OmniPayments' Yash Kapadia Was Happily Retired until His Wife Demanded He Return to Work

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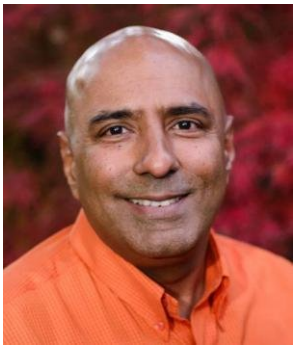
Introduction

Leave it to the spouse to know what is best for the family. Back in 2003, Yash Kapadia and his Opsol Integrators performed so well with a fixed-price contract that Yash was able to retire and devote 24x7 attention to his family. Six months later, retired life ended abruptly when Yash's wife insisted he return to work. So back Yash went from nonstop at home to the NonStop environment where he had thrived for years. Just in time to create OmniPayments.

Opsol and OmniPayments were the Brainchildren of a Tandem Developer

OmniPayments (www.omnipayments.com) is an HP NonStop-based financial transaction switch that offers customers all the requisite functionality to manage credit-card and debit-card transactions. It is one member of the Opsol family of NonStop mission-critical solutions for the financial industry. Opsol was founded by Yash in 1995, shortly after he left Tandem Computers.


Yash Kapadia

During his tenure at Tandem, Yash assumed numerous responsibilities. Originally a member of the NonStop Kernel Group, Yash next worked as a developer within the OSS environment. A position with Tandem Information Services (TIS) led to Yash managing a 150-person team that developed specialized applications for customers such as United Airlines and John Deere. When Bill Heil, at the time a Tandem product manager, needed a developer to build a Tandem-based web server, Yash volunteered. Within six weeks, he completed what soon became known as the iTP WebServer, a port to Tandem from an open-source Internet server.

The Founding of Opsol Integrators

Within the IT industry, it is common for the staff of major technology organizations to leave employment in order to develop solutions and services that complement those of the companies they departed. When Yash left Tandem, he didn't abandon the NonStop platform. Instead, he founded Opsol Integrators, Inc. (www.opsol.com). Opsol is short for "Open Solutions," and the company addressed customer interest in what was then the new development model of open source. More specifically, Opsol specialized in porting open-source solutions to NonStop servers running under OSS (Open System Services).

Opsol's first customer was a major U.S. bank. Opsol helped the bank to reengineer and re-architect its NonStop Guardian ATM applications to run under Tuxedo and NonStop OSS. In the late 1990s, Tuxedo was the predominant transaction monitor. The bank intended to migrate its applications to Tuxedo so that the applications could interoperate with Tuxedo applications on other systems. Today, the bank's Tuxedo-based applications remain in use and process 1.8 million daily transactions.

During this time, Yash maintained close ties with Tandem. He became a certified Tandem instructor and taught classes all over the world in subjects such as TS/MP, TM/MP, OSS, iTP WebServer, and later Java.

Opsol Takes a Risk with Fixed-Price Contracts

Fixed-price contracts are unpredictable. Deadlines may be missed by wide margins, and costs can escalate quickly beyond original estimates. It is the vendor that carries the risk, and that is why so many vendors are unwilling to absorb unforeseen costs and time overruns. Nonetheless, Yash is a risk taker. He decided early on that multiple NonStop opportunities existed for a partner who was willing to undertake fixed-price application development.

A. G. Edwards, a major U.S. broker-dealer, was Opsol's first fixed-price customer. The contract stipulated the development of a trading application to be ported from an IBM mainframe to a Tandem system. If the port was successful, A. G. Edwards would purchase a Tandem system and would pay Opsol the agreed-upon fixed price. If the port did not work, A. G. Edwards paid nothing. The customer set a specific benchmark for Opsol. The system had to support 8,000 brokers and process seventy transactions per second, a significant transaction volume back then. To reinforce its development efforts, Opsol acquired its own Tandem system and successfully executed on time and within budget the port of the trading application to run under OSS.

