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For Business Challenges

Explore the Gaps between Applications for Big Returns:

Discover Diamonds in the Crevasses

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Businesses large and small are coping with a sea change in how enterprise systems are conceived, developed, deployed, and evolve over time. With seemingly every employee – from the shop floor to the board room – fascinated by the ease of use of applications on their mobile devices, it is no wonder that core enterprise systems are getting a hard look these days. Why are they so inflexible? Why don't they reflect how the company does business today? Why are they so hard to navigate? "Why don't our systems work the way that I do," is a common user refrain.

Most businesses deploy back office systems and CRM as part of the "blocking-and-tackling" of IT infrastructure. The process is well understood and not the focus of this white paper, instead, this paper addresses the part of the IT landscape that has been long neglected – the white spaces between these core systems. These white spaces if addressed correctly can often create competitive advantage for organizations with relatively low investment of time and budget.

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What are the White Spaces and where do they live?

Core back office and CRM systems have evolved to the point where they address nearly all of the structured information challenges presented for entire range of business processes that span from order-to-cash for most companies. By structured information, we mean information that is readily stored in databases. It is rare to find a company that cannot adapt one of the market-leading ERP or CRM solutions to fit how the organization does business in the macro sense.

However, it becomes a different story when looking beyond order-to-cash. When examining the offer-to-order process or R&D processes, unstructured information, like that which can be found in email, documents, presentations, and social media, plays a critical role. Traditional ERP and CRM systems leave gaps or crevasses that are filled with unstructured information.

There are dozens of examples of "white spaces" in organizations. These gaps between systems are often unmonitored, unmanaged, and undocumented. Depending on the type of company, some examples might include, asset tracking, research tracking, contracts, lab testing, field service, case management, campaign management, and a host of other processes.

In addition, for most companies there is a whole class of business processes for managing relationships beyond the customer such as partners, vendors, investors, analysts, employees, contractors, and in some situations, students, patients, research subjects, and more. Most CRM systems selected to meet the requirements of customer relationships fall short when addressing these other constituent groups.

Figure 1. The diamond possibilities available through extending your core business systems

Why don't our Systems work the way that I do?

First and foremost enterprise systems (by definition) are not covering the white spaces. It is often these unaddressed or partially addressed business processes that cause the most dissatisfaction amongst employees as core systems are "shoe-horned" into a role for which they were never designed.

Those on the front lines of conceiving, developing and deploying systems to automate business processes understand that business applications must often address competing demands. Systems must accommodate both information workers and those focused on structured tasks. And paradoxically the market trends are driving many employees toward wearing both hats depending on what they are working to accomplish.

When employees are wearing their "information worker" hats they need applications that support collaboration with others – leveraging the kinds of unstructured information found in email, documents, presentations, and social media, in addition to the structured information found in spreadsheets and databases. When employees are wearing their "task worker" hats they often need systems that guide them through a process so new structured information is created or modified in such a way that it can be readily retrieved and combined with other structured information then reported and analyzed, all while following a set of predetermined business rules.

The question becomes: How do we conceive, develop and deploy new business applications for the white spaces that accommodate both styles of work while addressing the realities of very short development time frames and reduced IT budgets? First let's take a quick look at how we got here.

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Why Traditional Development Approaches Fall Short

Solution Developers have always had a challenging role. Their challenge has always been to take a set of business processes and capture them in software in a way that ensures consistency, reliability, availability, scalability, manageability, and security (to name a few). And, of course no business process operates in a vacuum so the proposed solution must, at minimum, fit into the IT landscape and be seamlessly integrated into other solutions, at best.

As IT has become more integral to the business over the last several years the budgets for application development have been flat or even shrinking[1] relative to company growth. Solution developers have had to learn to do more with less. For as they are acutely aware the total cost for a business to own a solution extends well beyond the initial development to include training and rollout, maintenance, integration, and enhancement.

