The Forrester Wave™: Point Of Service, Q3 2015
The 10 Providers That Matter Most And How They Stack Up
by George Lawrie
July 31, 2015

Why Read This Report
In Forrester’s 59-criteria evaluation of point-of-service (POS) vendors, we identified the 10 most significant providers in the category — Aptos, Demandware, Fujitsu, Microsoft Dynamics, NCR, Oracle, PCMS, Polaris Enterprise Solutions, SAP, and Wincor Nixdorf — and researched, analyzed, and scored them. This report details our findings about how well each vendor fulfills our criteria and where they all stand in relation to each other to help retail application development and delivery (AD&D) professionals select the right partner for their store point of service.

Key Takeaways
Aptos, Demandware, Fujitsu, NCR, And PCMS Lead The Pack
Forrester’s research uncovered a market in which Aptos, Demandware, Fujitsu, NCR, and PCMS lead the pack. Microsoft Dynamics, Oracle, SAP, and Wincor Nixdorf offer competitive options. Polaris Enterprise Solutions lags behind.

Architecture And Interoperability Are Key Differentiators In The POS Market
As AD&D professionals strive to support their retail store strategy, interoperability with retailers’ legacy applications and their investment in eCommerce engines will dictate which provider will lead the pack. Vendors providing a complete set of in-store interactions, while accommodating heterogeneous applications, position themselves to succeed.

Access The Forrester Wave Model For Deeper Insight
Use the detailed Forrester Wave model to view every piece of data used to score participating vendors and to create a custom vendor shortlist. Access the report online and download the Excel tool using the link in the right-hand column under “Tools & Templates.” Alter Forrester’s weightings to tailor the Forrester Wave model to your specifications.
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The 10 Providers That Matter Most And How They Stack Up

by George Lawrie
with Christopher Andrews, Arelai Ephraim, and Nicole Lesperance
July 31, 2015

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Forrester interviewed 10 vendor and user companies: Aptos, Demandware, Fujitsu, Microsoft Dynamics, NCR, Oracle, PCMS, Polaris Enterprise Solutions, SAP, and Wincor Nixdorf.

Related Research Documents
CPG Brand And Retail Channel Collaboration — From Signaling To Synchrony
The Forrester Wave™: Point Of Service, Q2 2012
The Retail CIO Agenda 2015: Secure And Innovate
POS Software Adapts To The Changing Role Of The Store

The meaning of “POS” has evolved dramatically over the past few years, shifting from “point of sale” to “point of service.” This shift has come as stores — from Apple to BaubleBar — have become the focus for customer experience. The physical store’s role in retail strategy continues to evolve, and this evolution requires store software that is well adapted to its role and specialized for the in-store environment.

Today, physical stores remain the channel through which more than 90% of retail sales are realized. Retailers use POS software to deliver store-specific experiences such as simple returns of online purchases, fast checkout in grocery stores, appointment-setting in specialty retail stores, or event-ticketing in destination stores. Customers use stores as showrooms to touch a fabric or see the finish on furniture before ordering them for delivery at home, and they increasingly see stores as destinations that integrate their physical and digital experiences with the brand.

Smart AD&D professionals look to POS applications to support all of these experiences. As POS continues to evolve, AD&D professionals in retail categories — from sports equipment to apparel — will rely on the software to support in-store experiences. They will use POS to look for embedded appointment management to entice customers, allowing them to learn about everything from their golf swing to their color palette. They will increasingly look for store applications that support entertainment and hospitality features, such as interactive experiences for frazzled shoppers and real-time promotions to make the shopping experience more entertaining.

The Store Environment Needs Specialist Application Support

Retail AD&D professionals know that stores are highly demanding environments. They know that they need the latest POS technologies in order to:

› Keep pace with new demands for transaction speed and accuracy. Every store interaction has its own pace, and every retail sub-vertical dances to a different beat. The beauty advisor in a L’Oréal Paris concession and her client have all the time in the world to sign on to multiple mobile applications and the luxury of two hands free to do it. But the store associate in Kroger may have both hands full while still needing help processing baskets. It’s why POS veteran NCR developed its trademarked user interface, DynaKey, to drive speed and accuracy.