Opsol was now firmly established in the fixed-price business, and more customers signed on. Yash and his team developed financial applications for Citbank of Mexico (Banamex); and Citibank was the first to purchase OmniCrypto, Opsol's encryption software. A new financial trading system running under NonStop OSS was built for the Bourse de Paris (now Euronext Paris). A major ISP (Internet Service Provider) turned to Opsol for OSS application-development services when the ISP became one of Tandem's largest customers.

NonStop and Opsol – Perfect Together

People who worked on the NonStop platform are often linked to NonStop forever. That certainly is the case with Yash. During Opsol's early years, Yash negotiated an outsourcing agreement with Tandem to perform application development for Atalla, a Tandem subsidiary that served as Tandem's encryption arm. Atalla provided hardware security modules (HSMs), external devices that performed all at-rest and in-flight data encryption functions, and key management for Tandem applications.

Yet another Tandem/Opsol collaboration was the execution of ZLE for Tandem. ZLE, or Zero Latency Enterprise, was a Gartner Group term for any strategy that combined information across technical boundaries (operating systems, database management systems, programming languages, etc.) to enable real-time business benefits. Tandem asked Opsol to assist with the development of custom software for Tandem's ZLE version. It allowed disparate data to be moved in real time and in a common format to an Operational Data Store (ODS). There the data was available immediately.

The OmniPayments Crew

Tandem succeeded in displaying to a large retailer the power of ZLE, but the ZLE implementation stalled at that point. Yash believed that there was more potential for ZLE than Tandem realized, so Opsol negotiated the acquisition of Tandem ZLE's intellectual property rights. Soon after, ZLE was reborn as Opsol's OmniHub, a NonStop data integration solution for companies requiring IT infrastructure integration in order to capture a single view of their customers' transactional activities.

Yet Another Fixed-Price Opportunity Paves the Way for Yash's Early Retirement

OmniMessaging from Opsol evolved from yet another intellectual property acquisition. In the early 2000s, with Tandem via Compaq now under the umbrella of HP, Opsol successfully negotiated the rights to HP's NonStop Internet Messaging solution. Internet Messaging delivered secure, reliable, and scalable messaging services for telcos, mobile operators, governments, and large enterprises. OmniMessaging became the name of the newly acquired product, and Yash found a promising opportunity with a major Japanese telecommunications operator. The telco had been using a Sun server for its messaging system, and the system had proven unreliable as the telco's subscriber base expanded. As a result, the telco was eager to consider alternatives, one of them being the fault-tolerant HP NonStop.

Opsol was able to secure a fixed-price development contract. However, the contract's terms and acceptance test criteria were onerous for Opsol. *Build on HP NonStop a reliable OmniMessaging platform that integrates successfully with the telco's existing applications, or get paid nothing.*

Few vendors would have exposed their businesses to such potential for failure. But Yash and his staff, by this time fixed-price veterans, were confident that the risks in terms of deliverables, quality, and schedule could be managed.

The project proved to be far more challenging than Yash had anticipated. Yet in 2003, all acceptance test criteria were met; and the telco adopted the OmniMessaging platform on

NonStop. With huge risks come huge rewards. The telco's payment to Opsol was so lucrative that Yash Kapadia was able to retire.

"A Retired Husband is Like Having a Grand Piano in the Kitchen"

To quote from television's long-running hit The Cosby Show, "A retired husband is like having a grand piano in the kitchen. It looks good, but the damn thing is always in the way." We will never know what exchanges took place between Yash and his wife, but retirement for Yash lasted a mere six months. With his company still intact and with his relationship with HP still strong, Yash reentered the work force with an eye to focusing Opsol's talents on solutions for the payments industry. Opsol already was heavily involved with Citbank of Mexico, and Rabobank in the Netherlands was now an Opsol customer.

