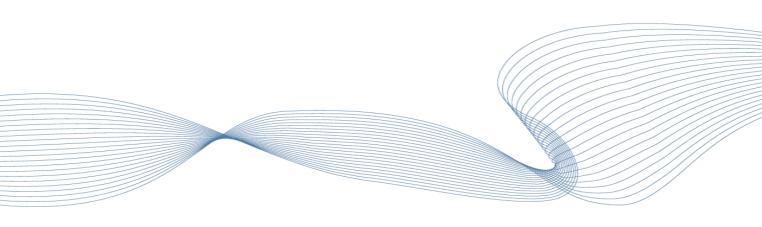
A PAC White Paper

Global Retail

Omnichannel, Service Innovation & the IT Balancing Act







MANAGEMENT SUMMARY

Changes in consumer behavior, technology, and economic conditions are dramatically reshaping the worldwide retail sector.

Multinational and large national retailers are in a period of unprecedented change in terms of how and where they interact with, and deliver to, their customers. The speed at which they have to move in order to remain competitive is also accelerating. Convenience for the consumer, 'always on' IT solutions, and secure processes are success factors for today's retail operations.

This White Paper explores the following four key trends and looks at how international and large national retailers are dealing with these challenges:

- **1. Omnichannel retail:** Consumers are increasingly drawn to digital channels and expect a seamless experience across all of their touch points with a retail brand, whether a physical store, a mobile app, or an online shop.
- 2. Innovation in delivery: The changing work patterns and lifestyles of their customers are forcing both physical and e-commerce retailers to offer greater convenience in terms of delivery and collection options. Here, too, the different channels have to be linked with each other.
- **3.** The store of the future: Physical stores remain the prime customer touch point for many retailers. However, they have to work harder than ever by creating more diverse and engaging formats to attract people to their doors.
- **4. Globalization**: International retailers need to develop increasingly agile store and e-commerce expansion strategies in order to ride the waves of demand coming from emerging markets and respond to volatile economic patterns in mature markets.

All of these areas will require a major transformation in the way that retail organizations source and deliver technology to their businesses. In the section, "The IT Balancing Act", PAC looks at how retailers can manage the ever-increasing technology and application requirements, while reducing the operational workload for IT departments. IT budgets remain under pressure and CIOs have to work smarter in order to make optimal use of internal resources while capitalizing on appropriate offerings from external suppliers.

The second part of this paper provides an independent industry analyst view of Diebold Nixdorf, one of the world's largest providers of technology solutions to global retail organizations, and assesses the vendor's key offerings – including its Store Lifecycle Management services and the TP Application Suite software solution portfolio in the context of current and future market dynamics.

1. INTRODUCTION - THE CHANGING FACE OF RETAIL

"The global retail sector is entering into a period of unprecedented change and upheaval."

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While private consumption was a solid pillar of economic growth in the established European and American markets over the past few months, current prospects are rather uncertain. In Europe, political challenges connected to the European refugee crisis and Brexit are primary factors that may dampen consumer spending in the months to come.

Meanwhile, a wave of mergers, acquisitions, and bankruptcies is dramatically changing the shape of the global retail landscape. Decades-old brand names are being usurped by smaller more nimble challengers from an increasingly global competitive field.

In order to generate top-line growth, retailers need to be able to quickly capitalize on the vulnerabilities or decline of their competitors or rapidly pursue opportunities in faster-growing emerging markets. European fashion retailers, H&M and Inditex, are both looking to offset difficult domestic market conditions by accelerating their international expansion plans. H&M plans to open 400 new stores in 2016 in territories that include New Zealand and Puerto Rico, while Spain's Inditex (including Zara) plans to open more than 400 new outlets this year in markets that include China and Russia.

+81%	\$342 bn	\$5.4 bn	730	88
Increase in worldwide mobile shopping app usage in 2015, following +174% growth in 2014 (<i>Flurry</i>)	Amount spent on US retail e-commerce in 2015 (U.S. Census Bureau)	Department store Macy's online sales in 2014, with a YoY growth rate of 30% (Top500Guide.com)	New stores opened by thrift store chain Dollar General in 2015 (Annual report)	Stores closed by electronics retailer Best Buy in the past three years (Annual reports)
228	73%	5,800	+33%	+1.1%

The changing face of retail - in numbers (Source: various)

Probably the biggest challenge arises from the unstoppable increase in online retail, which has already become the standard way for many consumers to purchase goods (notably music, books, fashion, and electronics) in many market segments. This has put a renewed focus on cost control and cost cutting in many business areas in order to enhance competitiveness. At the same time, retailers need to ensure that their business models and technology platforms are able to drive a consistent and constantly improving customer experience across multiple channels (internet, mobile, retail outlets), while generating maximum business value from the wealth of data on purchasing behavior that these channels generate.

