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Infosys in a Distinct Business: Finacle [1]

Girish Vaidya sat still, stunned by the abrupt turn in the conversation. An old friend, someone he knew well after 20 years in the banking industry, was launching a new bank. The friend was in the market for software to run the bank's internal operations, but not only was he not going to buy Mr. Vaidya's product, he wasn't even interested in learning more about it.

It was a wake-up call for Mr. Vaidya, just as he was settling into his new job. In January 1999, he had accepted an invitation from Nandan Nilekani, then Infosys's deputy managing director, to run the company's banking business unit (BBU). The BBU was Infosys's only business unit that sold a software product rather than services. Mr. Vaidya's most recent post had been as head of technology for a British-owned retail bank with extensive Asian operations. He had worked in India, Singapore, Australia, and London and had accumulated extensive knowledge of the business implications of technology choices in banks.

Mr. Vaidya knew he had signed up for a challenge. The BBU's product, Bancs2000, was in decline, generating only $2.5 million in annual revenues. But the opportunity to take on such a challenge while working for one of the most respected companies in India, reporting directly to Mr. Nilekani, proved irresistible, even though Mr. Nilekani told Mr. Vaidya explicitly that Infosys would shut down its only product business if he was unable to turn it around.

Mr. Vaidya's old friend helped him realize that his turnaround program would have to reach farther than he had imagined.

Origins

Bancs2000 arose from a 1993 software development project for an Indian retail bank. At the time, almost all Indian banks were state owned and business practices among banks were similar. Infosys saw an opportunity to launch a product rather than sell the same custom software development project over and over again, and the company negotiated with the client to retain intellectual property rights for the software. It was a pattern that

[1] In writing this case, the author assumed familiarity with the content of a related case, "Infosys: Maintaining an Edge."

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Infosys experimented with more than once, but only Bancs2000 survived. In the view of Infosys's senior management team, Bancs2000 occupied a particularly strong market position.

Infosys hired Haragopal Mangipudi as a project manager late in 1993, and his assignment was to convert the software developed for the client into a more general solution that any bank could use. To assist with the architectural design, several experienced engineers were permanently transferred from other Infosys business units.

The software that the team developed was a *branch banking solution.* Bank branches operated essentially as independent retail businesses in almost every bank in India at the time. Built around the central database in each branch, Bancs2000 automated core business processes—deposits and withdrawals, loans and repayments, interest calculations, bank statements for customers, income statements for the branch, and more. Bank tellers, customer service agents, loan officers, and other branch employees accessed the database through terminals, sometimes PCs, located throughout the branch. The process of consolidating information from branches at a bank's central headquarters was a manually intensive process because the communications infrastructure within India was still underdeveloped.

India was then just beginning to liberalize its banking sector. One of the country's first private-sector banks was ICICI Bank, which became Bancs2000's third customer. ICICI turned out to be an important client. T.S. Venkataramanan was the Infosys account manager for ICICI. (By 2007, he was Infosys's head of project management and delivery.) He recalled,

> ICICI was raring to go from day one. They introduced lot of new market practices. We added a lot of functionality to our product as a direct result.

The BBU Organization

There were three core activities within the BBU: product development (software architecture design, programming, and testing), sales and marketing, and services (installation, customization, training, and consulting). Despite an initial influx of personnel from Infosys, the BBU had only limited ongoing interaction with the rest of the company. Although the skill set needed for custom software development and packaged software development were broadly similar, the BBU was building a different business, and the vast majority of Infosys's client base was in the United States and Europe, far from the BBU's Indian clientele. As a result of these differences, the BBU had more operational freedom than Infosys's other business units.

As the Bancs2000 code base grew, the learning curve for new employees lengthened. To become fully productive, new employees had to understand much of the existing functionality and the impact that a change in the millions of lines of code could have on existing customers who upgraded to new versions of the software. As a result of this complexity, short-term people transfers between the BBU and its sister units were only rarely practical. Furthermore, decisions about software development were made differently than they were on Infosys's custom-software development teams.

