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Delivering Payments Value Online: CHIPS Ventures into Web-Based Management Services

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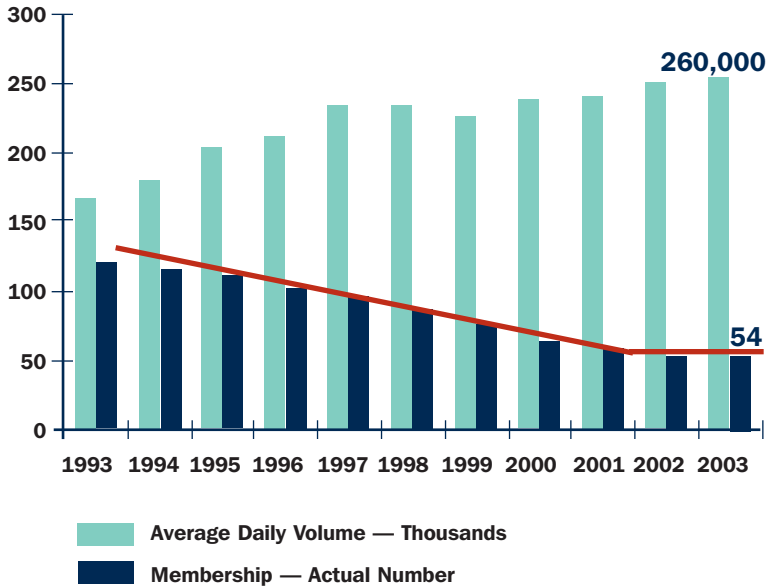
Although many early Web-based endeavors of industry-owned payments systems were ambitious e-commerce initiatives, current ventures are marked by a new pragmatic approach. Rather than embarking on strategic initiatives, payments system operators are now using the Internet channel more tactically to enhance existing business and operational processes. The Internet services introduced by Clearing House Interbank Payments System in November 2003 are a case in point. CHIPS Web access includes functions designated Supplemental Funding and Management Reporting. These initial services build on existing CHIPS functions and capabilities in liquidity and operations management. The online channel, however, expands users' access to services and increases CHIPS's ability to deliver new business and operational enhancements easily to all participants. The Internet services should help reduce friction in the clearing process and pave the way for future enhancements.

Background

CHIPS, the private sector's system for US dollar payments clearing, is owned by 54 financial institutions in 22 countries and operated by The Clearing House (New York). CHIPS provides netted, final, real-time settlement for high-value payments and currently handles more than 252,000 messages a day at a dollar volume exceeding \$1.3 trillion. Availability, performance, and liquidity are CHIPS's major benefits: Each dollar in the system turns more than 500 times per day. With the exception of 1999, when the euro was introduced, both payments message volume and dollar volume have increased annually over the past 10 years. Nonetheless, CHIPS faces an increasingly competitive environment with the realization of Continuous Linked Settlement (CLS) and the ongoing consolidation of banks and markets. CHIPS's payments message volume increased just 1.5% from 2002 to 2003, which reflects the softness in the global economy. Membership, while constant for the past two years, has halved since 1993. (See Exhibit 1.)

CHIPS is banking on the new Web services to retain current members and participants as well as attract new business to the system. It is positioning Web access as part of a service continuum, and, in fact, the Internet services are the latest in a series of recent demand-driven enhancements. Since the January 2001 introduction of CHIPS Finality, which eliminated settlement risk, CHIPS has