But, the monolithic, resource intensive, time consuming, rigid IT systems that were deployed using the conventional waterfall development approach produced chaos in the enterprise architecture strategy, evolving into an array of disparate systems with no single source of truth. The result was often flawed business decisions, and in some cases, even the eventual demise of business altogether. It has become a corporate priority to address the white spaces between core applications and to leverage a development approach that can offer a high return and low cost of ownership.

The Platform Approach to Mining the White Spaces for Diamonds

Solution developers have long known that platforms offer the best leverage for building applications for the business environment. A platform generally has a defined, unified server software stack along with a database and development tools. Huge benefits are gained by leveraging platforms especially when it comes to training, maintenance costs and development times.

However not all platforms are created equal. While basic platform services are a good starting point (server software stack and database) there is still quite a bit of heavy lifting left to the developer. Given the realities of IT resource constraints a platform that offers a broad array of services will likely yield a much higher return.

For example Microsoft's xRM application framework, which is part of the Microsoft Application Platform, includes capabilities for security, authentication, business process modeling, business intelligence, both on premise and cloud support, and a large partner ecosystem. Given that most companies already own several if not all of Microsoft's platforms (Office, Exchange, SharePoint, etc.) it may be a natural fit.

Application Platform Benefits

- Streamline IT operations: Through a common LOB application platform that allows better leverage and maximize existing IT resources
- One platform, many applications: Extensible building blocks allow the quick tailoring of unique applications to fit many business needs
- Benefit from shared resources and infrastructure: Leverage existing resources and capabilities from other applications
- Increase the efficiency of IT: Reduce time and effort associated with development, testing, release management, change management, and administration
- Keep pace with business change: Change quickly when the market changes with dynamic applications services and a highly flexible data architecture
- Focus on strategic objectives: Spend less time and fewer resources on developing custom applications or trying to get packaged software to fit business needs and focus on high-level goals
- Empower the business through innovation and agility: Provide business users with the ability to make changes and rapidly provide new differentiated capabilities.

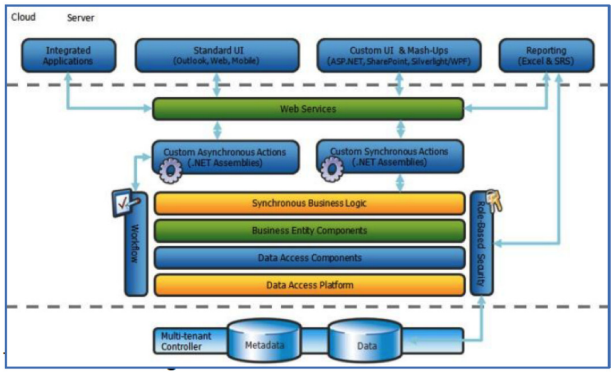

Figure 2. The Microsoft xRM Reference Architecture

Two companies which have leveraged the Microsoft platform are ServiceSource International and Nanosolar. Although these companies are in very different lines of business, they have each addressed the white spaces between their core systems to their commercial advantage.

ServiceSource International: the Diamonds are New Customers

ServiceSource International (NASDAQ: SREV) is a global leader in service revenue management which partners with technology-based companies to maximize maintenance, support, and subscription revenue while optimizing customer loyalty. SSI provides a cloud-powered managed service for their customers that was developed using the Microsoft Application Platform. Their customers, such as Adobe, Dell, GE, IBM, Johnson Controls, Microsoft, SuccessFactors, Roche, and VMware, integrate their service revenue collection and renewals directly into SSI's platform.

[1] Computer Economics, 2011/2012, IT Spending & Staffing Benchmarks, Executive Summary.

In order for Motorola to integrate their services to the SSI platform Motorola had to update their Quote Management solution which was a manual process. The existing manual process was leading to revenue leakage since there were no automated renewal reminders or simple self-service processes. Motorola sought the assistance of PositiveEdge to deliver an online e-commerce solution that would provide employees and end users an efficient and cost-effective means to purchase and renew licenses. The system included:

- Opportunity Search
- License Renewal reminders
- Integration with 3rd party tax calculation web services and secure payment gateway
- Order placement and notification

With the implementation of the PositiveEdge solution the entire manual buying and renewal process has now been completely automated which has in turn increased revenue and reduced delays in procurement. The application now provides a rich user experience that enables customer to quickly purchase products before their license expires.