The U.S. bank that had been Opsol's first customer had early on adopted BASE24, the electronic retail payment switch from ACI Worldwide. Widely deployed in the financial payments industry, BASE24 ran on the bank's NonStop servers. The bank maintains a network of 15,000 ATMs and thousands of retail POS (point-of-sale devices). It decided to add consumer-friendly, personalized ATM services and selected Opsol to build a new ATM-management system. Yash and his team installed Opsol's OmniATM solution to manage the enhanced ATM network and interfaced OmniATM with the BASE24 transaction switch. The bank was so satisfied with Opsol's performance that it recommended Opsol to another U.S. bank. Soon after, that bank became an Opsol customer as well.

BASE24's Sunset on NonStop Heralds the Birth of OmniPayments

In 2008, ACI Worldwide announced the sunset of its BASE24 financial-transaction switch on NonStop servers. Ending as well would be ACI's support for existing NonStop BASE24 applications. The sunset of such a popular product furnished Opsol with a huge opportunity. Yash observed the dilemma posed to NonStop users by BASE24's exit. Users could migrate to BASE24 on IBM mainframes; they could upgrade on NonStop to ACI's BASE24-eps, a completely different product; or they could consider the use of other vendors' solutions. Yash decided that Opsol should be one of those *other vendors* and introduced a new transaction-authorization switch, OmniPayments, to serve as a BASE24 replacement.

Opsol already had a head-start on OmniPayments' development. OmniATM, OmniCrypto, OmniHub, and OmniMessaging were installed in numerous locations worldwide; and the four products formed the basis for the OmniPayments solution. Additional modules, including OmniDirector, OmniOffender, OmniPOS, OmniReplicator, OmniStandin, OmniLogger, OmniConsole, and OmniDash, completed the OmniPayments layered design. Some components can be purchased separately and are used by Opsol to develop custom applications. All modules are SOA (service-oriented architecture) compatible.

In 2009, an OmniPayments pilot project was initiated with the U.S. bank where OmniATM already was installed as the ATM management system. The project was immediately successful,

the bank was thrilled, and Opsol was now in the BASE24 replacement business. So large was the potential market for OmniPayments that Opsol decided to set up OmniPayments as a separate corporation. Opsol Integrators Inc. is now the services arm, and OmniPayments Inc. is the product arm, focusing on payment transactions.

A typical BASE24 replacement takes about four months. The OmniPayments license fee is not based on transaction volume but instead on a one-time perpetual software license. No volume fees, no transaction fees, no penalties for company growth.

OmniPayments' Presence in Latin America

Although Opsol Integrators serves a global audience, OmniPayments has focused its efforts to-date on North America and Latin America. The company has achieved considerable success south of the U.S. border, in great part incumbent upon the capable leadership of Mauricio Meir.


Yash, Maricio, and Fernando Gomez, Banelco

Mauricio joined Opsol Integrators in 2009 as Vice President of Sales for Latin America. He, like Yash, is a former Tandem/Compaq/HP employee and held numerous management positions.

Under Maurico's guidance and with the strong support of Alejandro Mendoza Perez, Opsol's Vice President of Services in Latin America, OmniPayments has implemented a large installed base in several Latin American countries, notably Colombia. In countries where HP NonStop does not offer 24x7 support, Opsol provides managed services.

Omnipayments success stories in Latin America include:

Colombia's Families-In-Action program - The Colombian government has put into place a social safety net for poor mothers who have difficulty caring for their children. Familias en Acción offers semimonthly cash payments to the poorest of Colombia's mothers. The OmniPayments financial-transaction switch serves as the link between mothers and Colombia's national bank, Banco Agrario, for the distribution of cash subsidies.

Casa Ley - Casa Ley is one of Mexico's largest, privately held grocery-store chains. It uses OmniPayments in a continuously available active/active configuration to handle payment-card transactions. The backup for this system is provided by the OmniPayments cloud.

Correspondent Banking Services – In several Latin American countries, OmniPayments provides correspondent banking services to remote regions that cannot support bank branches. Correspondent banks are village merchants to which Opsol supplies POS terminals connected to the bank's OmniPayments switch. Local residents use the merchants' POS terminals for a variety of banking services.

The Dominican Republic deploys OmniPayments as its country-wide financial-transaction switch.