Exhibit 1: Member to Volume Comparison over the Past Decade



Source: TowerGroup based on CHIPS data

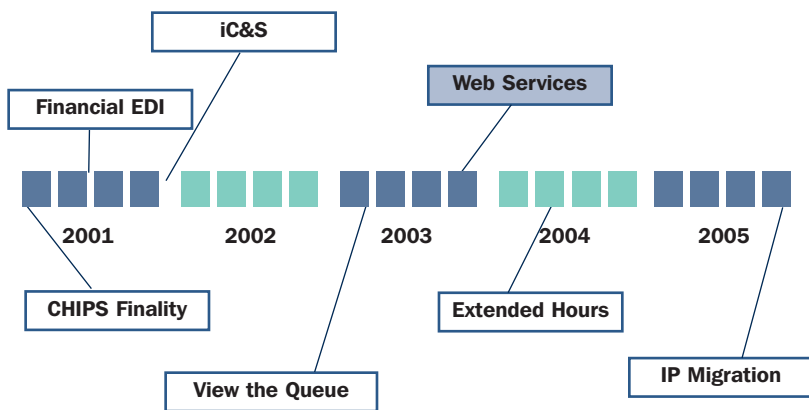
completed four major initiatives, whose benefit will be augmented by extended processing hours in May 2005. (CHIPS was the major proponent to the Federal Reserve of extended processing hours, which should enhance its members' competitiveness, particularly in Asian markets.) The Web services are also part of the process of Internet-enabling The Clearing House's electronic payment systems and facilitating CHIPS migration from X.25 to IP by the end of 2005. (Refer to Exhibit 2 for a timeline of these enhancements.)

Defining the Value Propositions

The Web will improve the efficiency of CHIPS's clearing process by providing participants with real-time access to the system for supplemental funding and payment prioritization and real-time position information, payment status, and unresolved payment message data. The services put more control in the hands of CHIPS users and give them greater insight and flexibility to manage

payment flows and to respond to customer needs. The online channel will help reduce some of the maintenance costs associated with CHIPS operations (including applications and systems development, training, and support) and at the same time will permit all participants to take advantage of CHIPS enhancements without undertaking system changes. Banks can now also distribute access to CHIPS information across their organizations. (Customer requests for security tokens have been higher than CHIPS anticipated, indicating that participants plan to offer Web access to users across a wider range of geography and function.) The Web product uses Microsoft .Net technology and industry-standard security technologies, which include limiting access to legitimate users via a secure URL on CHIPS servers.

Exhibit 2: Evolving Services Set



Source: TowerGroup

CHIPS itself benefits by the Web channel, which enhances its ability to deliver new capabilities more rapidly, reach all participants, and provide improved customer service. Ideally this will translate into increased transaction volumes by helping member banks attract new business to the system. Once there is sufficient adoption, CHIPS should see other advantages,

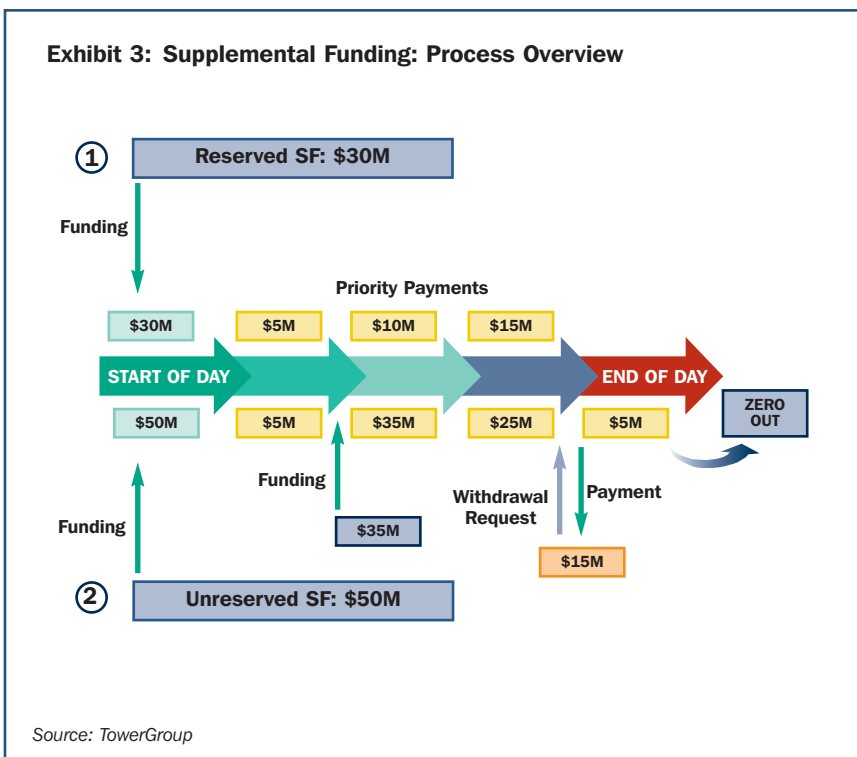
including lowered costs (e.g., for applications development, marketing, and customer support) and becoming more competitive with the Federal Reserve's Fedwire system.