Motorola has experienced an increase in renewals through the streamlined renewal process combined with timely reminders sent to customers. According to the project managers for Motorola and SSI, PositiveEdge defined, developed and deployed their solution on time and on budget and are looking forward to additional follow-on projects in the near term.

Nanosolar: The Diamonds are in Reliability

Nanosolar is a leading manufacturer of cost-efficient thin film solar cells and panels. They utilize an 'industrial' printing process to coat CIGS (Copper, Indium, Gallium, and Selenium) and nanoparticle inks on low-cost aluminum foil in order to enable the world's thinnest solar cells and lowest-cost solar panels.

Thin film solar cells and panels require stringent controls for manufacturing and testing. Because the work is highly specialized Nanosolar's core systems were not up to the task of managing the testing process. The company's manual systems were slowing the testing process and leading to backlogs. Packaged quality and testing applications were considered to replace the manual systems but all required extensive customization to adapt to the unique testing requirements of Nanosolar.

PositiveEdge was engaged to design, develop, and deploy a work order management system to automate the scanning of samples and monitoring the testing process. They worked with client teams to define the process workflow and improve the process to increase production. Further projects led to the development of an automated Inspection Management System which currently tracks all of the testing tasks and testing outcomes for Nanosolar in a scoring system. The projects were developed on the Microsoft Application Platform using Microsoft Dynamics CRM as a foundation.

Oleksiy Illyashov, Ph.D, the client project manager, was very pleased with the results of the projects with PositiveEdge and cites the following benefits:

- Reduced team size managing Reliability Work Orders from 14 to 8
- Reduce size of team managing Characterization WOs from 6 to 4
- Saved $120K by using Document Management system instead of off-shelf PLM
- Integrated security
- Automated tasks status checking integrated with Characterization Tools
- Unified easy-to-use interface for applications under Grid framework.
- Cross-application data interfaces and documents

Nanosolar has engaged PES for additional work including a global rollout of Microsoft platform technologies which will standardize Nanosolar's Sales, Marketing, and Contact Center business processes worldwide.

Positive Edge Solutions: Diamond Hunters

PositiveEdge helps customers design, develop, and deploy software solutions for critical customer-facing business challenges. They specialize in finding the diamonds in the white spaces between core systems. With their uncommon commitment to project success along with their comprehensive knowledge of Microsoft technologies, and backed by broad industry experience and methodologies, PositiveEdge consultants extend platforms such as Microsoft Dynamics CRM to create commercial advantage for their customers.

By leveraging a unique onshore/offshore delivery model, PositiveEdge solution consultants can work around the clock to deliver solutions quickly and cost effectively. Microsoft Dynamics provides the robust platform that has formed the foundation of more than 100 successful projects deployed globally in multiple industries, across dozens of enterprises, with 100% delivery success.

Deep Domain Knowledge

Positive Edge consultants have the training and experience to find and exploit the diamonds in the crevasses between core systems. They have extended the Microsoft Application Platform into places that few would have imagined – saving customers from risky custom-development projects or the need to rip-and-replace existing systems. From the front office to the shop floor, from contracts and legal to HR and QA, from service and support to mobile enablement, cloud computing, and social media integration – they've seen it all. Their projects extend across the pharmaceuticals and life sciences, biosciences, healthcare, banking, apparel, retail, manufacturing, high tech, telecom, property management industries, as well as government agencies.

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Technology leadership

PositiveEdge consultants have a passion for integrating technology with people and processes to create commercial value for customers – never deploying technology for technology's sake but rather using technology to tap into the organizational potential that exists waiting to be unleashed. They believe that all organizations can benefit from a fresh look at their existing systems to explore how to improve their return on their technology investment and enabling organizations to achieve remarkable business results.

