

ATM Software 2018

Market Data and Deployer Perspectives



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www.rbrlondon.com

RBR's *ATM Software 2018* study is the result of in-depth quantitative and qualitative research into this rapidly evolving market

Banks' ATM software projects increasingly extend beyond the channel

- ▶ Omnichannel initiatives see the ATM linked with mobile banking and CRM systems
- ▶ Branch transformation projects demand extended functionality and integration capabilities
- ▶ Banks' requirements are changing rapidly, from both technical and business perspectives



RBR's study provides vendors with an in-depth understanding of a rapidly changing market

- ▶ Detailed ATM software market size figures, plus in-depth coverage of multivendor projects
- ▶ Comprehensive vendor data, enabling competitive analysis down to individual country level
- ▶ In-depth description of banks' experiences, future plans, requirements and selection criteria

Part 1 provides data for the global market for ATM applications and monitoring software, including figures for “multivendor” projects

Part 1 – Market Data

Scope¹

- ▶ Data for **ATM applications** (including middleware) and **monitoring software**
- ▶ **Q4 2017** data by country and region
 - Size of **multivendor** market, as well as total ATM installed base
 - **Vendor shares** of total and multivendor markets
 - Number and **names of banks** using multivendor software
- ▶ **2022 forecasts** for application software
- ▶ **Historical data** (2007, 2009, 2012, 2015)

Methodology

- ▶ Study **participants to provide data** on own deployments
- ▶ Information solicited from other suppliers (total of **35+ vendors**)
- ▶ Accuracy of **submissions verified** using in-house data and other sources
- ▶ Supplier input combined with **existing RBR data** to cover “total” ATM market
- ▶ Data analysed to draw **key insights**
- ▶ Forecasting methodology refined

¹ For full details, see Appendix

Part 2 examines banks' perspectives on ATM software, including the impact of omnichannel and branch transformation initiatives

Part 2 – Deployer Perspectives

Scope

- ▶ **30 banks** interviewed
- ▶ Topics covered include:
 - ATM software **purchasing process**
 - Vendor/product **selection criteria**
 - Projects including **omnichannel** integration, **assisted self-service** etc.
 - Perspectives on **ATM monitoring** software and **ATM monitoring**

Methodology

- ▶ **Target** large and medium-sized banks from around the world
 - Institutions from across **EMEA**, the **Americas** and **Asia-Pacific**
- ▶ Contact relevant individuals and carry out **in-depth telephone interviews**
- ▶ **Findings in the form of** detailed profiles of each interviewed institution

Data are provided for 64 countries across 6 regions

Asia-Pacific	North America	Latin America	Western Europe	Central & Eastern Europe (CEE)	Middle East & Africa (MEA)
<ul style="list-style-type: none"> ▶ Australia ▶ Bangladesh ▶ China ▶ Hong Kong ▶ India ▶ Indonesia ▶ Japan ▶ Malaysia ▶ New Zealand ▶ Pakistan ▶ Philippines ▶ Singapore ▶ South Korea ▶ Taiwan ▶ Thailand ▶ Vietnam ▶ Other 	<ul style="list-style-type: none"> ▶ Canada ▶ USA 	<ul style="list-style-type: none"> ▶ Argentina ▶ Brazil ▶ Chile ▶ Colombia ▶ Mexico ▶ Peru ▶ Venezuela ▶ Other (incl. Caribbean) 	<ul style="list-style-type: none"> ▶ Austria ▶ Belgium ▶ Denmark ▶ Finland ▶ France ▶ Germany ▶ Greece ▶ Ireland ▶ Italy ▶ Netherlands ▶ Norway ▶ Portugal ▶ Spain ▶ Sweden ▶ Switzerland ▶ Turkey ▶ UK ▶ Other 	<ul style="list-style-type: none"> ▶ Belarus ▶ Bulgaria ▶ Croatia ▶ Czech Republic ▶ Hungary ▶ Kazakhstan ▶ Poland ▶ Romania ▶ Russia ▶ Serbia ▶ Slovakia ▶ Slovenia ▶ Ukraine ▶ Other 	<ul style="list-style-type: none"> ▶ Egypt ▶ Iran ▶ Israel ▶ Kenya ▶ Morocco ▶ Nigeria ▶ Saudi Arabia ▶ South Africa ▶ UAE ▶ Other