Supplemental Funding: Increasing the Liquidity Management Process

Supplemental funding is first and foremost a business issue and deals directly with liquidity and payment management issues. Banks are constantly looking for ways to increase their control over payment flows. Today most CHIPS payments clear in less than 15 seconds. However, the Supplemental Funding function lets banks fund and prioritize payments for immediate clearing, which is particularly important at peak processing times or to accommodate urgent payments. (The process is also important to CHIPS to prevent diversion of funds to the Federal Reserve's Fedwire system.)

Banks can employ the Supplemental Funding mechanism in one of two ways, either by adding supplemental funds early in the day without designating any particular high-priority payments or by tying funds to particular payments. The former gives

banks the option of using the funds as a "marker" for anticipated urgent payments expected later in the day; the latter guarantees immediate processing of critical payments on behalf of a customer or the institution itself. Supplemental funds can also be added intraday to guarantee immediate release of an unexpected payment and can be withdrawn before the CHIPS cut-off should anticipated requirements not materialize. As part of the funding mechanism, CHIPS has created a new category of "urgent" payments that take precedence over current "preference" and "nonpreference" payments. When not reserved for a specific payment message, supplemental funds are applied first to urgent payments and then to preference ones. (Unreserved supplemental funds can be used for any payment.) Any funds not used before cut-off are zeroed out at the end of the CHIPS processing day as part of the existing netting process. (See Exhibit 3 for an overview of the process.)



Management Reporting: Extending Operational Efficiency

CHIPS's goal for these Web-based tools is to start from what exists today that can easily be made accessible online and build out new functions and services as appropriate. The reporting tools available on the Web provide a real-time source of management information, including a window into the payments system for both

the day's funds transfer activity and unmatched payments. Management reporting tools are designed to increase operational efficiency, letting bank staff:

- View trading partner positions in real time (via query requests)
- Track the status of payment messages through CHIPS
- Resolve any issues (e.g., unresolved payments messages not yet matched by offsetting payments)
- Manage system interactions (e.g., queue management)

Most of these activities can be done today but require custom programming of the CHIPS terminal interface or a bank's customer information file. The "View the Queue" feature, for example, was available on the mainframe CHIPS system in March 2003 but implemented only by large, well-resourced banks. Making capabilities available via the Web enables all participants to take advantage of enhancements by eliminating systems development. The Web functions are easy to use; however, the current user interface will have to evolve to accommodate new functions and services.

Conclusion

CHIPS's new services will not have immediate industry-wide impact among domestic banks clearing high-value payments. However, the services do capitalize on industry goals to increase payments operations efficiency as well as add value to CHIPS banks looking for enhanced services to offer to their customers. This is important for CHIPS because it competes with Fedwire chiefly on the basis of service innovation and quality. Since November, only a dozen banks have implemented the services. Adoption will rise once users that are now testing the services go live and CHIPS promotes a more general rollout among its participants. Whether the new services alone will directly attract new members to the system is more problematic. The upcoming extended processing hours will have industry-wide impact, and the Internet services may then help draw business to CHIPS. At the end of the day, the current initiatives are a pragmatic step forward not an earth-shattering change. But at a time when banks and the payments business are under increasing pressure, using new technologies and channels to reduce the friction in payments processing, even in tactical ways, can provide additional advantage. Moreover, CHIPS has now developed a process and the infrastructure for introducing more strategic Web-based offerings in the future.

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