

Microsoft® Retail

April 2005

# Point of Service

White Paper





# Contents

Overview	4
The Microsoft Proposition for Point of Service	6
Delivering Point of Service	9
The Microsoft Partner Ecosystem	10
More Information	<b>Back Cover</b>

# Overview

## The Imperative for Change

At the heart of every retail organisation is a point-of-sale system. Consistent with their central role, these systems must be robust, secure, easy to manage, and—above all—reliable. The decision to upgrade, or rip out and replace, requires significant investment. It presents deployment and training challenges, and carries business risk, and thus it is never taken lightly.

Because retailers are cautious about technology in general, many point-of-sale systems are still in place beyond their expected useful lifespan of seven to 12 years. Some DOS-based versions are still performing in their 15th year. However, as competitive requirements and consumer demands increase, deferring decisions about a new point-of-sale system is no longer an option for many—perhaps most—retailers. Older systems—proprietary and often conceived as standalone, single-task, batch-mode, one-way communicating equipment in the “pre-Internet” era—are simply not able to perform the tasks that smart retailers deem essential today. And this performance shortfall will become more pronounced over the next five to 10 years.

The need for change has been driven—and complicated—by a slowdown in consumer spending coupled with increasing general operating costs and fiercer competition. In such a climate, any point-of-sale investment must benefit the overall business strategy and improve the bottom line by delivering lower operational costs along with higher sales. New technology, more of it now retail-specific, is enabling significant changes in the industry to achieve these goals.

Previously, discussions about next-generation point-of-sale systems have revolved around hardware issues and deciding whether to replace an old-fashioned checkout terminal with a more modern version. However, systems hardware has become the ‘commodity’ item, with software increasingly the defining element.

Meanwhile, as the need to meet high consumer expectations becomes even more important, the debate around what new system to purchase shifts from being simply about the selection of a new point-of-sale device to tackling the much broader concept of how to implement the best point-of-service offering.

### Changing Requirements

Today's shopper sometimes wants minimal interaction with the store and its staff, and sometimes seeks a high level of personal service. A new system must accommodate such variability in behaviour. This can be accomplished by integrating multiple device formats—self-checkout lanes, information kiosks, display screens, cigarette and magazine kiosks, lottery terminals, and specialised food service and petrol station devices, for example—in addition to traditional checkout lane devices.

#### Drivers for Change

##### Business

- High overhead costs
- High staff turnover
- Increasing competition

##### Technology

- Old systems unable to support new technology
- Hardware support limited and expensive
- Lack of standardisation
- Systems management challenges
- Unsuitable for customer service scenarios
- Availability of affordable wireless technology

##### Consumer

- Demand for convenience
- Desire for an enhanced shopping experience
- Frustration over out-of-stocks
- Increased familiarity with mobile technology



From the retailer's perspective, any new system must easily incorporate a wide variety of devices, which need to link into the existing IT infrastructure. For information from these devices to support improved decision making in the store, in the supply chain, and in the finance and human resources departments, it must flow in real time.

Over the past few years, retailers have grown frustrated when they tried to integrate new devices with legacy systems. Problem resolution has been costly both in terms of time and money. This has led many companies to opt for a single operating system that can run all devices, thereby helping reduce technical support and training costs for the IT staff.

In a multi-channel, around-the-clock shopping society, with no down-time for maintenance and upgrades, retailers will be looking for a robust system that allows upgrades and maintenance to be carried out swiftly and remotely. The implementation of a more rigorous approach to standards compliance and the wide availability of universal serial bus (USB) devices for point of service will make plug-and-play a reality.

Given that staff turnover can range between 20 per cent to 200 per cent, any new system must be easy to operate, thereby minimising training time and reducing the opportunity for operating errors. With more information available at the touch of a button, retailers will be looking at their systems to help improve staff productivity, and provide the essential added-value services.

#### **The 100 leading UK retailers outline point-of-sale priorities**

- 55%** of retailers are currently using Windows-based operating systems at the point of sale
- 48%** of retailers plan to move to Windows Embedded for Point of Service
- 78%** of department stores plan to move to Windows Embedded for Point of Service
- 45%** of retailers have already or plan to implement new, Chip and PIN compliant, point-of-sale systems

Source: IT in Retail Report 2005, Martec International

With product availability an ever-present problem, today's more flexible systems can be set up to help reduce lost sales due to out-of-stocks. New systems can be configured to ensure that sales personnel can easily offer potentially-disappointed customers the option of having the desired item delivered directly to their home by sending it from a distribution centre or a nearby store.