› Ensure consumer security. Retail CIOs are preoccupied with avoiding security breaches. This explains why POS software includes sophisticated capabilities to protect payment card and other personal data. It partly explains retailers’ conservatism about replacing conventional POS applications with a new generation of mobile-only applications and their preference for adopting mobile extensions to their existing POS infrastructure.
Deliver a common brand experience regardless of the operator's experience. Retailers use their store applications to implement policies on returns, loyalty, and discounts that express their brand promise. The retail workforce may mean well but is often temporary, consisting of new entrants to the workforce or part-time workers with limited commitments. With little budget for yesteryear’s hierarchy of supervisors and managers, retailers rely on configuring their store POS application for error-free, consistent controlled execution of their policies (for example, on returns with or without a receipt).

The POS Software Market Landscape Settles After The eCommerce Earthquake

Well-established POS vendors like NCR, Wincor Nixdorf, and Fujitsu have undertaken significant development to match the capabilities of eCommerce vendors, offering to engage the customer in the store as well as online. They’ve also had to compete with a new generation of store extensions to eCommerce such as TCS’ OmniStore POS or pure mobile-point-of-service (mPOS) solutions like Starmount offering to replace POS altogether.

However, the new competition in the POS marketplace has not yet fully lived up to the expectations of large retail clients. Forrester asked POS customers to rank their interest in POS, mPOS, and eCommerce vendors as solution providers for store use cases. We found that:

Well-established solutions are still the dominant form of large POS deployments. Our survey respondents expressed most interest in vendors like NCR, Wincor Nixdorf, and Fujitsu that offer well-established applications supporting a full range of store use cases, including omnichannel interactions. These vendors offer international retailers like Ahold or Carrefour a platform for high-volume, scalable, and differentiated trading. Our research found that competitive POS software is highly configurable and generally delivers “out of the box” integration with widely used eCommerce applications such as Oracle Commerce (formerly ATG) or IBM WebSphere Commerce. As a result, these vendors were the primary focus of this Forrester Wave™.

Mobile-only solutions are still emerging. We didn’t include mobile-only solutions such as Starmount, Lightspeed, or Manhattan — the owner of the Global Bay mobile POS solution since 2014. We also omitted solutions like Square and Shopkeep.com, because they’ve yet to achieve a high level of momentum with the large retailers with which we speak. We excluded mobile-only solutions from this Forrester Wave.

eCommerce applications don’t provide the full functionality that stores need. Most eCommerce vendors are sure that their application can be deployed in-store. But in general, store operations executives are skeptical.7 One retail executive, fed up with the repositioning efforts of eCommerce providers, told us, “When they can show me supervisor high amount lockout override on their eCommerce application or start of shift cash drawer reconciliation, then I’ll accept it as a store POS.” As a result, we excluded eCommerce-only store solutions from this Forrester Wave.
Point-Of-Service Evaluation Overview

To assess the state of the point-of-service market and see how the vendors stack up against each other, Forrester evaluated the strengths and weaknesses of top point-of-service vendors.

Evaluation Criteria Focus On Requirements For Stores In Large Retail Chains

After examining past research, user need assessments, and vendor and expert interviews, we developed a comprehensive set of evaluation criteria. We evaluated vendors against 59 criteria, which we grouped into three high-level buckets:

› **Current offering.** We evaluated 47 criteria that focus on core and advanced functionality. We evaluated core point-of-sale and return functionality, transaction types, omnichannel functionality, security, and extended point-of-sale capabilities including mobility, back-office functionality, architecture, and international capabilities.

› **Strategy.** To assess each vendor’s strategy, we evaluated six criteria including product vision, road map, customization strategy, and focus on retail.

› **Market presence.** To evaluate each vendor’s penetration of the point-of-service market, we evaluated five criteria including installed based, implementation scale, and geographic deployment.

Evaluated Vendors Have An Established Footprint And Support Store Operations

Forrester included 10 vendors in the assessment: Aptos, Demandware, Fujitsu, Microsoft Dynamics, NCR, Oracle, PCMS, Polaris Enterprise Solutions, SAP, and Wincor Nixdorf. Each of these vendors has (see Figure 1):

› **Complete functionality to support modern store interactions.** Forrester included vendors that provide functionality to support both store operations (such as age verification for liquor), and omnichannel store interactions (such as click-and-collect or return online purchases in-store).

› **A significant installed base.** Forrester included the 10 point-of-sale vendors prioritized by the readers of our earlier POS Forrester Waves that had a significant footprint in the stores of large retail chains.