All of these factors mean that retailers need to be both agile and efficient in order to survive and prosper in the future.

In terms of flexibility, new stores now need to be approved, developed, and opened within a matter of months rather than being mapped out as part of a multi-year plan. Fast-growing thrift store chain, Dollar General, is aiming to open approximately 1,000 new outlets in 2017. Stores also need to be decommissioned and closed just as quickly when short-term opportunities have passed or market conditions change. The world's third-largest retailer, Tesco, pulled out of its 200-store US venture, Fresh & Easy, after an unsuccessful five-year foray.

Product ranges and pricing levels need to be flexible or easily adapted in order to counter and beat the competition. Management also demands real-time data on customer behavior and supply chain performance in order to make business decisions. The flow of this information needs to run seamlessly from the shop floor, customer devices, and supplier systems all the way up to the boardroom.

The pressure to reduce costs comes partly from the economic climate, but the bigger challenge for many traditional retailers is to transform the business so that it is able to compete on price against online rivals that have much lower cost bases to support.

As a result, many traditional retailers are reassessing where the lines are drawn between what were historically considered 'core' operations, and what could be more efficiently handled by third-party partners. Order fulfillment and logistics, customer service, and IT are areas that retailers are externalizing in order to become leaner.

"As a result, many traditional retailers are re-assessing where the lines are drawn between what were historically considered 'core' operations, and what could be more efficiently handled by third-party partners."

Changing Lifestyles

Customers demand greater convenience to meet their work patterns & lifestyles

Changing Demographics

Ageing population, new middle class in emerging markets

Technology Access

Tech-savvy consumers and retailers, rising global penetration of access devices (tablets, smartphones, notebooks) and infrastructure technologies (the cloud, Internet of Things)







More Informed Consumers

73% of US consumers research products online before going to a store (PwC Total Retail Study 2015)

Economic Volatility

Consumers are more careful with their disposable income

The Mobile Age

Mobile is overtaking traditional desktop as main e-commerce channel

Drivers for new channels in retail (Source: PAC, unless otherwise stated)

2. THE ERA OF OMNICHANNEL

"The move toward omnichannel poses some huge challenges for retail organizations, not the least of which are the investments required in technology, marketing, and staff."

The way consumers interact with retailers and the level of service they expect is evolving at a dramatic pace. Major changes in lifestyles, demographics and technology are forcing retail businesses to provide more convenient and flexible service through an increasingly diverse range of outlets and interfaces. As a result, one of the main focuses over the next two to three years will be for companies to transition from a multi-channel to a truly omnichannel strategy.

Multi-channel retail is now the norm for even the most traditional retail brands. Macy's, which has built up a network of 870 outlets over its 180-year history, recorded a 30% increase in online sales to more than USD 5.4 billion in 2014, supported by an overhaul of its inventory model which saw 300 stores become e-commerce fulfillment centers.

Online, however, is increasingly only part of the story. Take the example of big-box toy retailer Toys"R"Us, which unveiled a variety of new ways in which customers could shop, collect, or find product information. These included a free ship-to-store option for online orders, in-store merchandise pick-up locations, and a My-Store app that enables customers to check the inventory of their local stores.

Omnichannel retail is about ensuring that organizations provide a seamless experience for customers across all of these channels. Offerings, pricing, and promotions need to be consistent across the board, essentially providing customers with a single account and view of the retailer's product database, while giving the retailer a single view of the customer's interaction across the breadth of the organization.

The benefits of omnichannel are two-fold. First, it improves the experience for customers because the retailer will track and respond to their purchase histories and feedback with personalized and engaging offers. Second, it can also improve the effectiveness of retail marketing efforts by enabling retailers to base their offers on a much wider understanding of customer purchasing patterns, social network affinities, use of loyalty programs, etc.

However, the move toward an omnichannel strategy poses some huge challenges, not the least of which are the investments required in technology, marketing, and staff. A lot of these challenges are being placed in the hands of the IT organizations, organizations that, in many cases, only recently came to grips with integrating their primary ecommerce sites with their store systems. Omnichannel is not just about having a consistent 'look and feel' in terms of content and branding across the various consumer touch points, but also about ensuring a seamless flow of data across what is typically a diverse and fragmented application landscape. Central merchandise planning and control systems need to be linked with the sales systems that drive promotions and

loyalty programs. Connected customers also expect these systems to be communicating in real-time as they skip from one channel to another.