To help ensure smoother in-store operations, more and more retailers will be using wireless as the preferred means of communication because it has become much more affordable. By linking telephones, tills, and closed circuit television (CCTV) cameras, managers can monitor key performance indicators such as customer traffic and basket size, and take the appropriate action to keep queues moving and increase service levels at busy times to reduce walkouts and lost sales.

Such systems also give floor staff real-time access to managers for price checks, requests for change, and remote authorisation for refunds or voids via a mobile device such as a personal digital assistant (PDA) or phone. This again speeds up the checkout process and reduces shoppers' frustration.

Looking toward the future, point-of-service systems will need to support emerging technologies such as radio frequency identification (RFID) and biometrics. The latter is gaining in use for everything from cheque acceptance to credit card authorisation, and retinal scans and fingerprinting will soon be part of every-day life, says IHL Consulting Group.

Because the way in which consumers interact with sellers continues to evolve, the next generation of point-of-service systems could be the last in their existing format. The challenge for retailers is to keep pace with these changes and ensure that any new system bought today can generate competitive advantage through a differentiated offer at store level and be sufficiently cost-effective so funds are available for future investment.

# The Microsoft Proposition for Point of Service

Easier systems management...empowering new customer experiences...  
lower lifecycle costs...increased revenues...

The future success of retailers rests on the customer-facing edges of the business, where giving consumers what they want, when they want it, and in an engaging and personalised way, will be the deciding factor. With the support of more than 40 of its application and device partners, Microsoft is working to satisfy the retail industry's shopping list of must-haves for smarter point of service in preparation for the future.

The result is Microsoft® Windows® Embedded for Point of Service, which is designed to enhance both the staff and customer's service experience, increase reliability and security, and deliver a **low total cost of ownership**.

For 15 years, from older DOS-based systems through to Windows Embedded for Point of Service, Microsoft has created increasingly sophisticated technology solutions for point-of-service terminals. However Windows Embedded for Point of Service is the first retail-specific software platform to make it **quick, simple, and cost-effective to install** frontline customer service devices, such as scanners, that can **help retailers differentiate their services from a competitor's offer** in the battle for market share.

This plug-and-play feature addresses feedback that, historically, indicates integration and management of peripherals has been costly and time-consuming. Now retailers can source their preferred point-of-service peripheral devices knowing that the Windows Embedded for Point of Service platform can quickly and easily recognise and install them.

Consumers are growing increasingly accustomed to being offered different service choices in-store, whether it is in the way they purchase with self-checkout devices or the way they receive product information from shelf-edge labelling or digital signage. The Windows Embedded for Point of Service platform embraces such changes in shopping behaviour and delivers the core principles of the Microsoft Smarter Retailing Initiative (SRI). It focuses on the win-win relationship of smarter shopping and smarter selling and is able to support whatever direction customer demands for convenience in point-of-service systems may take.

As the bar continues to be raised for checkout processing, adding value through related promotions and delivery details can not only provide an opportunity to up-sell, it can also help **increase customer satisfaction**. The latest generation of point-of-sale devices based on Microsoft technology have been developed to aid sales assistants in giving the customer a better shopping experience and in the process provide a better way for the staff to work.

Prompt and touch-screen technology can guide assistants through the purchase process and, using historical data, can immediately suggest items that may be of interest, such as warranties or rail or cinema tickets. This type of wizard application can **help in training new and existing staff members** and can empower them with

## The Smarter Retailing Initiative (SRI)

SRI focuses on helping businesses improve how they sell and operate through better access to customer and product information.