› **International presence.** Forrester chose vendors with the ability to deploy and support solutions internationally, in deference to our large base of clients at global retail firms.
FIGURE 1 Evaluated Vendors: Vendor Information And Selection Criteria

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Product evaluated</th>
<th>Product version evaluated</th>
<th>Version release date</th>
</tr>
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<td>Demandware</td>
<td>Store Center</td>
<td>15.8-SC</td>
<td>Mid 2015</td>
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<td>Aptos</td>
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<td>April 30, 2015</td>
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<tr>
<td>Fujitsu</td>
<td>Retail Suite</td>
<td>4.4</td>
<td>March 2015</td>
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<td>Microsoft Dynamics</td>
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<td>2012R3</td>
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<tr>
<td>NCR</td>
<td>Suite of POS products*</td>
<td></td>
<td></td>
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<td>Oracle</td>
<td>Retail Xstore Point Of Service</td>
<td>7.1</td>
<td>March 2014</td>
</tr>
<tr>
<td>PCMS</td>
<td>Vision Commerce Suite</td>
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<td>November 2014</td>
</tr>
<tr>
<td>Polaris Enterprise Solutions</td>
<td>iRetail</td>
<td>7.0</td>
<td>February 2015</td>
</tr>
<tr>
<td>SAP</td>
<td>Point-Of-Sale by GK</td>
<td>5.0</td>
<td>April 15, 2015</td>
</tr>
<tr>
<td>Wincor Nixdorf</td>
<td>TP.net</td>
<td>5.5</td>
<td>May 31, 2014</td>
</tr>
</tbody>
</table>

Vendor selection criteria

- Sufficient level of interest from the Forrester client base
- Point-of-service packaged applications that were deployed in 20 or more large retailers
- Annual revenues of $60 million or more

*OmniPOS1, 7.1; Advanced Store, 6.6; Counterpoint, 8.5; R10 Enterprise Solution, 10.5.5; StoreLine, 8.4.7; Advanced Checkout Solution, 7.0; RetailOne; RPOS, 6.12; Power DAX, 10.5.6; Power HQ, 10.4; Power Inventory, 10.5.6; Aloha POS; Silver; Counterpoint; Silver Pro Restaurant Edition

POS Software Rises To The Omnichannel Challenge

The evaluation uncovered a market in which (see Figure 2):

- **Aptos, Demandware, Fujitsu, NCR, and PCMS lead the pack.** These vendors delivered mature, sophisticated, comprehensive current capabilities and “out of the box” eCommerce integration, together with compelling strategy, and thus lead the pack.

- **Microsoft Dynamics, Oracle, SAP, and Wincor Nixdorf offer competitive options.** These vendors offered nearly the same level of current capability and nearly the same strategy as the Leaders, but lagged in small details. The Strong Performers lack a common reason for trailing the Leaders. While the Leaders showed us stronger capabilities in areas such as offline trading and POS maintenance, some of the Strong Performers outperformed the Leaders in criteria such as device integration, discounts and promotions, and even store pickup.
- **Polaris lacks some capability around targeting and ability to influence standards.** While Polaris provided some impressive transaction support (including the ability to generate invoices), it lacked some capabilities around automated customer segmentation and targeting.

This evaluation of the point-of-service software market is intended to be a starting point only. We encourage clients to view detailed product evaluations and adapt criteria weightings to fit their individual needs through the Forrester Wave Excel-based vendor comparison tool.

**FIGURE 2** Forrester Wave™: Point Of Service, Q3 ’15

Go to Forrester.com to download the Forrester Wave tool for more detailed product evaluations, feature comparisons, and customizable rankings.
Vendor Profiles

Leaders Deliver Applications And Vision Supporting Differentiated Store Strategies

› Demandware. Demandware delivers superior endless-aisle functionality and cross- and upsell. But its acquisition of Tomax also brought more store-specific capabilities, such as price overrides and staff discounts and commissions. Demandware has a relatively limited store solution user base, both in numbers and in geographic distribution, but offers a compelling vision for future store systems and internationalization. Demandware would be most attractive to a retailer looking for the highest-touch retail experience, especially in a luxury category, to offer the same personalization in-store that it offers online.

› Aptos, Inc. (formerly Epicor Retail Solutions). Aptos, thanks to its long history with retailers like JCPenney, provides sophisticated line-item treatment, age validation, taxes, and price overrides.
Aptos offers a superior road map and strategy for managing customization together with a significant installed base and broad geographic distribution. A retailer in search of a well-proven store solution in specialty, and particularly apparel, retail would be attracted to the Aptos solution. Such a client would likely appreciate its enterprise selling, clienteling, and CRM capabilities to target groups of customers or individuals.

