and workflow applications. Even more importantly, application integration can extend beyond corporate boundaries in support of supply chain transformation and driving one to one communication with customers. The services architecture minimizes application integration TCO through a platform of reusable services supporting ERS applications.

A SA based design and planning approach is aimed at delivering maximum flexibility and value. SA knits multiple services together to support rapid deployment of scalable, flexible composite applications across the enterprise, both inside and outside.

The ERS SA supports four key areas where retailers will need to focus on integration and interoperability: between applications used within the store that reside on the same box or platform; between systems used within the store that reside on different platforms; between systems used in the store and central office systems; and between systems used in the store and external suppliers and business partners

#### Refreshing the ERS Platform

On a periodic basis we use the ASE process for on-going ERS program planning and solution refresh. During our solution refresh we take time to understand the latest point of view from each of the four partners as to current product/technology offerings, product/technology roadmaps (1-3 year horizon), and research and development roadmaps (3-5 year horizon). We use the ASE process to assimilate the partner point of views and agree on what elements of the ERS solution should be eliminated, changed, or added.

We are currently engaged in this refresh process. We are in the process of evaluating and assessing new technologies such as digital home, new wireless broadband technologies such as WiMax, sensor and mesh networks, agent technologies, new compute platforms, and Voice IP as examples. These and other technologies will impact the retail industry by creating opportunities for new applications and use models.

## **ORIGINALITY**

No single vendor can provide the combination of vision, breadth, agility and the ability to minimize solution total cost of ownership that can potentially be realized through ERS. Furthermore, rarely if ever do partnerships in the IT industry remain in place long enough to be productive. Our business model and collaboration framework is unique in the respect that we have success and momentum on our side. Our partnership remains strong as we continue to improve our collaboration framework which includes our governance model, guiding principals/rules of engagement, and extended ecosystem model (ISVs and OEMs).

## **SUCCESS**

Our program goals can be broken down into two main categories. We have collective goals for the overall program and each of the partners. Also, we share goals with our ERS customers.

We established ERS program annual goals associated with the number of ASE events, customer proof of concepts, and solution implementation wins. Each of the ERS partners also established revenue targets. We have more realistic expectations for the second year given our first year experience, but all in all our overall first year program results were very positive. We are in the first quarter of the second year of the program.

Business transformation is a journey not so much a destination. Customers are interested in short-term projects with a significant ROI. We have designed the ERS program to support initial point solution implementations with an eye towards establishing an adaptive IT platform based on the services architecture. The services architecture minimizes application integration TCO through a platform of reusable services supporting ERS applications.

As stated earlier we have conducted over 30 ASE events. The majority of our ASE events lead to subsequent customer engagements. We will continue to support customers through the iterative three phased adopt, adapt, transform process with keeping in mind this is often a multi year collaboration process. We will continue to refine our collaboration model to maximize customer value through our ERS extended ecosystem.

## **DIFFICULTY**

The ERS program goals can be broken down into two categories. First, those associated with the overall program and secondly, those individual goals for each of the four partners.

We have annual targets associated with the number of customer ASE events, proof of concepts, solution implementation wins, and combined revenue. Each of the ERS partners has specific annual revenue targets. Our results for the first year of the program were positive. The specifics are confidential. We are now in the second year of the program.

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