The SRI architecture is based on open industry standards for integrating data that will ensure that vital information about the store and its products, financials and supply chain partners, together with other core enterprise information, can be easily integrated with consumer-facing innovations. This can transform the customer experience, deliver competitive differentiation, and help retailers to reap the benefits that integrated data promises.





the tools to treat customers as individuals and regain the feel of the traditional personalised service values of the local shopkeeper. This approach can also **soften some of the negative aspects of constant employee churn.**

The **ease of management and deployment of systems** inherent in Windows Embedded for Point of Service can also enhance the working life of the IT department. Improvements in remote device management mean that a great deal of work which previously required engineers to physically visit stores to integrate, update, or repair devices can now be dealt with centrally across the network. Now too, a single device can be configured to serve multiple purposes, thereby reducing the inventory of special-purpose devices. This new era will ease the introduction and deployment of new solutions for requirements such as self-scanning. Together with the automated deployment of maintenance and security updates, these changes can drastically cut staff hours and support costs. Windows Embedded for Point of Service also provides the **longest published product support lifecycle** for point-of-service systems—up to 10 years.



#### **Waitrose (UK)**

**"Proprietary technologies have had their day in terms of point-of-sale systems. We chose Microsoft technologies because they give us the flexibility to add peripherals from a wide range of suppliers. With a proprietary solution, we would still have to develop bespoke interfaces."**

Waitrose, part of the John Lewis Partnership, has more than 150 branches in England and Wales. The grocery chain wanted to upgrade outdated systems with a new architecture to streamline IT management. Waitrose chose to implement Microsoft Windows XP Embedded, a member of the Windows family of operating systems, which integrates seamlessly with Windows Server™ 2003 and Active Directory® to enable all IT resources to be managed effectively from a single console. It also integrates with Microsoft Systems Management Server (SMS), which rapidly deploys new applications and patches across the network and third-party point-of-sale applications and peripherals.

#### **Woolworths (South Africa)**

Woolworths Holdings Ltd. in South Africa is using the FREEDOM point-of-sale solution from **MATRA Systems** Ltd. to underpin its future business strategies. Woolworths is one of South Africa's premier retail chains with a sophisticated, customer-centric offer that spans grocery, textiles and homeware, and encompasses corporate, concession and franchise operations.

FREEDOM was selected for its agility and extensive multi-channel and mobility capabilities. With SMS and Microsoft Operations Manager (MOM) already in place, Woolworths is deploying and managing the channels remotely. This infrastructure is soon to be extended with Windows Embedded for Point of Service, to provide a retail-hardened base for the thousands of selling points.

One of the key benefits of the integrated solution has been performance at the checkout, where there have been significant improvements to transaction times. These improvements are expected to continue as further processes are integrated.

## The Microsoft Proposition for Point of Service continued

Windows Embedded for Point of Service is a **single platform** that can help businesses leverage customer-facing technology to minimise queues, offer loyalty cards, customise promotions, run mandatory systems such as Chip & PIN, and utilise emerging technologies such as RFID and biometrics.

In addition, the platform can integrate with the head office to provide **real-time visibility of sales figures and stock levels** for just-in-time replenishment. This information flow can also be used to facilitate advanced multi-channel capabilities such as Internet or catalogue purchase fulfilment through the store and warehouse.

The advent of Windows Embedded for Point of Service does not herald an “all change” situation for point-of-service hardware, rather its addition **helps existing investments to be used to maximum advantage**.

Technology innovation will continue apace, providing new aspirations; in the next 10 years, point of service may become unrecognisable from our current understanding of it. Microsoft, through developments such as Windows Embedded for Point of Service, will continue to lead this process. Over the years, Microsoft has also become a part of the consumer’s everyday experience through software that powers PCs and Smartphones, and through MSN®, Microsoft Xbox® and other products. Smart retailers will leverage these two trends to better interact with the consumer and enhance the shopping experience, however it develops.



### The Tussauds Group

Entertainment company, The Tussauds Group (TTG), has chosen the Retalix StorePoint solution to control its retail and catering operations across its sites in the UK, Europe, USA, and Asia.

**Retalix StorePoint**, which integrates touch-screen point of sale, the back-office applications and the Retalix chain management solution. It already operates in more than 42 different food and retail stores on 88 point-of-sale terminals, in all of TTG’s UK theme parks, including the world-famous Madame Tussauds in London.

### Mothercare

Leading clothing chain Mothercare will deploy the **BT Expedite’s Connected Retailer Store** solution for new point-of-sale hardware and software, sales analytics, and Chip and PIN technology in all its 232 stores by mid-2006.