- **Fujitsu.** Fujitsu, with a long history in stores all over Asia and Europe, as well as a growing presence in America, offers superior functionality in traditional store POS, but also line-busting, customer self-service, and store-within-store-functionality. Fujitsu Market Place offers a fascinating vision of a framework for orchestrating a retailer’s assets to deliver differentiating cross-channel experiences without ripping and replacing legacy investments. Fujitsu’s POS would be most attractive to a retailer looking for a single application provider and systems integrator to support store operations in multiple countries, especially if the retailer’s formats included store-within-store and/or self-service.

- **NCR.** NCR, with its vast experience and range of retail application assets, delivers a wide range of deep current capabilities, including specialist capabilities to serve the fast-growing convenience retail sub-vertical. Its investments in loyalty, convenience, and hospitality provide the assets to orchestrate differentiating customer experience across multiple retail sub-verticals and to respond to the changing retail environment. It also scored well on customer self-service, store-within-store functionality, and international deployment capabilities. NCR leads the field in terms of its ability to influence and adhere to standards, in addition to its vision and massive installed base. NCR would also appeal to retailers looking for a single vendor to manage applications and service globally and to manage legacy store estate.

- **PCMS.** PCMS offers strength in line-item treatment, line-busting, and customer self-service, but also in inventory management, contributing to its compelling vision for the future and ability to manage customization while safeguarding the retailer’s upgrade path. PCMS also offers intriguing integration with social computing for retailers looking to capitalize on social networks. PCMS would be most interesting to a multichannel, multiformat retailer with self-service and line-busting that is interested in exploiting its innovative integration of social technologies and keen to capitalize on its proven exploitation of J2EE architecture.

**Strong Performers Challenge With Loyalty, Insight, Or Device Innovation**

- **Microsoft Dynamics.** Microsoft offers superior social networking integration and strong functionality for inventory management and store-within-store functionality as well as for influencing and adopting standards. Microsoft also has a very significant retail store user base and the widest range of store technology offerings. As might be expected, it showed the most compelling vision for adoption of new interfaces like Microsoft Surface to enrich the store experience. Microsoft would appeal to retailers in specialty categories like fashion or home improvement or others that require an ERP level of inventory and order management at the store, as well as at enterprise level.
› **Oracle.** Oracle delivers leading functionality for store line-item treatments and for price overrides and staff discounts. It leads the field in clienteling and loyalty. It also delivers sophisticated capabilities in omnichannel order management, using an order broker to suggest preferred and feasible locations from which to fulfill orders. It offers 18 languages with the base solution that can be accessed based on the store’s language preference. Oracle’s POS solution appeals to retailers in specialty or destination retail that value the breadth of the Oracle retail footprint, which now includes hospitality and multiple eCommerce assets as well as store solutions.

› **SAP.** SAP’s GK POS leads the field in discount and promotion functionality, with some of its clients applying as many as 300,000 discount rules at each scan (rather than at the end of the basket). The solution also offers strengths in endless-aisle functionality and in multilanguage, multicountry readiness and deployment, though the number of implementations is still relatively modest. While it is attractive to retailers looking for standalone or omnichannel POS, SAP will be most interesting to retailers looking to develop innovative exploitation of the firm’s big data and predictive analytics framework, customer activity, and repository in order to drive compelling insight and engagement from multiple sources of data, both internal (such as ERP or eCommerce) and external (such as social media).

› **Wincor Nixdorf.** Wincor Nixdorf leads the field in device integration, targeting promotions, line-busting, and self-service as well as manager mobility and loss prevention. Together with some other solutions we evaluated, it offers out-of-the-box integration with eCommerce solutions like Hybris. Thanks to its sister banking business unit, it also offers innovative cash management. Wincor Nixdorf will be most interesting to retailers looking for a single provider of software and integration services capable of supporting global implementations.

**Contenders Shine In Delivering Select Store Capabilities**

› **Polaris Enterprise Solutions.** Polaris delivers excellent functionality for line-item treatment, together with superior returns functionality; store pickup, including routing orders to the optimum fulfillment store; and multicurrency capabilities. It has a significant installed base in developing economies. Retailers in categories such as home improvement where a “trade counter” serves small business customers will appreciate the Polaris capability to produce an invoice, rather than simply a receipt.
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Supplemental Material

**Online Resource**
The online version of Figure 2 is an Excel-based vendor comparison tool that provides detailed product evaluations and customizable rankings.