30 banks were profiled, who collectively deploy 485,000 ATMs

Overview

- ▶ RBR interviewed 30 banks across 17 major ATM markets in December 2017 and January 2018
- ▶ Collectively, the institutions profiled deploy 485,000 ATMs – 16% of the world’s bank-grade ATMs
- ▶ Every institution interviewed has an estate of at least 1,000 ATMs, and half of the institutions interviewed rank among the three largest ATM deployers in their respective markets

Americas	Asia-Pacific	Europe, Middle East and Africa
<ul style="list-style-type: none"> ▶ Afirme (Mexico) ▶ Banorte-Ixe (Mexico) ▶ Bradesco (Brazil) ▶ Desjardins (Canada) ▶ Huntington Bank (USA) ▶ KeyBank (USA) ▶ PNC Bank (USA) ▶ Regions Bank (USA) ▶ TD Canada Trust (Canada) ▶ TecBan (Brazil) ▶ US Bank (USA) 	<ul style="list-style-type: none"> ▶ Bank Central Asia (Indonesia) ▶ CCB (China) ▶ Commonwealth Bank (Australia) ▶ Cuscal (Australia) ▶ ICBC (China) ▶ SBI Group (India) 	<ul style="list-style-type: none"> ▶ Absa Bank (South Africa) ▶ Alfa-Bank (Russia) ▶ Banques Populaires (France) ▶ BBVA (Spain) ▶ BNP Paribas (France) ▶ Finanz Informatik (Germany) ▶ Garanti Bank (Turkey) ▶ Ibercaja Banco (Spain) ▶ Intesa Sanpaolo (Italy) ▶ KBC Bank (Belgium) ▶ Lloyds Banking Group (UK) ▶ UniCredit (Italy) ▶ Sberbank (Russia)

In addition to the study report and database, clients receive access to senior researchers; a presentation of key findings can also be arranged

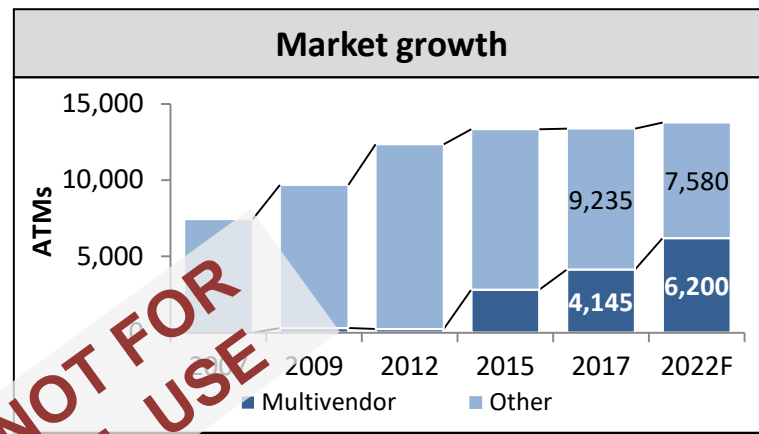
- Deliverables**
- ▶ Electronic (multi-user licence) copies of research findings
 - Part 1 Executive report in PowerPoint containing key market statistics, trends and commentary by country and region
Comprehensive market database provided in Excel
 - Part 2 Report comprising profiles of interviewed institutions
 - ▶ A conference call presentation of the study results can be organised if desired
 - ▶ Privileged access to RBR's senior research analysts
- Price**
- ▶ £35,000