3. NEW DELIVERY MODELS

"Retail organizations have to take a more flexible approach to delivering goods to their customers in order to meet changing customer demands."

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Working consumers typically have problems receiving goods purchased online during the day, e.g. via parcel delivery. This has led to an explosion in the number of retailers offering more convenient collection options, the most prominent of which is 'click and collect'.

Many large retailers now have dedicated collection points within their stores for orders placed online, which means that customers can save time by avoiding having to stand in line. Click-and-collect is really changing the game though for those retailers with limited outlets or the online pure-plays that are partnering with bigger companies with large store networks. Amazon has installed metal lockers in grocery and convenience stores, such as 7-Eleven, to enable customers to pick up goods like books, DVDs, and iPads. There is no extra charge for the customer, who has the reassurance that they will not miss a delivery, and it also reduces Amazon's own delivery costs.

In some cases, the point of collection is completely divorced from the retailer's existing store portfolio. Supermarket group, ASDA, opened a stand-alone click-and-collect point at the heart of the commercial area of Reading that enables office workers to use this service. The click-and-collect trend is also opening the door for new players to enter the market, such as Collect+, a UK-based courier organization that enables customers to post and collect parcels from over 5,800 pre-approved local shops. Collect+ has partnerships with retailers that include Topshop, Next, and Play.com. US-based Shoprunner offers a similar drop-off and collection service for more than 140 retail brands.

Another major trend, particularly among big-box retailers, is drive-thru collection. Most of France's leading supermarket chains, including Casino, Auchan, E. LeClerc, and Intermarche, offer a drive-thru collection option. Intermarche's 'Le Drive' service is available at more than 1,000 Intermarche stores in France and enables consumers to pay for and collect online orders and have them loaded into their vehicles within a five-minute timeframe.

Consumers are increasingly expecting these delivery options as standard practice and those retailers that have yet to deploy them will need to move quickly in order to remain competitive. One of the big challenges they face will be in ensuring that they can rapidly deploy the technology infrastructure that is required to ensure the flow of data from these diverse collection points back into store and inventory management systems that will provide the customer with a single view of their order.

4. DRIVING INNOVATION AT THE STORE LEVEL

"Globalization also requires retailers to have a flexible approach to the type of outlets they deploy at a local level."

Accounts of the demise of physical retail outlets are greatly exaggerated. Outlets remain a central point of customer interaction, even for those organizations at the cutting edge of omnichannel retail.

The store remains the primary point of sale for most organizations. The world's five largest retailers (Wal-Mart, Carrefour, Tesco, Metro, Kroger) made a combined EUR 745 billion in revenues in 2015, but PAC estimates that less than 5% of that total came through non-store channels. Many consumers view shopping as an enjoyable social activity and a high percentage of them prefer to 'touch and feel' products, such as white goods, before they buy.

The economic headwinds in Western markets, coupled with the shift toward online shopping, escalating store operating costs, and changing consumer behavior is encouraging many retailers in North America and Europe to scale back their number of outlets. On the other hand, the growth of the middle class in countries like China and Brazil has seen a rush to open new outlets to exploit this new stream of disposable income. Peak market opportunities may have already passed in some emerging countries, so having the agility to scale up and scale down as quickly as possible is paramount.

Globalization also requires retailers to have a flexible approach to the type of outlets they deploy at a local level. For example, while big-box outlets are proving successful in markets such as China, there is a renewed focus on smaller formats across all geographies because some consumers are seeking more personalized service. Additionally, local regulations in some markets place strict caps on store size in order to protect smaller retail groups. Mexico's Oxxo, which has about 14,500 convenience stores across Latin America, is one of the most successful examples of a small adaptable store format.

In addition to providing scalability and flexibility, today's stores also need to appeal to customer emotion. Many retailers are increasingly using their floor space to enhance their brand by engaging with the customer rather than driving the sale of products instore. The industry is seeing a new wave of creativity in store design and entertainment. For example, outlets are incorporating flexible features that change the way the store looks throughout the day, or utilizing interactive technology and displays, or collaborating/sharing space with other brands and services – all with the aim of enhancing the customer's in-store experience.

5. RETAIL IN A GLOBAL MARKET

"Almost one-quarter of the revenues earned by the world's 250 largest retail companies came from international markets."

If there is any doubt that retail is a global market, consider the progress made by three of the world's largest fashion retailers, which hail from Spain, Sweden, and Japan.