**Data Sources Used In This Forrester Wave**
Forrester used a combination of data sources to assess the strengths and weaknesses of each solution:

› **Vendor surveys.** Forrester surveyed vendors on their capabilities as they relate to the evaluation criteria. Once we analyzed the completed vendor surveys, we conducted vendor calls where necessary to gather details of vendor qualifications.

› **Customer reference calls.** To validate product and vendor qualifications, Forrester also conducted reference calls with two of each vendor’s current customers.
The Forrester Wave Methodology

We conduct primary research to develop a list of vendors that meet our criteria to be evaluated in this market. From that initial pool of vendors, we then narrow our final list. We choose these vendors based on: 1) product fit; 2) customer success; and 3) Forrester client demand. We eliminate vendors that have limited customer references and products that don’t fit the scope of our evaluation.

After examining past research, user need assessments, and vendor and expert interviews, we develop the initial evaluation criteria. To evaluate the vendors and their products against our set of criteria, we gather details of product qualifications through a combination of lab evaluations, questionnaires, demos, and/or discussions with client references. We send evaluations to the vendors for their review, and we adjust the evaluations to provide the most accurate view of vendor offerings and strategies.

We set default weightings to reflect our analysis of the needs of large user companies — and/or other scenarios as outlined in the Forrester Wave document — and then score the vendors based on a clearly defined scale. These default weightings are intended only as a starting point, and we encourage readers to adapt the weightings to fit their individual needs through the Excel-based tool. The final scores generate the graphical depiction of the market based on current offering, strategy, and market presence. Forrester intends to update vendor evaluations regularly as product capabilities and vendor strategies evolve. For more information on the methodology that every Forrester Wave follows, go to http://www.forrester.com/marketing/policies/forrester-wave-methodology.html.

Integrity Policy

All of Forrester’s research, including Waves, is conducted according to our Integrity Policy. For more information, go to http://www.forrester.com/marketing/policies/integrity-policy.html.

Companies Interviewed For This Report

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Endnotes

1 The Forrester Wave evaluation of POS software from Q3 2006 refers to “point of sale.” The Forrester Wave evaluation of POS from Q2 2012 emphasizes the role of store applications in supporting cross-channel service such as online returns in store or click-and-collect. See the “The Forrester Wave™: Point Of Service, Q2 2012” Forrester report.

2 Most retail sales will still occur in a physical store. Although mCommerce and eCommerce sales are growing at a faster rate than traditional store sales, the majority of retail sales will still occur in a store environment. See the “Market Overview: Mobile Point Of Service Solutions For Retail” Forrester report.

3 Mobile presents an enormous opportunity to transform the customer experiences for those able to cope with relentless device permutations, demanding human factors, and expectant customers. See the “The Best And Worst Of Mobile User Experience” Forrester report.

4 NCR DynaKey was designed by human factors engineers to reduce training time and cashier errors. Source: “NCR RealPOS Dynakey,” NCR (http://www.ncr.com/retail/department-specialty-retail/assisted-service-hardware/realpos-peripherals/realpos-dynakey).

5 As expected, almost all IT executives surveyed (97%) consider managing data security to be one of their top five considerations in 2015. See the “The Retail CIO Agenda 2015: Secure And Innovate” Forrester report.

6 Purchasing mPOS software from the same vendor that provides incumbent POS solutions will allow retailers to seamlessly integrate with their existing systems. These integrations are often quick, as the mPOS solution simply acts as another register, although retailers may need to upgrade their POS infrastructure to the vendor's latest release as a prerequisite to using mPOS. Typically all functions that exist in the physical point of service register are also available on the mobile thin client.

7 To be sure, some eCommerce vendors realized that the tablet website form factor was too clumsy for store associates and worked with partners to develop a “cartridge” for native deployment on Android or iOS to improve usability. We reluctantly excluded eCommerce solutions, such as Hybris and its store extensions from TCS, but included Demandware in the Forrester Wave because it went even further by acquiring Tomax for its experience of deploying a cloud application to the store. In January 2015, Demandware acquired Tomax, a Salt Lake City-based provider of point-of-service (POS), store operations, and merchandising solutions, in order to accelerate Demandware’s ambitions to broaden its presence into the physical store. Most notably, the acquisition gives Demandware much-needed domain expertise in the areas of POS, store operations, and cash management. See the “Brief: Demandware Gears Up To Enter The Store” Forrester report.
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