

While still small compared with other parts of the world, the region's RFID market is expected to grow to \$69 million in 2012—nearly quadruple what it was in 2007.

By Beth Bacheldor

Feb. 12, 2009—Organizations across North America, Europe and Asia have been investing in radio frequency identification for several years to help improve operations, cut costs and boost revenues. Now, the technology is gaining traction in a new corner of the world: the Middle East.

In 2007, the market for RFID hardware, software and services in the Middle East region was valued at approximately \$18.1 million, and last year it was estimated to be worth about \$22.9 million, according to [VDC Research](#), a technology market research and strategy firm located in Natick, Mass. This year, VDC estimates the market will reach \$29.4 million (the firm notes that 2008 figures are estimates subject to change in light of current unstable economic conditions worldwide). By 2012, the market in the Middle East is expected to be \$69.1 million, VDC reports, with the overall RFID market in the Middle East expected to grow an average 24.7 percent year-over-year between 2007 and 2012. The countries included in VDC's Middle East forecast are Turkey, Iran, Iraq, Saudi Arabia, Yemen, Syria, Israel, Jordan, United Arab Emirates (UAE), Lebanon, Palestine, Kuwait, Oman, Qatar and Bahrain.

The RFID market size in the Middle East may be small compared with the rest of the world, but its growth is stronger than certain other regions, especially for certain applications. In the Middle East, the focus is on employing RFID as a tool to help track assets and individuals, particularly in the construction and oil and gas industries—two of the region's top industries. RFID is also making headway in other sectors, including the auto industry, retail, health care, and some of the region's governments, which have RFID-enabled identification card and passport initiatives.

"The Middle East, in a positive sense, is the perfect storm for RFID," says Mike Meranda, CEO of [TagStone](#), a relatively new RFID consultancy based in Dubai, United Arab Emirates. Founded in 2005 (see [TagStone Launches, Announces Partnerships](#)), the company operates an RFID testing and demonstration facility in Dubai, and offers business assessment, process and technology blending, solution architecture, technology selection, and solution integration and support in that area of the world.

In contrast, VDC notes, the RFID market for North and South America in 2007 was \$415 million, and is expected to expand to \$1.28 billion by 2012. In the combined Europe, Middle East and Africa (EMEA) region (of which Europe counts for the majority of revenue), the RFID market was valued at \$428 million, and expected to rise to \$960 million by 2012. And in the Asia-Pacific region, VDC reports, the RFID market in 2007 was \$379 million and will reach \$1.6 billion by 2012.

In Europe and North America particularly, RFID has received a great deal of attention as a technology tool to help retailers and others track cases and pallets of goods as they traverse supply chains, from the moment they leave suppliers' sites until they move through distribution channels and arrive at the

retail stores (a movement spurred by retail giants [Wal-Mart Stores](#) and [Metro Group](#)). In Asia Pacific, much of RFID's growth has been fostered by that region's national governments, which have been active in RFID technology pilots and the development of international RFID standards. Additionally, Asia Pacific's continued growth as a manufacturing hub has spurred the technology's use in factories and warehouses.

In the Middle East, on the other hand, many governments and companies are looking to emulate Singapore and Hong Kong, both of which, according to Meranda, have vibrant economies but very little in the way of natural resources or land. As in Singapore and Hong Kong, there is a real appreciation for technology in that region. "The difference in the Middle East is countries there have a little more land, and lots more money," he says. "There is a lot of infrastructure building, a lot of capital and forward-leaning thinking."

TagStone is currently working on RFID implementations for two offshore oil companies owned by the government of Abu Dhabi, the capital and second most populous city in the UAE, after Dubai. Both firms are utilizing active RFID-enabled wristbands from [Identec Solutions](#), which will help them track employees at all times, particularly in the event of an emergency. Thousands of workers will be tracked at each company, Meranda says; one firm's RFID deployment is already up, he adds, while the other is expected to implement the solution this summer.

RFID-enabled tracking applications are not only being implemented in the construction and oil and gas industries. [Intellexflex](#), a Santa Clara, Calif., provider of RFID systems for yard management, asset tracking and applications for transportation and logistics, aviation and hospitality, reports that it is currently in discussions with several clients regarding the use of radio frequency identification to track individuals. Six months ago, says Sam Liu, Intellexflex's director of marketing, the company worked with a Turkish hospital to install an RFID-enabled tracking system the hospital uses to track employees for accounting purposes.