Inditex, the owner of the Zara brand, has more than 7,000 stores worldwide and sells its products online in 29 countries. Sweden's H&M plans to open 400 new stores in 2016 and will follow up on the recent opening of its first outlet in New Zealand by opening additional outlets. Japan's Fast Retailing, with its Uniqlo core brand, has already conquered the Asian markets of China and Korea and is present in the USA with approximately 60 outlets. The fashion retailer is currently concentrating its efforts on the European market and has already opened stores in the UK, France, Germany, and Belgium.

Looking at the bigger picture, research from Deloitte found that almost one-quarter of the revenues earned by the world's 250 largest retail companies came from international markets. However, this rapid international expansion poses a number of new challenges to retailers:

- 1. Localization: A store format that works in one country will not necessarily work in another. Changing economic conditions and an evolving competitive landscape mean that the window of opportunity in a new geography may be a small one and retailers need to test the local market to fully understand how to adapt their outlets and offerings to best meet consumer buying preferences.
- 2. Supply chain: There is not a single major international retailer that does not also have a supply chain that stretches across multiple regions. The challenge now is to remain competitive and relevant in new territories. After several tragic fires in clothing factories, particularly in Bangladesh, ethical standards in purchasing became a much-discussed issue in sub-sectors such as fashion retailing.
- 3. Regulation: Local regulations can have a huge impact on the approach that a retailer needs to take in order to enter a new market. Local stipulations on the size and location of new stores need to be heeded, as do increasingly complex laws concerning environmental protection. These regulations are constantly evolving one good example is India's current relaxation on barriers that once prevented new food stores from opening in the country.
- **4. Integration**: This is perhaps the toughest component of a successful international expansion strategy. While retaining a look and feel that meets the specific demands of a particular location, it is also hugely important for retailers to ensure that new sites can be integrated into the group's central operating processes.

The head office needs to be at the heart of the flow of information with regard to data on sales, regulation, and supply chain in order to make informed decisions on individual stores or clusters of outlets, regardless of their locations. Those store functions that were historically in silos, such as sales, store environment, inventory, and security, are increasingly being brought together through the purchase of integrated systems in order to enable the channeling of real-time data through to the boardroom.

6. THE IT BALANCING ACT

"IT expenditure will increase at an annual growth rate of 3.7% in the retail sector between 2016 and 2020."

The IT organization within a retail business is in a difficult position.

On the one hand, it is charged with enabling the business to evolve to keep up with the trends discussed in this White Paper, such as omnichannel integration, new delivery requirements, and global expansion. On the other hand, the ongoing price sensitivity and increasing price awareness of consumers, combined with escalating competition and store operation costs (energy bills, rent) means that there is huge pressure to reduce costs in order to protect margins.

While technology is increasingly acknowledged by the board as an essential competitive tool, the IT department is not exempt from this cost-cutting. This means that the retail CIO is forced to perform a balancing act, ensuring that the 'lights-on' systems that support critical day-to-day operations (point of sale, supply chain, web site, and back office transactions) are delivered as effectively and efficiently as possible in the age of 24x7x365 retailing, while freeing-up both resources and funds to exploit new technology investments.

Cost **Availability** Agility Reduce IT's status as a bottleneck Support group-wide cost reduction Ensure that all core systems have initiatives by cutting day-to-day costs the expected level of availability on a for enabling the business to expand & freeing budget for tactical projects worldwide basis & implement new strategies **New Technology Innovation** Need to support new technological Quickly and seamlessly support the advances such as mobile solutions, deployment of new channels, big data/predictive analytics, cloud delivery methods & other projects delivery, Internet of Things, artificial intelligence etc. **Transparency Cyber Security** Improve the visibility of the cost and Bolster defenses against increasing performance of IT systems and & more sophisticated cyber-attacks processes to the board on websites, infrastructure & apps **Skills** Compliance **Suppliers** Ensure compliance with all regulatory Legacy skills are retiring from External providers provide essential requirements (store formats, business, niche skills (e.g. cyber skills & expertise, enable retailers to accounting, etc.) at a global/local security, big data) are difficult to focus on core/strategic activities level source

The ten biggest challenges facing the retail CIO (Source: PAC)

"The issue of skills is a time bomb for IT organizations at many retail groups." How can this be achieved? The IT organization has been running as fast as it can to keep up with the pace of change in recent years, but mergers and acquisitions, international expansion, and multi-channel transitions have seen the number of platforms, providers and integration points escalate to crisis levels.

The issue of skills is a time bomb for IT organizations at many retail groups. Current IT processes, such as maintaining ageing systems and hardware platforms, are labor intensive and dependent on skills that have been in the organization but may soon be lost through retirement (keyword 'demographic change') or cost-cutting. For some, the best way to mitigate this risk is to move to more standard applications and architectures that can be supported through centralized global resource teams at managed services suppliers. Another reason why retailers are increasingly leaning on external partners is to help smooth the cost of investing in new technology. Some suppliers are able to leverage financing models to ensure that the cost of upgrading is spread out over a multi-year term.