Expansion

The BBU began expanding internationally within just a few years, opening operations in two neighboring countries, Nepal and Sri Lanka, by developing partnerships with local IT companies. Doing business in new countries was more challenging than the BBU initially anticipated. Each country had its own regulatory framework, central banking system, and variations on standard bank processes. The BBU had to customize Bancs2000 in each country. The product development team began building more flexibility into the software so that it could be customized in more ways, down to the logic of specific business processes.

The BBU's service arm increased in importance as installations became more complex. Although the code base was gradually gaining flexibility, installations frequently involved modifications to the core software code.

Hard Times

By 1997, more than 90 percent of the BBU's revenue still came from Indian banks, and it was getting harder to make money in India. Revenues declined. A senior manager described the situation:

> The Indian market was at a crossroads. Banks were still buying branch banking solutions, but they had become a commodity. We had always sold Bancs2000 at a premium price, and we were under a lot of pressure because our competitors were dropping their prices like crazy. We were not in a good situation. We started losing deals based on price.

As the situation worsened, Mr. Nilekani started investing much more of his time with the BBU. He brought some new people into the business, including Merwin Fernandes, a software veteran from the enterprise resource planning (ERP) sector, as head of sales.

Mr. Nilekani and the BBU management team concluded that for the business to have a chance, the product needed to be completely revamped from a branch banking solution to a centralized banking solution. The telecommunications infrastructure in India was advancing, and the management team believed that the next major wave of IT investments in Indian banks would be towards centralized business processes. Mr. Fernandes, in fact, had seen the same transformation in ERP systems—from "islands of information on localized legacy systems to new-generation, centralized, back-office systems."

The Indian financial sector was changing in other ways as well. The private sector was growing, and banks were starting to globalize. That intensified competition among banks and reduced interest rate spreads (the difference between interest rates on deposits and on loans), driving many banks to seek new fee-based revenue streams. Banks also wanted to become more customer-centric and to more carefully assess and manage the aggregate financial risks they faced. Neither was possible without a centralized customer database.

The BBU management team hoped to get in front of these trends and establish themselves as thought leaders and shapers of the Indian banking industry. They set an agenda for rebuilding Bancs2000 as a centralized banking application within one year. The Infosys board believed the BBU had the ability to turn itself around. It agreed with the plan, which would generate substantial short-term losses, and allocated the necessary capital. Mr. Fernandes reflected that the board understood the risks and returns:

> Infosys was always focused on hitting the numbers quarter to quarter, and that has been a good thing for the company. At the same time, management believed in the potential of this long-term initiative. Mr. Nilekani had a firsthand appreciation of what he was dealing with, and the CEO, Narayana Murthy, also had a good appreciation of banking products. He had been involved in our banking solution from the early days.

The team planned several enhancements beyond turning the product into a centralized banking solution, including a stronger customization infrastructure to make the product more flexible; a new capability for handling multiple-currency transactions; a web-based interface rather than a client-server design; and a “stand-in server” that enabled 24/7 operations by eliminating the need for a daily blackout period for transaction processing.

To complete the project quickly, the BBU went on a recruiting spree. Most of the new BBU employees came from outside Infosys, as the company’s service business was running at nearly full capacity and growing rapidly.

By the end of 1998, the BBU had made great progress in the development of a centralized banking solution and had launched an initiative to ensure that sales conversations focused first on customer problems and only later on the product itself. Mr. Nilekani felt, however, that for the best chance at growth, the BBU needed leadership from an insider in the banking world, not from a technologist. Mr. Vaidya fit the bill.

A New Leader

When Mr. Vaidya arrived in January 1999, the BBU employed 180 people but generated only $2.5 million in revenue. Mr. Vaidya worked to instill a sense of urgency in his team as soon as he joined the company. He described his communication strategy:

> Infosys was a company that had a kind of family feeling. The BBU was too comfortable, feeling that they might muddle along but would continue to operate. I started sending the message that that was not the case anymore. Infosys was a publicly listed company. We had to do to well. To change people’s mind-set, I kept saying that we had just two years to prove ourselves. I generated an element of pressure and paranoia.

