Commentary

FSP Wireless Architectures: Plan Now for Future Flexibility

A flexible Adaptive Application Architecture is critical for financial services providers that need to deliver mobile services — whether business-to-consumer, business-to-employee or business-to-business — now or in the future.

Despite their initial — and perhaps exaggerated — promise, mobile business-to-customer (B2C) applications have proved to be a disappointment for many of the financial services providers (FSPs) that have deployed them. FSP B2C wireless implementations have frequently proved to be highly problematical, and customer demand and return on investment (ROI) have been unsatisfactory. The result: Many customer-facing mobile implementations are being reduced, abandoned or refocused as business-to-employee (B2E) programs.

Gartner believes that, in the near term, B2E mobile applications, and in the longer term, B2C — and, to some extent, business-to-business (B2B) applications — still offer significant potential for FSPs (see "Wireless in Retail Banking: B2C vs. B2E"). Embracing wireless technologies is becoming an important aspect of contemporary FSP strategies, whether to provide a complete repertoire of retail delivery channels or to enhance employee productivity and effectiveness. Whatever the purpose of the endeavor, the key to long-term success will be a more deliberate and calculated technology deployment than those driven by the now-faded hype surrounding wireless.

Virtually every aspect of mobile financial services — technologies, market demands and user needs — remains highly fluid and subject to rapid and ongoing change. FSPs that have any interest in wireless services, now or in the future, must prepare well in advance to respond to this change. The key to this essential preparedness is strategic, long-term planning — in marked contrast to the tactical and often hastily improvised deployments that have been characteristic of most FSP wireless implementations — using the architectural approach Gartner has identified as Adaptive Application Architecture (A3; see "The Impact of Mobility on Enterprise Architectures"). A3 is the key approach that will enable FSPs to provide appropriate wireless B2C, B2E and B2B product and service offerings in an environment of rapid and unpredictable change in technological and business demands. A3 is required to provide the flexibility, reusability and scalability demanded by this fluid environment.

Why Is the A3 Approach Essential for FSPs?

- **Wireless technologies will continue to change very rapidly.** The tactical approach — essentially, tacking wireless systems on to delivery architectures — can enable FSPs to meet near-term goals for rapid deployment and minimized spending. However, the continuing rapid evolution of
device types, carrier networks and server products during the next few years will make it necessary to completely revise such tactical implementations. Because application server products will continue to change rapidly, this requirement for flexibility is even more important. Failure to plan for this process by ignoring the flexible A3 model will only speed architectural obsolescence. For example, several retail banks that were among the first to roll out wireless B2C applications gambled that the Wireless Application Protocol interface would be the one most widely used by mobile devices, and built inflexible protocols for porting data to that interface. When it became clear that other types of interfaces were being adopted, the banks were forced to completely re-create their wireless delivery protocols.

- **The focus and intent of mobile initiatives will change.** The recent, pronounced shift in focus among retail banks from B2C to B2E applications illustrates that for many FSPs their B2C wireless offerings are not delivering adequate ROI (see "What Has Happened to Wireless Retail Banking?"). As a result, several FSPs have chosen to reduce or eliminate their offerings, but without abandoning their substantial investments in these technologies. The solution: using wireless technologies as a way of delivering services (for example, sales force automation tools or wireless e-mail) to their own employees. This approach enables an FSP to realize some ROI from its mobile investment, and leaves in place applications and infrastructure that can be leveraged if B2C programs are reinstated. In addition, it builds in agility for FSPs whose first wireless programs are B2E initiatives and that may eventually want to leverage those capabilities into B2C services. The highly flexible A3 approach enables FSPs to respond rapidly to such unpredictable changes in perceived business needs.

- **The types of functionality needed continue to change.** The earliest FSP implementations of B2C wireless focused on providing very basic support for demand deposit account functions; however, the FSPs quickly recognized that wireless users wanted additional functionality, such as funds transfer and stock alerts. B2E applications are also moving slowly from basic e-mail and calendar services to more-sophisticated applications, such as sales force automation. Unless the A3 approach is adopted, the future addition of B2C and B2E functionality and services may require significant system refitting. For example, FSP architectures that do not effectively isolate the application layer from the processing, database and delivery layers may operate well when only account balance and transaction history data is made available. New functionality, such as proactive account activity notification, may be very difficult to port to the wireless and other channels.

- **A3 enables an FSP to address two critical, and closely related, needs: multichannel integration and consistency of product/service delivery across channels.** This is perhaps the most-compelling reason for implementing A3 because it relates not only to wireless, but to all delivery channels. FSPs must be able to present the same face — with the same information and the same processes — no matter what delivery channel a customer or employee chooses. The flexible A3 architecture scheme enables an FSP to more-easily leverage information from one channel to another, primarily requiring customization of the user interface, rather than of the entire delivery system.

- **Economic conditions change.** The need for a flexible, wireless-ready architecture is made even more critical by the uncertain state of the economy and of the financial services industry. Most FSPs are faced with constrained IT budgets and limited skills and other resources. Flexible architecture, using the A3 model, can help FSPs deal with their resource constraints by enabling them to leverage already-installed infrastructure to the greatest extent possible, and to more-efficiently invest in system enhancements when they are needed.
**Bottom Line:** An FSP wireless project should incorporate A3 early — perhaps in the strategic planning phase. Implementations that do not take the A3 approach may succeed in the near term, but will likely struggle — or have to be replaced altogether — in the longer term.