The role of the IT organization and the CIO will have to transform in order to remain relevant to the requirements of the business. In the past, the CIO's main focus was on IT cost reduction. However, the boardroom is increasingly expecting IT to take a strategic role in enabling change in the organization by helping the business innovate, for example, by laying the foundations for true omnichannel retailing. The IT department must evolve its role from that of a support center to that of a business-change enabler and companion.

In order to do this, IT departments have to find new ways to deliver IT in order to remain innovative and competitive. Given the pressure on internal skills and costs, an increasingly important part of the CIO's job will be deciding what areas of IT are strategic functions that should remain in-house and which would be best served by service providers. Both the consumer and the internal stakeholders expect accessibility and mission critical availability for all transactions. In other words: IT solutions need to be 'always on'.

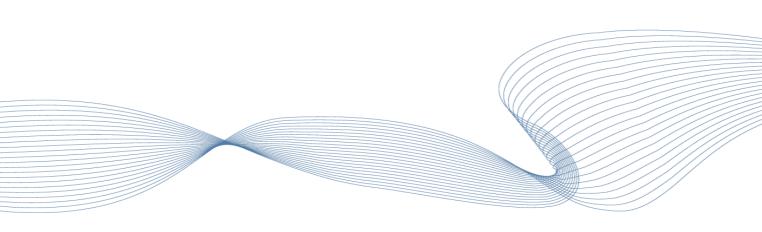
IT infrastructure is the area that is most commonly being externalized by retailers through managed services and outsourcing agreements. The types of hardware platforms used from the shop floor through the supply chain and up to the head office are being transformed by trends such as cloud provisioning, mobile device proliferation, and autonomic computing. As retailers look to take advantage of this evolution, many are deciding that actually owning the physical equipment should not be a strategic priority and the company should instead look to source a combination of hardware, software, and services for a fixed fee and with clearly defined service levels and outcomes.

One of the biggest challenges facing retail CIOs is navigating their way through the supplier landscape, which includes retail technology specialists, small local players and large global generalists. PAC believes that it is already essential for external providers to

have a geographic footprint that matches that of their clients in order to enable them to open new stores quickly and operate centrally under the same conditions.

A PAC White Paper

Diebold Nixdorf An Analyst's View







7. DIEBOLD NIXDORF: AN ANALYST'S VIEW

In this section, PAC provides an objective analysis of the portfolio of Diebold Nixdorf, a key player in the retail IT market, in the context of the market drivers and requirements that were outlined in section one of this White Paper.

7.1 Portfolio overview

Diebold Nixdorf is one of the major IT providers offering a diverse and extensive portfolio of hardware, software, and services for the retail sector worldwide. The company supports innovative retailers from different sub-sectors, such as food, fashion, DIY, etc., with a strong focus on large national and international players.

The key aim of Diebold Nixdorf's proposition is to reshape the retailer's core processes – especially those that interface with the consumer – and improve their availability. As described in the chapters above, efficiently selecting and seamlessly combining different channels through which consumers can be reached is one of the major challenges retail companies are facing today. Diebold Nixdorf's 'Connected Commerce' solution approach helps to optimize and standardize shopping processes and increase retailers' consistent appearance across all sales channels. The approach combines the software and framework-styled platform 'TP Application Suite' and comprehensive IT service delivery and management offerings pooled in its global 'Store Lifecycle Management' provision.

TP Application Suite

Overview: The TP Application Suite ensures unique and consistent business rule processing provided by a service-based architecture, which helps to manage omnichannel retail operations and can interface with standard back-office systems such as SAP. The suite supports the sales channels within the store (traditional POS, self-service, mobile devices, etc.) and beyond (e-commerce, m-commerce), enabling retail organizations to centrally manage, control, and monitor the entire offline and online store landscape and customer service. The scalable, modular, and service-oriented architecture of the suite allows the applications to be adjusted to the architectural and functional requirements of each retailer. The application modules can, therefore, be used by retailers of different sizes, sub-sector focus, and geographical footprint. The standardized service-based architecture (SOA) also provides the possibility to extend the suite's business support to additional processes and sectors. This is also key for integration and collaboration with a variety of partner solutions within the TP ecosystem.

So how does the TP Application Suite fit in with the market dynamics highlighted in the first section of this White Paper?

