



We are witnessing an increasing number of enterprises transforming their business based on the digital model. A majority of firms have already made large investments in digital, believing that this will bring the next wave of growth. While enterprises are embracing new and emerging technologies, the focus is on merging these technologies into the next generation of business strategies. At the same time, enterprises are not entirely happy with their applications. Existing enterprise applications are unable to keep up with the rapidly changing and growing requirements of the enterprise. Most of the applications are targeted at automation of transaction processing or departmental automation. While these applications help to automate processes and increase efficiency, they fail to offer any strategic benefits - such as increasing market share or offering a unique solution to the clients. In such a scenario, service providers or software vendors need to change their traditional way of offering services to address the current needs and requirements of enterprises. Successful ISVs have adopted a new thinking - go global, go vertical, go SMAC, go agile, go modular, go low cost, go ecosystem. This approach will provide tremendous benefits for enterprises as it helps product companies not only to achieve the next level of benefit, but also frees up its scarce product development resources and experts who can focus on core work.

By Sonata Software and Offshore Insights

Product Engineering
Enterprise IT Services
Technology Infrastructure



DEPTH MAKES A DIFFERENCE

Change in the Market Indicates Arrival of Digital Business

The world is rapidly going digital. Internet, broadband, social media, mobile internet penetration-are growing at an exponential rate. There is a sudden explosion of data with millions of networked sensors being embedded in the physical world. Data is flowing from various sources in the form of text, audio, pictures, video and log files. Accumulating this data rapidly through all these devices - smart phones, sensors, Internet and social media. With the rise of digitization, data is multiplying rapidly. The number of people and households connected by digital networks is increasing by the day. More than a billion people use social networks (like Facebook, Twitter and LinkedIn), content sharing sites (like YouTube, Flickr), various topical blogs, and discussion forums. These social networking sites are creating millions of content pieces that reflect on products, services, people, events, and overall about businesses.

Growing convergence of IT platforms coupled with new access devices like smart phones, tablets and e-readers are redefining the marketplace. Amazon, Apple, eBay and Expedia are classic examples of companies using technology to disrupt businesses and industries, upset market leaders, change commercial relationships and provide a springboard for a new set of players.

New Economy Accelerates Evolution of Digital Business

While the digital world brings with it a set of challenges, it also creates opportunities for tapping new business segments, predicting customer behavior and identifying new ways of reaching out to and engaging with customers, collaborating with customers on innovative product ideas and even co-creating new offerings. The ever-rising number of interactive media is empowering customers to make quick decisions. Besides, the interaction between the customer and the enterprise and the speed at which information is accessed, are shaping products and services. All these changes have given rise to a new economy that is always connected, highly mobile, app-centric, and data rich. Some of the significant and impactful factors driving this new economy are:

Growth in digital and SMAC technologies. Digital media and the interactive web are witnessing a transformation that is lending a powerful voice to the present-day customer. This, in turn, is forcing future-driven enterprises to go back to the drawing board and rethink their strategies on conventional approaches while creating new business models. There is a growing demand for emerging technologies with a large majority of Fortune 1000 companies wired into technology trends. Over the last two years, Offshore Insights has been witnessing a rising number of enquiries from clients for planning and implementing these new technologies. Changing business needs are forcing companies to adopt technologies like Cloud, Mobility, Social, and Big Data Analytics. Several companies are embracing and benefitting from these technologies. For instance, Sears Holdings, a large US retailer, used Big Data tools to modify its loyalty programme and use personalized customer insights that in turn strengthened its revenues. Similarly, there is evidence of several companies having benefitted immensely by adopting new technologies.

Tech savvy, impatient, demanding customer. The digital revolution and the advent of social media have shifted the balance of power in the customers' favour. Traditionally, customers' buying decisions depended largely on product advertisements. Customers today are extremely tech-savvy, vocal and discerning. They prefer to do their own research and are less influenced by product adverts and promotions. They are equipped to take well-informed decisions and share their experiences openly, listen to the experience of others to make an informed buying decision, compare competing products on various parameters like price, features, safety and durability. Moreover, customers can now buy products/services anytime, anywhere: crossing national boundaries from the comfort of their home or even on the move. Customers are also providing continuous feedback on products or services that they use. This highlights their role in product and service design. Further, customers are now influencing buying decisions with expansive reach. With the power to influence a multitude of potential customers, the voice of the dissatisfied customer echoes louder than ever before.