The new technology will underpin Mothercare’s turnaround programme of new services and products. Upgraded web-ordering systems and centralised records will reduce transaction times and simplify customer ordering, while Chip and PIN technology will combat credit card fraud.



## Delivering Point of Service

Function	Product	Description	Microsoft partners
Operating system (OS)	Windows Embedded for Point of Service	OS for point-of-service devices that is secure, easy to manage, and offers retail device plug-and-play functionality	<b>OEM:</b> Fujitsu Services Division, TOSHIBA TEC Europe Retail Information Systems, Wincor Nixdorf Worldwide <b>ISV:</b> Anker Plc, Avenew, MATRA Systems Ltd, BT Expedite, Retalix Ltd, TOSHIBA TEC, Wincor Nixdorf
	Windows XP Embedded with Service Pack 2	OS aimed at upgrading installed point-of-sale devices and offering advanced security and management features	<b>OEM:</b> Fujitsu, IBM Corp, NCR Corp., TOSHIBA TEC, Wincor Nixdorf <b>ISV:</b> Anker, Avenew, Landsteinar Strengur, MATRA Systems, NCR, NSB, Retalix, TOSHIBA TEC, Wincor Nixdorf
	Windows XP Professional with Service Pack 2	OS for the desktop user deployed when a single platform is required for both the office and store	<b>OEM:</b> as above <b>ISV:</b> as above
	Microsoft Windows CE	Embedded OS for small footprint devices such as handhelds	<b>OEM:</b> Symbol Technologies, HP
Devices in the store using above	Point of sale	For fast and full-service checkout	<b>OEM:</b> as above <b>ISV:</b> as above
	Kiosks	Helps customers find information in the store	<b>OEM:</b> Fujitsu, IBM, Kudos Digital Group Ltd, NCR, Wincor Nixdorf <b>ISV:</b> Kudos, MATRA Systems, NCR, Retalix, Wincor Nixdorf
	Self-checkouts	For shoppers to self-scan and pay	<b>OEM:</b> Fujitsu, NCR, Wincor Nixdorf <b>ISV:</b> Fujitsu, NCR, Retalix, Wincor Nixdorf
	Digital media	In-store marketing and branding	Castify Networks, Kudos
Management technologies in the store	Windows XP Embedded built-in technologies	Device Update Agent, Software Update Services and Windows Update Services	MATRA Systems, Retalix, TOSHIBA TEC
	Systems Management Server	Software and device management and auditing software for the Windows platform	MATRA Systems
	Microsoft Operations Manager	Console providing alerts and notifications based on business events	
Web services	Microsoft .NET Platform	Provides access to central system from within the point-of-service application; extends the existing application by adding new services without changing existing software; develops applications that run in multiple environments	Avenew, BT Expedite, Retalix, TOSHIBA TEC, Wincor Nixdorf

# The Microsoft Partner Ecosystem



## Anker Systems

**www.anker-systems.com** info@uk.anker-systems.com

Headquartered near Manchester, UK, Anker Systems provides of integrated point-of-sale software and systems to retailers across Europe. Anker is the largest independent EPoS provider for the retail and hospitality markets, with subsidiaries in 11 European countries and distributors in a further 41 countries across Europe, the Middle East and Africa (EMEA).



## Avenew

**www.accenture.com** alain.vitrian@accenture.com / pedro.barsanti@accenture.com

In collaboration with Informatica El Corte Inglés, Accenture is offering Avenew, a fully-featured point-of-service application aimed at department store and speciality retailers in Europe, South Africa and Latin America. Avenew is installed in 800 stores on 30,000 point-of-sale devices in retail outlets, including El Corte Inglés.



## BT Expedite

**www.btexpedite.com** btexpedite@bt.com

BT Expedite is the retail specialist division of BT. It offers a comprehensive portfolio that includes innovative solutions, products, and services for every area of retailing: planning, sourcing and product development, merchandising, store, sales analytics, and CRM, plus managed services, hardware, network infrastructure, consultancy and professional services, and client care. Today, BT Expedite provides solutions to more than 60 leading retailers in the UK and Europe.



## HP

**www.hp.co.uk** lise.finlay@hp.com

HP is a technology solutions provider to consumers, businesses and institutions globally. Its offerings span IT infrastructure, personal computing and access devices, global services and imaging, and printing. In partnership with Intel and Microsoft, HP brings value, flexibility and choice of open systems to the retail industry.