Omnichannel retail: The key to successful omnichannel strategies will be ensuring a consistent customer experience across multiple physical and digital interfaces. Diebold Nixdorf's TP Application Suite supports all sales channels within the store and beyond the store in a multi-vendor hardware-agnostic manner. This is achieved by the seamless flow of data across the entire spectrum of systems, from the store through to the back office and central systems, which is something the TP Application Suite was designed to support. In addition, the service-oriented software design ensures the reusability of the TP Application Suite business rules in different use cases.

The TP Application Suite offers comprehensive omnichannel solutions based on one software platform, TP Retail Services, that allows for a range of point-of-purchase concepts and multiple shopping scenarios, creating the link between the store and the external sales channels (e-commerce, m-commerce). The TP Application Suite operates as a retailer's omnichannel software platform from point-of-purchase to central management and backbone systems, together with components for central administration and control, customer relationship management, omnichannel merchandise management, and retail business intelligence.

Globalization/store of the future: The implementation of innovative delivery and store models requires a solution that seamlessly supports the new requirements without the need for major customization. Retailers need a flexible framework that can easily integrate existing systems and ensures the consistent flow of data and transactions. It is the same story for retailers looking to move into new geographies that increasingly require an 'out-of-the-box' platform that enables them to operate within the specifics of the local market in terms of fiscal legislation, etc. The TP Application Suite comes with predefined country packages that allow a quick and cost effective go-to-market.

IT standardization and cost control: The shift away from costly and difficult-to-maintain legacy systems toward the adoption of standardized componentized systems is one of the biggest IT trends in retail. The TP Application Suite elements are predominantly provided as industrial standard software products. Diebold Nixdorf uses its TP Retail Services architecture internally as a solution framework as opposed to a set of dedicated applications. Although they can be bought as individual products, the software portfolio is based on the same reusable business logic, components, services, and principles. The emphasis of the TP Retail Services platform is on enabling incremental development, deployment, and maintenance, as well as growing the business support when needed. Customers can keep using existing software assets and use this architecture to build new applications while phasing out legacy systems in a controlled manner.

Store Lifecycle Management

The second key pillar of Diebold Nixdorf's 'Connected Commerce' approach is its global 'Store Lifecycle Management' offering. This end-to-end approach provides two top-level values. The first is improved TCO and IT performance through the proactive operation of the entire store IT lifecycle. The second is a better ability to compete by way of a faster utilization of innovations. Diebold Nixdorf's top-level key activity is its provision of operational governance to ensure optimal results.

Under this general roof there are three scalable solutions that are built on each other to address three completely different pain points in a dedicated way.

Store Support provides an end-user Helpdesk to solve retailers' daily store IT problems faster and more sustainably. It is a multilingual single point of contact that retail customers can contact should they require guidance and support regarding retail IT systems. The fast recovery of IT solutions is a critical success factor for the acceptance of IT solutions and processes. Solutions have to be 'always on'. 'Always on' is guaranteed through proactive monitoring and an efficient network of services. The utilization of remote technology via the Diebold Nixdorf eServices Platform®, including a knowledge database, allows the Service Desk to solve incidents with the first call without the need to dispatch incidents to further support levels. This ensures faster incident resolution and a more sustainable restoration – which ultimately minimizes the impact on the customers' business operations.

Store Operations additionally add the complete store IT operations including all hardware and software at retailers' stores. This provides value by establishing operational excellence for the store IT. It also provides value by transforming capital expenditures into operational expenditures.

In detail, provided services include IT operations and service management. This includes release management, event management, the Service Desk, and incident management, including on-site services when necessary. Reporting is also included. Everything is operated by Diebold Nixdorf's Global Service Delivery organization.

Store Projects accelerates retailers' growth with project management based on predefined process frameworks for all other lifecycle phases before and after Store Operations. These include market entry, market transfer, store opening, store renewal, and store closure. Such lifecycle phases are completely managed by Diebold Nixdorf through a global Governance Model.

Potentially required third-party vendors or customer IT entities are integrated into the store lifecycle through professional supplier and operations management.

Just how relevant is the Store Lifecycle Management portfolio in the context of challenges facing global retailers today?

Omnichannel: The pursuit of a true omnichannel strategy poses a huge challenge to retail organization IT departments. Diebold Nixdorf's Store Lifecycle Management portfolio supports the central application management and operation of omnichannel software, including the operation aspects of business related processes.

Globalization: Retailers need greater agility in their international store infrastructures in order to rapidly scale up and down in order to meet changing local market demands. They are also taking an increasingly diverse approach to their store formats in order to make them relevant to local consumer trends. The Store Lifecycle Management offering gives customers a predefined store IT infrastructure model, which speeds up the process of opening and closing stores. The vendor's Global Service Desk offering provides a single point of contact for application support, and Diebold Nixdorf has standardized its global services delivery to ensure a uniform level of support across multiple territories.