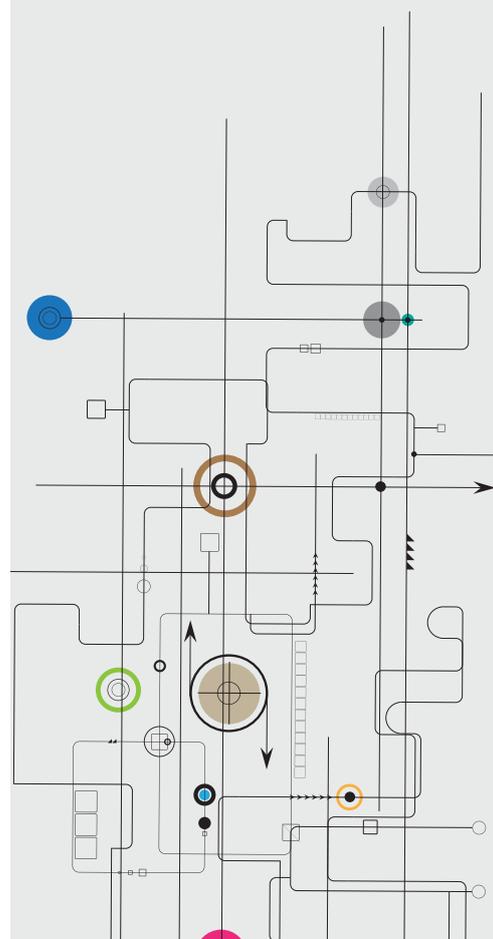
Increasing competition. Several digital start-ups have mushroomed over the last few years. Today, all a start-up needs is an idea and a website to commence business. Equipped with new tools and digital technology, more and more start-ups like Zynga, Groupon, 360Buy, Dropbox are competing with traditional businesses. Digital technology has greatly lowered the barriers to entry for new innovative players. There has been a sudden explosion of new players that have emerged "overnight". There are also some digital business sensations like Twitter, Facebook, Youtube, Instagram, TripAdvisor that are forcing traditional companies to change their business model.

Top Questions

- How is the digital business impacting the marketplace?
- Why are enterprises unhappy with their software enterprise applications?
- What is the best possible solution to bridge the functionality holes in today's scenario?

“Our expectations from IT are constantly changing because of the business needs. We are in the process of expanding our business to new markets. Lately, there are debates in most our meetings on how we can capitalize from investing more in digital.”

Senior Director
Fortune 500 company



Rising cost pressures. In today's fast changing business environment, most enterprises are looking for ways to cut costs while at the same time deploying projects faster. For instance, compared to mammoth infrastructure services, many companies are finding cloud solutions cost effective and easier to manage. Cloud takes away the need to fund the building of hardware, installing software, or paying dedicated software license fees. For instance, Etsy, an e-commerce website focuses on handmade goods that brings buyers and sellers together and provides recommendations for buyers using cloud based solutions. The cost flexibility afforded through cloud provides companies like Etsy access to tools and computing power that is typically affordable only by large, cash rich retailers.

Greater interest in new geographies and emerging markets. The digital world is erasing the boundaries of geographic restrictions. This borderless 'digital world' is replacing the 'physical world' from a commercial viewpoint. Billions of customers are leveraging the digital medium to browse, share, search, pay and buy products and services online. At the same time, it has facilitated companies to share messages and views with customers and receive quick feedback from customers. The distance and time constraints of the 'physical world' are irrelevant in the 'digital world'. Digital technology is enabling retailers, online travel companies, manufacturers and all those who sell online to understand customers' purchasing behaviour and identify trends.