## Kudos

**www.kudosdigital.com** martin.harrison@kudosdigital.com

Kudos Digital Group Limited is a UK-based software and solutions provider operating in the Smarter Retailing Initiative market space, based on the Microsoft operating systems and development environments. Kudos combines its enterprise class application and device management software platform with professional and operational services for solutions in general retail (self-service, vending); food service (self-service ordering) and digital media signage (information, advertising).



## Landsteinar Strengur

**www.lsretail.com** eloise@lsretail.com

Since 1996, Landsteinar Strengur has been one of the principal companies developing retail and hospitality solutions based on Microsoft Business Solutions–Axapta® and Microsoft Business Solutions–Navision®.

Its retail solutions have been sold in 130 countries and translated into 30 languages.

More than 4,800 stores use Landsteinar Strengur's solutions. Among its customers are: IKEA, Adidas, NAAFI, Pizza Hut Inc., Booths Supermarkets, Moss Pharmacy, and Concept Sports International (2004 Olympic Games, EURO 2004).

**NCR Corporation****www.ncr.com** enzo.tumminaro@ncr.com

NCR is a leading global technology company helping businesses build stronger relationships with their customers. NCR's ATMs, retail systems, teradata data warehouses, and IT services provide Relationship Technology solutions that maximise the value of customer interactions and help organisations create a stronger competitive position. NCR is based in Dayton, Ohio, United States.

**MATRA Systems****www.matrasystems.com** shouldsworth@matra.co.uk

MATRA Systems provides agile point-of-sale solutions to major retailers worldwide. Its FREEDOM solution helps retailers to provide a co-ordinated and consistent offer to customers. It combines the different channels and services and seamlessly integrates with the rest of the enterprise in real time to meet the needs of today's rapidly changing retail environment.

FREEDOM operates in grocery, department store, general merchandise, pharmacy, and hospitality environments.

**Retalix****www.retalix.com** renee.vanoostveen@retalix.com

Retalix provides integrated enterprise-wide software solutions for the retail food and fuel industries worldwide, including supermarkets, convenience stores, fuel stations, and quick-service restaurants.

The company offers a full suite of software applications that support food retailers' retailing and supply chain management operations. The technology ensures retailers can increase their operating efficiencies while improving customer acquisition, retention, and profitability.

**Symbol Technologies****www.symbol.com** info@uk.symbol.com

Symbol Technologies, The Enterprise Mobility Company™, delivers products and solutions that capture, move, and manage information in real time. Symbol's solutions integrate advanced data-capture technologies, mobile computing platforms, wireless infrastructure, mobility software, and world-class services programmes.

**TOSHIBA TEC****www.toshibatec-eu.com** ovanschap@toshibatec-eu.com

Total solution provider TOSHIBA TEC Europe Retail Information Systems offers a complete retail package. It includes consulting and system design, system installation, operation, and maintenance of point-of-sale systems, cash registers, scales, bar-code printers, peripherals, and software information systems. TOSHIBA TEC Corp. has a global turnover of €2.5 billion through 72 offices worldwide, employing more than 10,000 people.

**Wincor Nixdorf****www.wincor-nixdorf.com** info@wincor-nixdorf.com

Wincor Nixdorf is one of the world's leading providers of IT solutions to retailers and retail banking. The company has around 6,000 employees and made net revenues of €1.57 billion during the last fiscal year. Wincor Nixdorf has a presence in more than 90 countries, with its own subsidiary companies in 30 of those countries. Wincor Nixdorf is the market leader in ATMs and point-of-sale systems in Germany.



## More Information

To find out more about the Microsoft Point of Service proposition, please visit:  
**[www.microsoft.com/smartretail](http://www.microsoft.com/smartretail)**

© 2005 Microsoft Corp. All rights reserved. Microsoft, the Microsoft logo, Windows, MSN, Xbox, Windows Server, Active Directory, Windows Mobile, Axapta and Navision are either registered trademarks or trademarks of Microsoft Corp. or Microsoft Business Solutions ApS or their affiliates in the United States and/or other countries.

Microsoft Business Solutions ApS is a subsidiary of Microsoft Corp.  
The names of actual companies and products mentioned herein may be the trademarks of their respective owners.