Appendix

Study Deliverables Samples

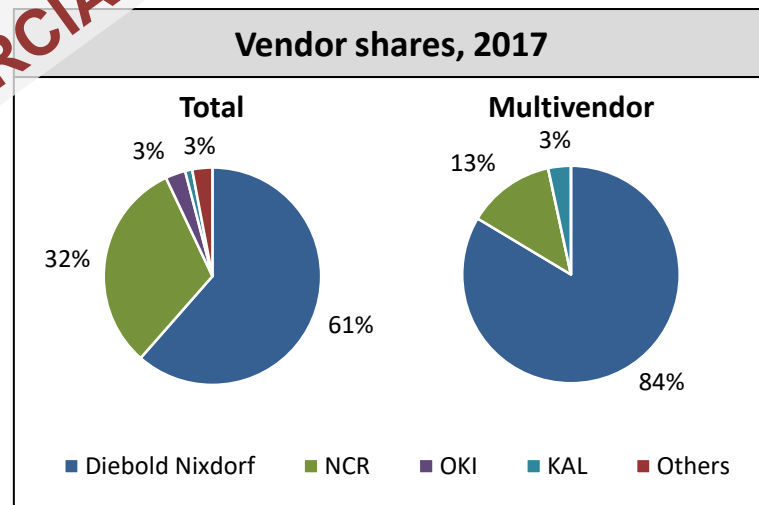
CIMB Bank was the first domestic bank to use multivendor software in Malaysia

Key facts, 2017			
Metric	Multivendor	Other	Total
# ATMs	4,145	9,235	13,380
- Global Rank	25		35
Penetration	31%	69%	100%
- Global Rank	34		
Multivendor deployments: CIMB Bank, HSBC, OCBC Bank, Citibank			



Market insights

- ▶ CIMB Bank is the first domestic Malaysian bank to adopt multivendor software, having done so since 2011. All other users are foreign-owned
- ▶ Other domestic banks are likely to follow suit over the next few years
- ▶ Banks' estates feature different types of terminals (recyclers, dispensers, deposit-only) and multiple suppliers, so multivendor software should deliver significant benefits



An Excel spreadsheet provides comprehensive data for custom internal analyses

- ▶ Comprehensive data for all 64 countries in RBR's report *Global ATM Market and Forecasts to 2022*
- ▶ Market sizes, historical data and forecasts for applications and monitoring software
- ▶ Vendor data for applications, middleware platforms and monitoring tools

Country	ATMs, 2017			ATMs, Rank, 2017		Penetration, 2017
	Multivendor	Other	Total	Multivendor	Total	Multivendor
Australia	X,XXX	XX,XXX	XX,XXX	XX	XX	XX%
Bangladesh	XX	XX,XXX	XX,XXX	XX	XX	X%
China	XXX,XXX	XXX,XXX	XXX,XXX	X	X	XXX%
Hong Kong	X,XXX	X,XXX	X,XXX	XX	XX	XX%
India	XX,XXX	XXX,XXX	XXX,XXX	X	X	XXX%
Indonesia	XX	XX,XXX	XX,XXX	XX	X	XXX%
Japan	XX	XXX,XXX	XXX,XXX	N/A	X	X%
Malaysia	XX	XX,XXX	XX,XXX	XX	XX	XXX%
New Zealand	X,XXX	X,XXX	X,XXX	XX	XX	XXX%
Pakistan	X,XXX	XX,XXX	XX,XXX	XX	XX	XXX%
Philippines	XX,XXX	XX,XXX	XX,XXX	XX	XX	X%
Singapore	XX	X,XXX	X,XXX	XX	XX	XXX%
South Korea	X,XXX	XXX,XXX	XXX,XXX	XX	X	X%
Taiwan	X,XXX	XX,XXX	XX,XXX	XX	XX	XXX%
Thailand	XX	XX,XXX	XX,XXX	XX	X	X%
Vietnam	X,XXX	XX,XXX	XX,XXX	XX	XX	XXX%
AP - Other	X,XXX	XX,XXX	XX,XXX	XX	XX	X%
AP - Regional Total	XXX,XXX	XXX,X,XXX	XXX,X,XXX	X	X	XXX%