New Technology Fuels Transition to the Digital Age

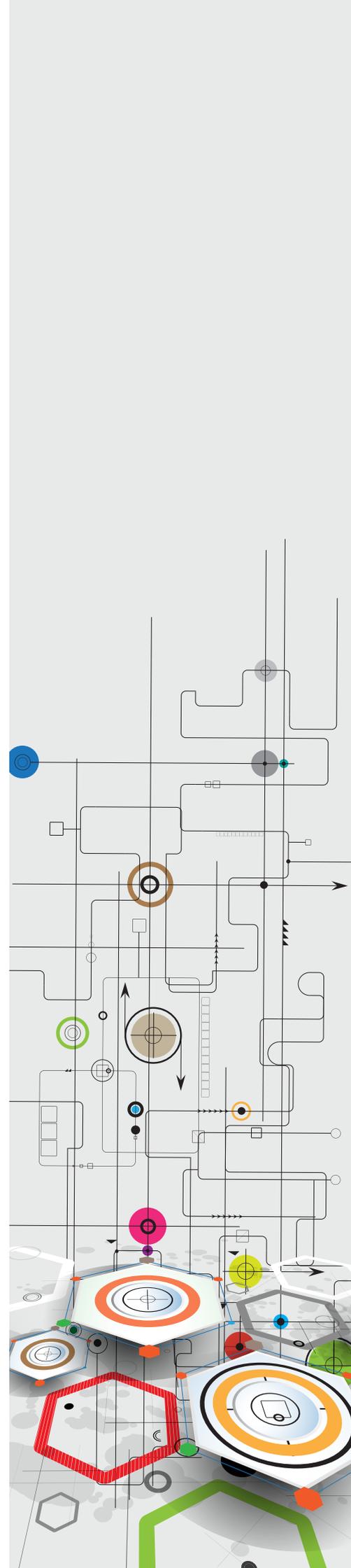
With mobile phones and social media emerging as powerful marketing tools, technology is fueling the transition to the digital age. Data on online customer actions, social media impressions, customer locations and previous purchases, can be analyzed to predict future customer actions, fine tune marketing activities and increase sales. At another level, it is helping companies to intelligently understand data through new types of analytics thus creating new opportunities. In the evolving market characterized by changing customer requirements, enterprises will have to constantly reinvent themselves. They need to exploit technology in order to conceptualize new and diverse marketing innovations. As enterprises embrace digital, they are also witnessing:

Mainstreaming of 'SMAC'. Over the last three to four years, most companies have been experimenting with Social, Mobility, Big Data Analytics and Cloud technologies. In a recent survey by Offshore Insights, nearly two thirds of the respondents indicated that their companies have adopted or substantially implemented these new technologies and a large percent of Fortune 1000 companies are using these technologies to grow and stay ahead of competition. In the last two years, Tesco has created interactive grocery stores in airports and subway stations and has expanded into new markets. It is estimated that more than 20% of Tesco's online sales now come through smart phones while 10% of all orders from Tesco Direct come through its mobile website. Similarly, GE has built cloud-based services with intelligent analytics to collect and combine vast amounts of industrial-machine data and equipment data, extracting unique insights that can be used to set new performance standards in industries like aviation and energy. Moreover, companies have launched initiatives like customer reviews, e-counselling, and social shopping to help customers make decisions and gives companies valuable insights that revolutionize how they go to market.

Changing business processes. As companies are going digital, every aspect of their business is becoming increasingly interconnected and automated. A company's expansion plans and long term future depends on its seamless business processes and workflow integration. Entry into new markets will mean shift in customer needs and product specifications. This would demand that enterprises invest in robust systems and technologies that meet changing business needs.

Current Enterprise Applications Fail to Meet Client Expectations

Majority of enterprises are unhappy with their existing enterprise applications. Most of the applications are targeted at automation of transaction processing or departmental automation. Several clients told Offshore Insights that these applications help to automate processes and increase efficiency, but fail to offer any strategic benefits - such as increasing market share or offering a unique solution to the clients. With expanding business and increasing competition, clients expect these applications to facilitate effective decision making. Several ERP satisfaction surveys reveal low client satisfaction levels with regards to the application functionality. As highlighted in our interactions with buyers, they are not entirely happy with their ERP applications because these applications fail to address the following:



Agility. The measure of an ERP application's success is the benefits that arise from its implementation and use. With the implementation of these large scale applications, enterprises have managed to achieve automation and departmental computerization. Several of them have also experienced increased efficiency and reduced cost of functions such as accounting or human resources. But our interviews with over two dozen global firms seldom highlighted their achieving strategic benefits or bringing in agility required to survive rapidly changing business situations. Rather, as enterprises continued to invest heavily in these deployments, it created frustration that festered and grew.

Support to new processes. Most of the large enterprises have invested heavily on enterprise applications. Despite huge investments in technology, enterprises are still finding business process holes in their ERP suites. A leading mortgage firm that invested a huge amount to implement packaged applications told Offshore Insights that while the application offered some respite in terms of a stronger framework, it failed to provide them any strategic benefits or differentiation.