IT standardization and cost control: One of the challenges retail organization IT departments face is freeing up resources in order to support more tactical projects. The Store Lifecycle Management portfolio is designed to improve the efficiency and effectiveness of core IT processes by implementing ITIL-based IT service management standards, including the support of the physical store network expansion strategy from a single source. Diebold Nixdorf also offers commercial flexibility in terms of a pay-as-you grow model, with the cost of hardware, software, and services spread out over a multi-year period.

PAC's opinion

With its takeover of retail IT specialist, Wincor Nixdorf, the American IT provider Diebold has created the new company, Diebold Nixdorf, and is able to draw on decades of technological know-how, with a focus on the global retail industry.

The portfolio includes a broad range of hardware, software, and services. Diebold Nixdorf's ability to rapidly deploy end-to-end, out-of-the-box solutions will be an increasingly attractive proposition for retailers that are looking to move toward more agile IT platforms that support their fast-changing business requirements.

The reality is that today's retailers have accumulated heterogeneous IT landscapes, consisting of a patchwork of legacy and packaged systems. Diebold Nixdorf's ability to support multivendor environments with its Store Lifecycle Management Services portfolio helps retailers overcome what has become a major skills challenge and bottle neck within their IT organizations. The modular nature of the TP Application Suite offering also enables retailers to quickly move toward omnichannel delivery models and can drive much greater integration between the different elements of the application portfolio, without the need for a complex rip-and-replace transformation program.

PAC believes that domain expertise is going to be an increasingly important asset for IT technology and service suppliers that are looking to work with international retail groups. A deep understanding of the dynamics of the sector are essential if suppliers are to make their portfolios relevant to the business needs of their customers.

After acquiring former Wincor Nixdorf, Diebold Nixdorf is clearly positioned as a retail sector specialist. PAC expects the company to keep investing to ensure that its strategy and technology roadmap are in line with the direction of its customers. Before the acquisition, Wincor Nixdorf had undergone a comprehensive restructuring program in recent years, a key benefit of which was the improvement of its service delivery capabilities. Strong progress had been made regarding consistency, efficiency, and the quality of ITIL-standard service delivery. The pooling of innovation potentials and knowhow made possible by the merger should bring additional improvements in service provision and software programming for Diebold Nixdorf's retail customers.

The company's international presence is increasingly important as retailers step up their international focus. For instance, Diebold's existing service infrastructures clearly offer opportunities to gain a stronger foothold in the American retail market. This may also benefit European retailers that want to expand into the American market, for example.

Moreover, many retailers are trying to seize opportunities in emerging countries. Diebold Nixdorf's local presence on the ground in markets such as Asia Pacific have made it an important partner for the likes of Tesco, which named Wincor Nixdorf as its supplier of the year for outstanding service in 2013.

This White Paper has highlighted the huge shifts that are taking place in the retail market in terms of globalization and delivery and channel innovation. Diebold Nixdorf is well-situated to maintain its position as one of the best vendors to help its clients tackle the mounting technology challenges they will face in the coming years.

7.2 Case studies



Optimized shopping experience

Business challenge: s.Oliver is one of the leading European fashion retailers. Due to its fast-paced growth, its central and store process requirements increased. s.Oliver needed a worldwide tested software solution that would ideally support international growth and country-specific requirements. In addition, the solution needed to cover all relevant central and store processes, and, most importantly, must smoothly integrate with SAP for retail. To round out the optimal checkout, s.Oliver also required a modern and intuitive-to-use checkout solution, as well as an international service concept.

Project scope: All s.Oliver locations were equipped with the complete solution from Diebold Nixdorf. The SAP-certified retail solution from Diebold Nixdorf allows s.Oliver to cover all relevant central and in-store processes. The multilingual ability supports implementation on an international level, replacing the many country-specific software programs that were previously in use.

s.Oliver's fundamental decision was based not only on hardware and software, but also on the demand for services from a single source and internationally dependable and secure support. These needs were met with Diebold Nixdorf's comprehensive range of services that can be expanded with product-related services to selected Managed Services.

Diebold Nixdorf's value proposition: For s.Oliver, customer satisfaction and international expansion are top priorities. With Diebold Nixdorf, the company has found an international partner with many years of experience and a deep understanding of retail store processes. To optimize store processes, s.Oliver has implemented the modern POS software TP.net and the BEETLE checkout systems. Scalable services ensure the highest worldwide availability.