"A lot of the employees there get paid hourly," Liu explains, "and the hospital was having a hard time tracking exact hours." Using Intellexflex's battery-assisted passive (BAP) badge tag, the hospital (which Intellexflex is not at liberty to name) can track and monitor when workers come in and leave, as well as their location within the hospital. The tags operate at the 865-868 MHz ultrahigh-frequency (UHF) band and comply with [EPCglobal](#)'s proposed Class 3 standard.

In addition, TagStone worked on another RFID-enabled people-tracking initiative with Kuwait retailer MS Retail. The retailer has an RFID system at its new children's superstore, [Baroué](#), designed to enable parents to monitor their kids as they play in the store's playground. The system utilizes cameras and [Ubisense](#) ultra-wideband (UWB) active RFID tags and interrogators (see [At a Kuwaiti Children's Store, Parents Drop and Shop](#)).

Many current applications and RFID initiatives in the Middle East are closed-loop initiatives that involve the use of RFID within only a single organization. But there is a multi-country initiative—a pilot overseen

by the [Universal Postal Union](#) (UPU) that could help encourage the technology's use across organizational and country boundaries. The UPU is a United Nations agency that serves as the primary forum for cooperation between postal organizations worldwide. In 2008, Qatar, Saudi Arabia and the United Arab Emirates tested whether RFID would work as a tool for measuring the performance of mail delivery services.

The pilot, spearheaded by Qatar's [General Postal Corp.](#) (Q-Post) and also including [Saudi Post](#) and [Emirates Post](#), leveraged both passive EPC Gen 2 tags and active tags placed on approximately 3,120 test letters that circulated among the three nations (see [U.N.'s Universal Postal Union Gears Up for Large RFID Pilot](#)). The UPU is now gearing up for a large-scale pilot, set to commence in April 2009, that will involve the deployment of RFID systems in Dubai, UAE and Saudi Arabia, as well as in all other participating countries (a total of 20 initially, with 30 more joining in 2010), and the development of requisite data and analysis programs.

Several Middle Eastern countries also have aggressive plans for using RFID-enabled identification cards and passports. The Kingdom of Bahrain, for instance, recently ordered an additional 1 million electronic ID cards from Dutch digital security firm [Gemalto](#). The order extends the country's original electronic ID system that got underway in 2007, which leverages RFID-enabled electronic ID cards that serve as the official ID for Bahrain citizens, as well as for foreign residents. Bahrain is not the only government in the region employing RFID-enabled ID cards; the [Gulf Cooperation Council](#) (GCC), of which Bahrain is a member, is championing the use of the RFID-enabled ID cards and passports. The GCC is a trade bloc involving the six Arab states of the Persian Gulf (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE).

Louis Bianchin, a senior analyst with VDC Research's auto-ID and transaction-automation practice, agrees that RFID's use is growing in the Middle East, but adds that challenges still remain. "It is encouraging to see the uptake, but it is not quite there yet, and we wish the market could do better," Bianchin states. "There aren't as many [RFID] distributors in the region. While there are some local distributors, the knowledge of these distributors is limited."

RFID vendors have spent most of their efforts in the United States and Europe, then moved on to Asia, and then to Latin America, according to Michael Liard, practice director of RFID for [ABI Research](#), a market research firm located in Oyster Bay, N.Y. More recently, he says, vendors have been eyeing the Middle East.

"But it takes time to foster channels, and to do market outreach," Liard says. "There are go-to-market strategy challenges, and there aren't that many qualified systems integrators and resellers in that region who can really promote the value and business of RFID." Language and cultural differences are also challenges that can take time to work through, he adds.

This year, RFID Journal will host its first RFID technology conference and exhibition in the region—[RFID Journal LIVE! Middle East](#). Conference sessions will cover how radio frequency identification can

improve operations in construction, logistics, oil and gas, health care and other industries. The event will be held on June 15-17 at the InterContinental Hotel Festival City in Dubai.

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