Needs of new stakeholders. Some of the IT services companies have built customized ERP solutions for enterprises. However, during our interviews many clients confirmed that customization is a huge investment and a time-consuming exercise. At the same time, in spite of heavy customization, the incremental value over and above the product is limited. Also, when the underlying ERP software is upgraded, this customization layer often proved incompatible.

Strategic value. Strategic intent of IT has changed and enterprises want to deliver strategic value. Enterprise applications need to offer more than just automation and on-going operational improvement for the company. With heavy investments in technology, clients look for new-gen IT functionality that will address the overall efficiency and the company's financial performance. As businesses expand, they are looking to achieve actionable insights by using applications that will enable them to make strategic decisions. A manufacturing company told Offshore Insights that apart from automation, they expected their ERP application to add more business value to their decision making.

Why Enterprise Applications Fail in Current Format

Emerging technologies, especially a combination of SOA based application architecture, Cloud and SaaS delivery models, rising power of social networks, and new access devices like tablets and smart phones are changing the role of IT in enterprises. As a result, enterprises are looking for solutions that will help them cope with this fast changing technology. Existing enterprise applications are unable to keep up with rapidly changing and growing requirements of the enterprise. Emerging technology trends coupled with newer models of buying is getting IT much closer to business processes than ever before. Existing enterprise applications are falling short of client requirements because applications are:

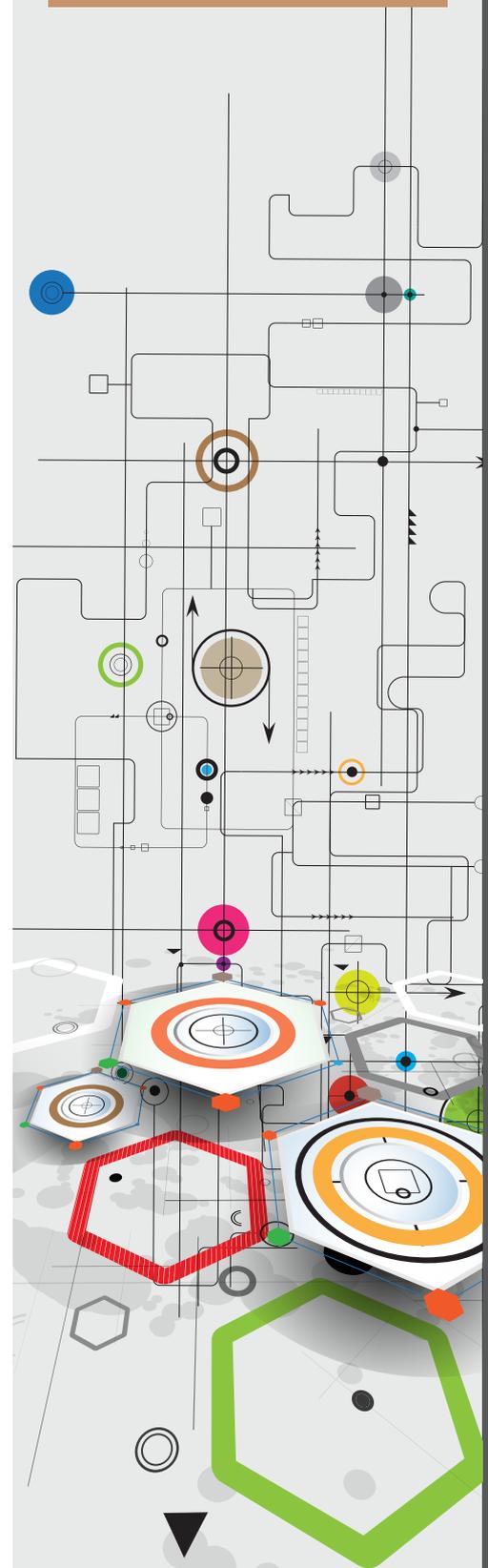
Generic or "one-size-fits-all". Clients typically get a generic enterprise application that does not address any of their immediate issues. When we compared 20 installations of leading ERP software in pharmaceutical companies, we found these implementations handled business process automation and workflows in similar ways and could not deliver a unique experience to any of the companies. After spending huge money and several years, companies still got look-alike solutions. Service providers have primarily focused on automating the processes and workflow by deploying their standard and proven frameworks and methodologies – often labelled as "best practices". These vendors typically redesigned the process to suit an ERP application workflow. They got rapid deployment because of best practices and industrialized support, but this standard implementation approach made ERP more commoditized and all installations looked similar.