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Confidential - Client internal use only																				
Measure	Country	Total	Auriga	CR2	Diebold Nixdorf	DPS	Genicom	Hitachi Omron	Hitachi	Hitachi	Glory	GRG	Hiaward	Hitachi-Omron	KAL	KingTeller	Nautlius Hyosung	NCR	OKI	Proprietary
Total, 2017	Austria	X,XXX	X	X	X	X	X	XX	X	X	X	X	X	X	X	X	X	X,XXX	X	X,XXX
	Belgium	X,XXX	XXX	X	X,XXX	X	X	X	X	X	X	X	X	X	X	X	X	XXX	X	X,XXX
	Denmark	X,XXX	X	X	XXX	X	X	XXX	X	X	X	X	X	X	X	X	X	XXX	X	X
	Finland	X,XXX	X	X	X	X	X	XXX	X	X	X	X	X	X	X	X	X	X	X	X,XXX
	France	XX,XXX	X	X	XX,XXX	X	X	X	X	X	X	X	X	X	X	X	X	XX,XXX	X	X,XXX
	Germany	XX,XXX	X	X	XX,XXX	XX,XXX	X	X	X	X	X	X	X	X	XXX	X	X	X,XXX	X	X,XXX
	Greece	X,XXX	X	X	X,XXX	X	X	X	X	X	X	X	X	X	X	X	X	X,XXX	X	XXX
	Ireland	X,XXX	X	X	X,XXX	X	X	XXX	X	X	X	X	X	X	X	X	X	XXX	X	XX
	Italy	XX,XXX	XX,XXX	X	X,XXX	X	X	X	X	X	X	X	X	X	X,XXX	X	X	X,XXX	X	XXX
	Netherlands	X,XXX	X	X	X,XXX	X	X	XX	X	X	X	X	X	X	X,XXX	X	X	X,XXX	X	X
	Norway	X,XXX	X	X	XXX	X	X	X,XXX	X	X	X	X	X	X	XX	X	X	X	X	X
	Portugal	XX,XXX	XX	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Spain	XX,XXX	X	X	X,XXX	X	X	X	XX,XXX	XX	X	X	X	X	X	XX	X	X	X,XXX	X

The part 2 “Deployer Perspectives” report comprises in-depth profiles of every institution interviewed for the study

- ▶ Profiles of every bank interviewed
- ▶ Each profile contains:
 - Background on bank, including ATM estate
 - Details of ATM software platform
 - Customer experience: current and future ATM software projects, including assisted self-service, alternative interaction technologies, CRM/personalisation and integration with other channels
 - Procurement: vendor selection criteria and purchasing process
 - ATM network management, including monitoring

In 2014, BBVA began rolling out ATMs with contactless/NFC readers, and around half of its estate offered “on-us” contactless cash withdrawals via cards at the end of 2017. The bank is developing this facility, and plans to offer mobile NFC withdrawals and “not-on-us” contactless card withdrawals by June 2018. The bank comments that contactless withdrawals have become popular with many of its customers owing to their speed and convenience, and believes that uptake of one-tap ATM transactions will accelerate following the introduction of smartphone NFC withdrawals.

BBVA has been piloting biometric withdrawals using palm vein identification on one of its Fujitsu ATMs for several years, but has yet to make any decision regarding wider rollout. It believes that mobile may also allow customers to take advantage of biometric withdrawals, using the fingerprint reader or facial recognition function of their handset, bypassing the need for the bank to invest in costly hardware itself.

BBVA customers have access to pre-staged cash withdrawals using a one-time code generated via the bank’s mobile app “Efectivo móvil” (mobile cash). Codes can also be sent to a mobile number of the customer’s choice as a means of payment. The bank is considering enabling NFC functionality for pre-staged withdrawals on the customer’s handset, but has no plans to use Bluetooth as this would require additional hardware upgrades where there is no discernible demand from customers.

Since 2007, BBVA has been increasing the degree of personalisation on its ATMs, the result of which has been to improve the customer relationship and create a more seamless user experience. The home screen automatically displays the customer’s most recent transactions, offers a quick cash option and a marketing offer generated by the bank’s proprietary CRM system. Customers can also set numerous default options such as the display language (either regional or foreign), receipt options (printed, email or SMS) and their preferred currency denominations. These are stored for future interactions, but can be easily amended at any time. Finally, ATMs offer customers non-bank information such as the location of the nearest petrol station and their current prices, which the bank considers a further enhancement to the user experience.

Procurement

BBVA’s ATM 4.0 application software is fully developed and maintained in-house and the bank has no plans to procure any software from a third party. The bank has established a successful working relationship between its in-house software developers and its three hardware suppliers, allowing it to resolve most compatibility issues with minimal difficulty.

ATM 4.0 is compatible with both XFS and JFS standards – the bank changes one parameter in order to switch from one set of standards to the other – and is capable of running over different operating systems. Having recently migrated most of its fleet to Windows 7, BBVA is not considering any alternative operating systems such as Linux.