Carvajal is a major technology consulting and services company. Its goal is to create the predominant financial-transaction network in Latin America. For years, many of the region's financial-transaction networks have depended upon a Unix-based transaction switch implemented on commodity servers. This switch has not provided the reliability required by the Latin American banks, has been unable to support new functional requirements, and is expensive. Carvajal selected the OmniPayments financial-transaction switch as the foundation for its transaction networks.

Biometrics Operator - To control fraud and drug cartel money laundering, Colombia established a national database of fingerprints for all of its citizens. The parties to any large cash or debit-card transaction must be authenticated by their fingerprints. To manage fingerprint authorization for debit cards, Colombia has designated Biometric Operators, who act as authorization agents. Carvajal has been designated a Biometric Operator. It uses OmniPayments as the transaction switch between debit-card transactions entered at POS terminals and the national fingerprint database, used to authenticate those transactions.

Introducing the OmniPayments Fraud Blocker

Not every potential customer wants to leave the transaction switch in which they have invested heavily. To service that market, Yash and his team created the OmniPayments Preauthorization Engine, aka the *Fraud Blocker.* Modern and easy to manage, it preauthorizes millions of transaction far more effectively than complex, compute-intensive alternatives. The Fraud Blocker can be used in conjunction with the OmniPayments Financial Transaction Switch or can be purchased separately as a seamless interface to other providers' switches.

One of Latin America's largest suppliers of electronic transactions counts on the OmniPayments Preauthorization Engine, which seamlessly interfaces to the EPS (Electronic Payment Systems) provider's existing financial-transaction switch via an Opsol-created custom support module.

The switch routes all financial transactions to OmniPayments for preauthorization prior to submitting the transactions to the issuing banks for final approval. For this EPS provider, that amounts to almost 200 million transactions per month.

The Future is in the Cloud

Having failed at early retirement, Yash has no plans to stop working in the near future. Instead, he now is focused on building OmniPayments clouds in the company's geographic sales regions.

The first cloud was based in Northern California and serves as the backup for several customers in an active/active financial-transaction switch configuration. In 2015, OmniPayments introduced OmniCloudX on NonStop X. OmniCloudX hosts numerous instances of OmniPayments at a pay-for-use price so attractive that mid-size retailers and financial institutions can enjoy the benefits of having their own high-capacity transaction switches. OmniCloudX is continuously available with automatic failover to other OmniPayments NonStop X servers.

OmniPayments also hosts ITUGLIB, Connect's library of user-contributed freeware and other software utilities. OmniPayments provides at no cost the processing capacity, maintenance, power, and bandwidth.

The Secret Sauce in the Opsol/OmniPayments Recipe for Success

Yash credits the success of his companies to several ingredients. One is his willingness to take on fixed-price contracts, whether for the development of custom applications or for enhancements to OmniPayments. Yash confesses that he initially agreed to this uncertain payment option because he was "young, stupid, and willing to take a risk." Years later, with numerous fixed-price successes on his resume, he is confident that his team of approximately 100 NonStop programmers can complete just about any development project within six months. His programmers are the second ingredient in his secret sauce, and their skills afford Opsol a competitive advantage when it comes to custom work.

The third ingredient is Yash's pricing model. Privately owned, Opsol and OmniPayments possess tremendous flexibility in adjusting quotes to attract potential customers. This is evidenced by Opsol's successful bidding of NonStop systems against Unix and Windows competitors. Even more impressive is Yash's guarantee that the OmniPayments financial-transaction switch will save a company at least 50% of its current transaction processing costs.

The final ingredient is Yash's wife. Her unwillingness to have Yash constantly in her way at home – like the grand piano in the kitchen – drove Yash out of an early retirement and back into the world of product development. A big shout-out to Mrs. Kapadia comes from those companies who made strategic investments in Opsol/OmniPayments technology.

Opsol Integrators and OmniPayments maintain a presence in several locations. They include company headquarters in California, development facilities in India, and offices in Houston, Mexico, and Colombia.