Do not support SMAC. Majority of companies have been using their enterprise applications for many years and it serves as a backbone of the company. However, this application portfolio does not support technologies from the SMAC stack. While some companies have started deploying enterprise mobility and social media platforms, they are moving rather slowly in this area.

Do not offer differentiation. Business intelligence and strategic benefits derived from using the applications are increasingly becoming very important to executives across verticals. Enterprises are looking at applications to drive business growth. At an end user level it is critical to ensure application performance while enhancing employee productivity and customer satisfaction. However, companies are finding that they lack differentiation in their enterprise applications.

"We invested more than \$600 million in global roll-out of an ERP but now management is not ready to invest further \$200 million to upgrade the system because they could neither achieve revenue growth or any competitive advantage"

IT Leader at a Fortune 100 beverage company



Have functionality holes. More and more enterprises are realizing that their ERP and actual work processes do not align or their applications are lagging behind the requirement. Several enterprises are trying to assemble a coherent framework from various disconnected processes. Clients want service providers to plug application functionality holes, while at the same time extending the benefit by deploying a unique IT application that takes care of workflow integration.

Delay in release, pain in upgrade. Having seen that their large scale ERP applications perform below their expectations, clients have become wary of exploring other solutions. They are not ready to throw away existing systems and again experiment with another application. At the same time, they want a solution - fast, at low price, in incremental fashion, and leveraging what they have.

Have integration issues. As IT organizations shift focus from technology centricity to business, they are expected to transform and deliver world class business processes. But often these processes flow across multiple functions, running through diverse IT applications and systems, often not well integrated. Further, fractured tech-biz collaboration undermines the value it delivers.

Time to market is very high and enterprises are in a hurry. With multiple release cycles, product development needs strong architectural sophistication. Testing capability is a core competency for product development. Further, design and development requires specialized tools and infrastructure. However, time to market with existing applications is very high. With competition intensifying, enterprises are not in a position to allow delays in product launch.

ISVs Need to Go Global, Embrace New Technology and Go Vertical

Growing and changing client needs require constant evolution in product features and functionality. At the same time, technology standards in terms of platforms and connectivity requirements keep changing continuously. Despite these challenges, there is tremendous opportunity for enterprises that are willing to think differently. Successful ISVs are finding themselves with better and more-innovative products, greater insights into their customer's needs, better understanding of functionality changes and agility to retool in order to be able to respond to the changing technology landscape. How are these ISVs holding their ground?

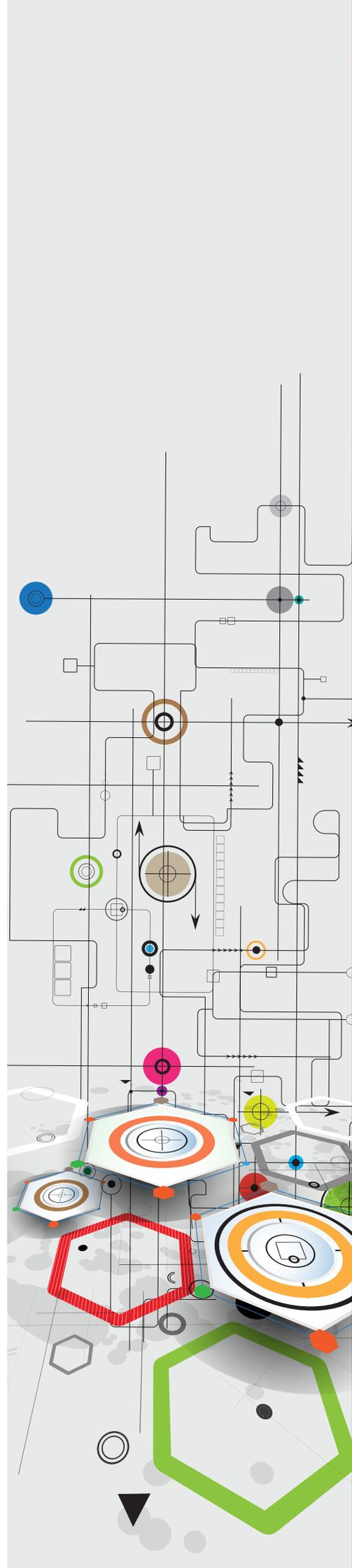
Go global. Enterprises largely face a variety of challenges before they can bring their products to international markets. One of the challenges is making the product ready for a different audience. Some of the ISVs are investing in developing localized versions of products to suit the audience across markets. Microsoft for example has been localizing its operating systems and products for many years in several different languages.