Scale Economically

Their onshore/offshore delivery model is unique to software deployment services. While it is a proven model for custom development projects, they find that it offers unique advantages for their customers. With offices in the U.S., India, and Dubai, PositiveEdge can offer service on most continents by leveraging the onshore/offshore delivery model. This is particularly valuable for companies that have regional offices that need individual attention. Having worked with companies ranging from large multinationals to Silicon Valley-based startups, Positive Edge caters to the unique environments presented by customers of all shapes and sizes.

With the onshore/offshore model, PositiveEdge delivers:

- Follow-the-sun services to speed delivery
- The value advantage of having fewer consultants who must be accommodated on site
- Consistent and reliable services almost anywhere around the globe with only 25% of the required resources placed on site

PositiveEdge can deliver this consistent and reliable experience for every customer engagement based on their unique perspective gained through more than a hundred successful customer implementations around the world, combined with their close relationship with Microsoft and a common set of tools and training that enable them to function as an integrated global team.

Conclusions

The crevasses between core systems – either those that arise from unique business processes or are considered challenging because of the need to include unstructured information along with structured data – can be full of diamonds waiting to be discovered. These diamonds can often be mined at low cost and have a high return because solutions can be built leveraging platforms such as the Microsoft Application Platform that allow for rapid application development and deployment and provide a fast track to competitive advantage.

PositiveEdge is amongst the top 5% of global solution providers in the Microsoft ecosystem and specializes in diamond hunting for their customers.

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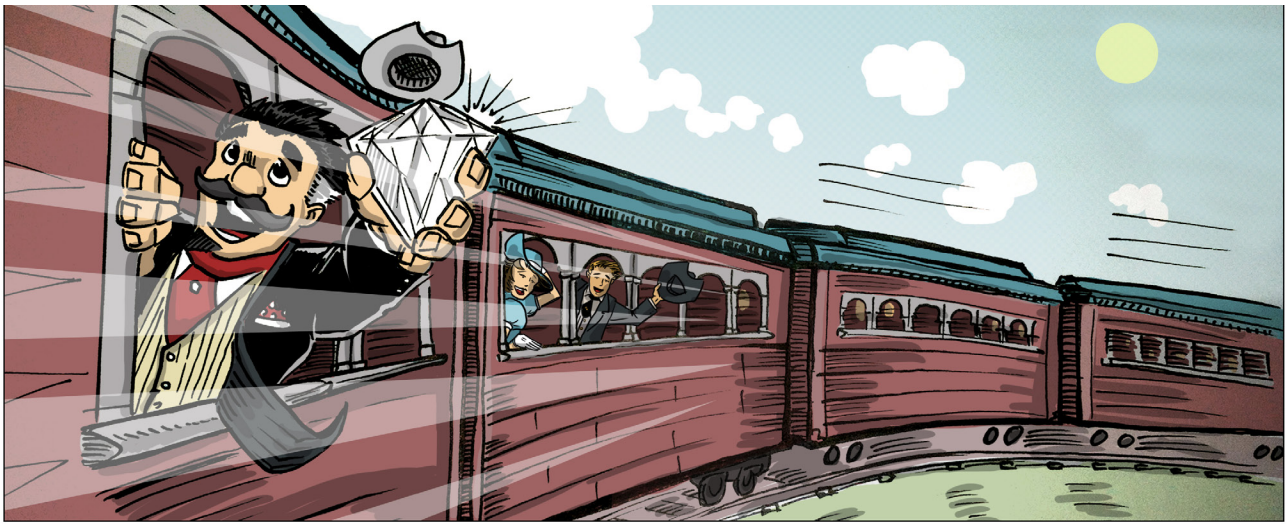

For more information about how to discover diamonds in the crevasses between your core systems or to learn more about how Positive Edge can help, visit www.positiveedge.net or email info@positiveedge.com

Watch the Webinar at www.positiveedge.net