"Tesco is growing quickly, especially in Central Eastern Europe. With Diebold Nixdorf, we have an internationally experienced partner that can maintain this pace with us. Diebold Nixdorf's services not only make the processes in our stores simpler and more transparent, we are also experiencing a significant reduction in the costs of operating the stores."

Jan Trhon, Service Manager, Tesco Central Europe

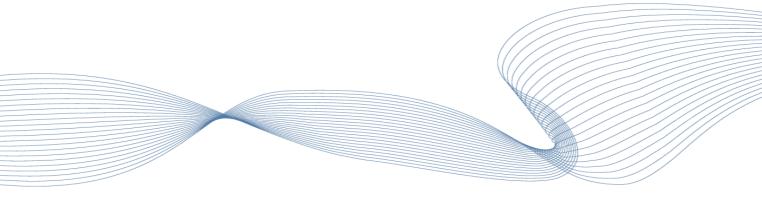


Globalization & IT standardization

Business challenge: Tesco is a major retailing enterprise with a vast number of stores. The company's swift development produced a heterogeneous IT infrastructure environment consisting of equipment from different vendors. In order to increase availability, optimize processes, and increase efficiency in handling service providers, Tesco was looking for a provider that could handle full management and maintenance of all its systems.

Scope of service: Tesco has transferred complete management for all devices, including multivendor systems in its stores in the Czech Republic, Slovakia, Turkey, Poland, Hungary, UK, Republic of Ireland, Malaysia, and China to Diebold Nixdorf. The installed base of equipment comprises 10,300 POS terminals and all related infrastructure, as well as backup, central servers, and software.

Diebold Nixdorf's value proposition: Diebold Nixdorf is able to fulfil Tesco's requirements in terms of POS system availability and guaranteed operation of the IT infrastructure in all stores. Diebold Nixdorf took responsibility for the entire server infrastructure. Within the Managed Services offering, central and backup servers, as well as the software, are managed and monitored centrally. The integrated solution comprising Availability Services, such as Incident Management and IMAC services and the Managed Services, provide Tesco with efficient operation of its 10,300 POS systems and related IT infrastructure across the Czech Republic, Slovakia, Turkey, Poland, Hungary, UK, Republic of Ireland, Malaysia, and China. Key factors in Tesco's selection of Diebold Nixdorf as a service provider were the vendor's longstanding experience and network of skilled service engineers. The possibility to handle the management of Tesco's entire IT infrastructure, even handling multivendor devices and software, were also critical criteria for Tesco. The main benefits for Tesco were increased availability resulting from real-time monitoring and remote incident management, reduced operational costs due to process automation and optimization, clear responsibilities with Diebold Nixdorf as single point of contact, and end-to-end transparency through detailed reporting.



About Diebold Nixdorf

Diebold Nixdorf (NYSE: DBD) is a world leader in enabling connected commerce for millions of consumers each day across the financial and retail industries. In particular, its software-defined systems bridge the physical and digital worlds of cash and payment transactions, with processes that are convenient, secure, and efficient for businesses and end customers alike.

Diebold Nixdorf is an innovation partner for nearly all of the world's top 100 financial institutions and a majority of the top 25 global retailers. Its unparalleled solutions and services are essential to evolving in an 'always on' and changing consumer landscape.

Diebold Nixdorf has a presence in more than 150 countries with approximately 25,000 employees worldwide and is headquartered in North Canton, Ohio, USA and Paderborn, Germany.

Visit www.dieboldnixdorf.com for more information.

About Pierre Audoin Consultants

Founded in 1976, Pierre Audoin Consultants (PAC) is part of CXP Group, the leading independent European research and consulting firm for the software, IT services and digital transformation industry.

CXP Group offers its customers comprehensive support services for the evaluation, selection and optimization of their software solutions and for the evaluation and selection of IT services providers, and accompanies them in optimizing their sourcing and investment strategies. As such, CXP Group supports ICT decision makers in their digital transformation journey.

Further, CXP Group assists software and IT services providers in optimizing their strategies and go-to-market approaches with quantitative and qualitative analyses as well as consulting services. Public organizations and institutions equally base the development of their IT policies on our reports.

Capitalizing on 40 years of experience, based in 8 countries (with 17 offices worldwide) and with 140 employees, CXP Group provides its expertise every year to more than 1,500 ICT decision makers and the operational divisions of large enterprises as well as mid-market companies and their providers. CXP Group consists of three branches: Le CXP, BARC (Business Application Research Center) and Pierre Audoin Consultants (PAC).

For more information please visit: www.pac-online.com