Go vertical. Each client requirement varies, and cannot be addressed by a "one size fits all" solution. Clients want customer specific standards and processes that provide a more tailored solution than standard packages. ISVs are bringing out "point applications" to fill specific white spaces in specific verticals. Even broad enterprise applications are built for sub-verticals, micro-verticals, and even specific businesses. For instance, Microsoft Dynamics AX is built for companies in manufacturing, public sector, services, retail and distribution, delivering industry-specific capabilities that function out of the box. Several companies like Delta Airlines, Cayman Chemical among others are using this application.

Go SMAC. In today's scenario, emerging technologies are creating a set of challenges for enterprises. Meanwhile, clients are looking for easy to use, flexible and quick to deploy solutions that will address specific enterprise needs. In addition, ease of use – through iPad, PDAs, smart phones; flexibility via a unique and agile product architecture, SaaS and Cloud based delivery; and differentiation through a combination of custom built but highly robust and pre-built solutions, will become compelling factors that drive business.

Go modular. Enterprise customers need software products that are customized to integrate into their systems. In addition to customization, there are demands of extensibility on the product. To offer required flexibility, these ISVs are making nimble product components which can be easily stitched together, mostly via customization and OEM connectors, to map to client process.

Go low cost. In today's competitive marketplace, enterprises are looking for ways to keep costs low, while at the same time deploying cutting edge technology and practices. Successful ISVs are looking to better leverage offshore/global delivery. This will free up R&D budget in old products and can subsequently be used for new development, core work.



Go agile. Enterprises are increasingly faced with the challenge of dealing with new technologies, new geographies and address tremendous flux in the market. Enterprises must innovate rapidly and compress product lifecycles tremendously.

Go ecosystem way. It is not possible for a single product company to cater to all requirements. Smart product companies need vibrant partner eco-systems to offer products. They will need to leverage specialist partners for specific verticals, technologies and skills. As a result, several service providers are innovating and providing solutions to clients on top of client's existing applications. On the one hand, ERP players like SAP and Oracle are actively building ecosystems to strengthen their applications and partner with product development companies to provide client solutions. On the other hand, players like Google and Apple are revolutionizing the applications market. Even IT service providers – be it large firms like Accenture and Cognizant, or mid-sized firms or firms (software product development partners or OPD firms) that built these products are competing in the enterprise marketplace.

Leveraging Partners, Offshore and OPD Experience to Stay Relevant

Providers with experience of maintaining hardware or providing legacy application support or delivering non-core work to their clients may not be able to deliver the new age functionality to clients. With every vendor, whether large or mid-sized, offering similar capabilities and playing the value proposition card, it is essential to choose vendors with focus on product building capability. ISVs should look for service providers with a combination of product building experience and IP and domain capability. Given the unique nature of work and expertise required to deliver functionality to clients, ISVs are looking to:

Leverage partners. Leverage partnerships in tools, vendors, boutique technology players, and partners with the ability to harness emerging and new technologies. Close collaboration and partnerships between tools vendors and specialist technology players brings several benefits to ISVs.

Leverage offshore. For large scale maintenance type of work or generic customer development, leveraging large scale offshore IT services firms that can offer the desired capability and great price points will be beneficial. Offshore not only reduces cost pressures but also offers access to large talent pool.

Leverage OPD experience and process. Product building experience is critical in this space. In addition to IP and domain capability, focus and experience in building products is essential. In order to bridge functionality holes in enterprise applications, ISVs need product building expertise along with customization skill sets. Enterprises should leverage OPD specialists for that.

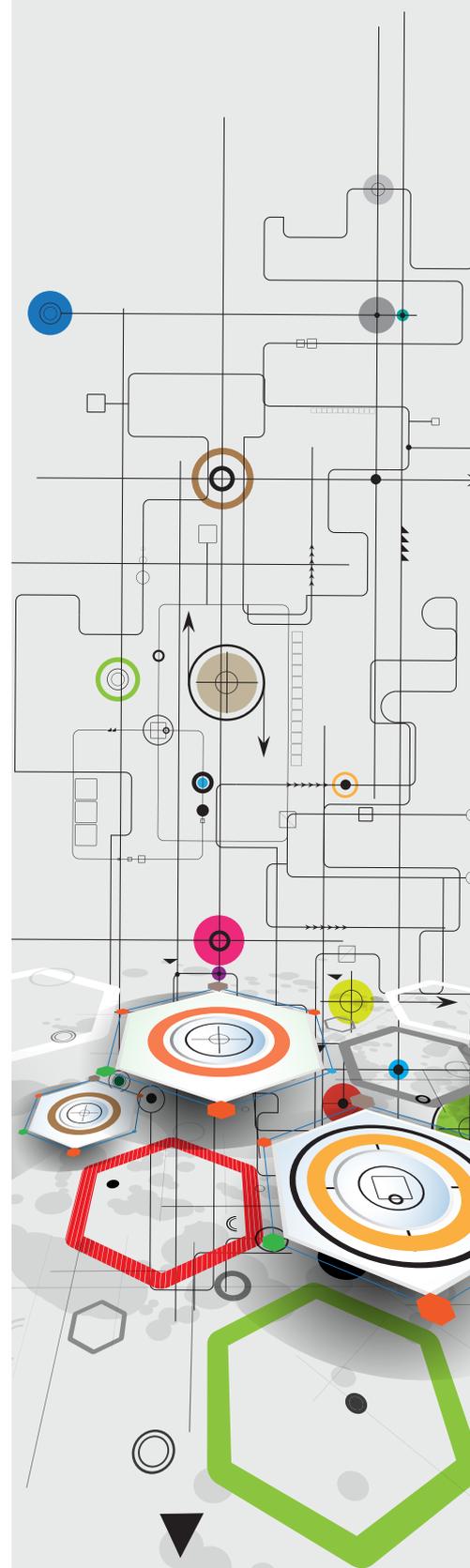
With this New Thinking, Enterprises Will See Tremendous Benefits

As enterprises look for robust and revolutionary products that could propel significant growth, there is greater emphasis on product building experience. Product building experience is a driving factor for the next-gen process sophistication building. Following are three significant benefits that clients will gain with this new thinking:

Deep domain knowledge. Product development requires deep domain as well as process knowledge. The depth of knowledge and experience in product development is indicative of the expertise and capability that the service provider has built in the field. Domain knowledge will help build a strong and focused position in the industry.

Sub-process, configuration approach and applications pitch. The requirement or needs of the customer constantly change. This requires constant evolution in the product features and functionality. At the same time, technology standards in terms of user interfaces, platforms, and connectivity requirements continuously change. With the new thinking, ISVs will be in a better position to understand functionality changes, work on sub-process, and configure an approach to address customers' needs. In the long term, this will help companies to extend the operating life of their products, and will also assure fulfilment of long-term obligations towards customers.

Multichannel. Multichannel integration is a significant factor in today's marketplace. Effective multichannel strategies lead to satisfied customers and efficient and profitable operations. By adopting the new approach, ISVs will be able to easily identify integration holes. And using software and technology tools, they can create the glue that is required to seamlessly link all the channels. This will bring multichannel capabilities together that are seamlessly integrated with legacy systems of the clients.



Leveraging OPD Partners is One Approach to Unlock the Benefits

Growing and changing enterprise needs require constant evolution in product features and functionality. At the same time, technology standards in terms of platforms and connectivity requirements keep changing continuously. Enterprises are under constant pressure to upgrade and add to their product offerings, augment internal skills, accelerate product development, and cut costs. These pressures are forcing them to explore the option of OPD. An OPD service provider will be in a better position to understand functionality changes and address the needs of the customer. Especially for business domain applications, enterprises should ensure that they are working with a specialist and experienced partner in that area. An OPD specialist will help bridge the gap between IT functionality and clients' changing needs. Key benefits of working with an OPD partner are:

Focus and traction in product development space. Product building experience is critical. In addition to IP and domain capability, OPD companies have the required focus and experience in building products.

On-time/on-budget delivery. Budget and date of product release are important features of product development. Date of product release is fixed and the product is released irrespective of whether or not all the features are added to the release version. OPD service providers typically have a track record to meet launch date and budget.

Experience of managing (hundreds of) product release cycles. Managing multiple release cycles is a huge task in itself. This necessitates detailed documentation, meticulous version management and multiple platform portability. In order to manage all these intricacies, extensive experience of managing product release cycles is important.

Rigorous architecture and testing capability, specialized tool and infrastructure. With multiple release cycles, product development needs strong architectural sophistication. Testing capability is a core competency for product development. Further, design and development requires specialized tools and infrastructure like fixtures, assemblies, and test rigs.

Vertical expertise. For "product like" work, enterprises will do well to look for OPD partners with a combination of product building experience and domain capability.

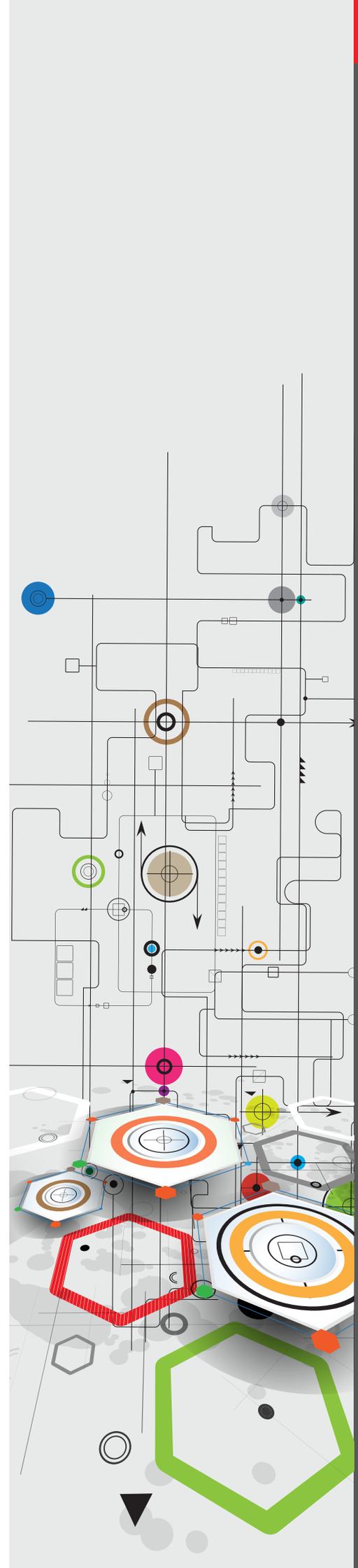
Expertise in SMAC. Over the last few years, majority of OPD companies have built a team around SMAC technologies. Several of them have developed expertise in these emerging technology areas. Product building experience along with SMAC capability is a definite advantage.

Traditional OPD services like end of life product sustenance, etc. Product development is a specialized field different from traditional IT services. Traditional IT services primarily include application development and maintenance. The product piece is largely missing since most of their contracts are around large scale application maintenance work. Partnering with OPD providers will help in traditional OPD services like end of life product sustenance.

Smart ISVs are Already Adopting this Route

Smart ISVs are leveraging OPD partners in order to increase their focus on product innovation. Over the years, several companies including Microsoft, Cisco, Texas Instruments, and Motorola have decided to expand their R&D teams by partnering with OPD companies. For instance, Microsoft in partnership with Sonata Software developed a robust/dynamic omni-channel enabled ERP solution for the retail industry. Microsoft Dynamics AX allows retailers a single view of the customer enabling dynamic cross-channel experiences while seamlessly connecting digital, store, supply chain and organizational - back office and front office-systems. With this approach, Microsoft has acquired the agility to bring out innovative applications across industries as well as strengthen its product road map. Adopting this approach means more than just cost reduction and on-going operational improvement for the ISV. This puts in place a model that can continuously anticipate change, and quickly adapt to it.

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ABOUT SONATA SOFTWARE

Sonata Software is a global IT services firm focused on catalyzing transformational IT initiatives of its clients through deep domain knowledge, technology expertise and customer commitment. The company delivers innovative new solutions for Travel, Retail and Consumer Goods industries by integrating technologies such as Omni-Channel Commerce, Mobility, Analytics, Cloud and ERP, to drive enhanced customer engagement, operations efficiency and return on IT investments. A trusted long-term service provider to Fortune 100 companies across both the software product development and enterprise business segments, Sonata seeks to add differentiated value to leaders who want to make an impact on their businesses, with IT.



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