As a businessperson, Mr. Vaidya agreed wholeheartedly with the ongoing sales initiative and acted to reinforce it. He wanted to avoid any talk about functionality until the last second.

> We decided to start conversations with potential customers by explaining where we thought the banking industry was headed and what kind of technology investments were needed to keep up. Then, we'd talk about Infosys and its strengths and that because we were a large, established, and respected company, we'd be there for the full 20-plus years that the client would use the software. Finally, we'd talk about the specifics of the product.

Mr. Vaidya also shifted the recruiting strategy so that the BBU was hiring more for banking experience, less for technology expertise. He created a product management role, filled by a banker, not by a software engineer.

The BBU first sold its revamped software in 1999. Bancs2000 was now a centralized banking solution targeting the retail banking sector. It was the third entrant into the centralized banking solution market, behind the two leaders in this market, i-flex solutions (India) and Temenos (Switzerland). Both were niche software players that had focused first on wholesale banking and gradually added retail banking functionality—the reverse of Bancs2000's path. Neither competitor was a part of a large organization like Infosys, but each was already serving customers over a much broader geographic footprint.

The new Bancs2000 did not generate explosive growth. The BBU had financial targets, and Mr. Vaidya met with Mr. Nilekani quarterly to discuss performance, but both men knew the company was betting on Mr. Vaidya's long-term effort to transform the business. Thus, short-term targets did not have a lot of meaning.

Mr. Vaidya's approach to transformation was emboldened by the conversation with his friend who was starting a new bank. Technology leaders in Indian banks were closely networked, and the conversation helped Mr. Vaidya realize firsthand that the buzz about Bancs2000 was not good. He recalled his reaction:

> If I couldn't get a friend to simply talk about the product, how could I expect to get my sales team to sell it?

The conversation was likely representative of the market perception. In fact, a BBU employee who was with a different technology consulting firm at the time recalled specifically recommending that clients avoid Bancs2000 because he had heard less than positive reviews of the product.

Mr. Vaidya believed in Bancs2000 and felt that these negative perceptions of it were years out of date. He decided the only way to reenergize the market was to re-brand the product. He explained the rationale, which was tied to his mental model of the sales process (in the corporate software industry, this could last as long as 18 months):

> There are three stages: an emotional stage, followed by a rational stage, followed by another emotional stage. To get past the first stage, you had to have a positive perception in the marketplace. To get past the second stage, you had to have a great product. To get past the third stage, you had to reassure the customers that they had made a sound choice and that you would be there for years to support them. Our problem was that we were failing to get past the first stage, and that was because our brand was weak.

Having been on the other side of the transaction, Mr. Vaidya knew the decision-making process for customers was nerve-racking and complex. That was why the reassurance of a trusted brand was so crucial. He commissioned an in-depth study to determine how best to re-brand Bancs2000. In July 2000, the product was re-launched as Finacle. Sanat Rao, a former banker who had joined the BBU's services group as a consultant earlier that year (and was the head of worldwide sales by 2007), described the new product:

> Finacle is the heart of the entire technology infrastructure in a bank. It looks after all back-office operations, where every transaction in the bank actually happens. It is the lifeblood of the bank. All other applications interface with Finacle.

Mr. Fernandes described how the company positioned the Finacle brand:

> Our position was very clear. First, Finacle was a new-generation system. Second, we emphasized flexibility over functionality. In part, that was because our competitors were ahead of us on functionality. But it was also because the banking industry was changing rapidly and flexibility was more crucial than functionality. Finally, we emphasized Infosys's size, reputation, and track record as a company that excelled in service delivery and software installation.

Expansion

From 2001 to 2003, Finacle grew at rates of 50 percent to nearly 100 percent per year. Mr. Vaidya began investing in further international expansion, and Finacle won new customers in Southeast Asia and the Middle East. Finacle was proving a powerful choice for retail-focused banks in the developing world.

The Finacle team had aspirations for further growth, however, and specifically wanted to target larger banks as well as banks in the developed world. A common approach for software companies entering new geographies was to start with small clients and gradually work their way up to bigger ones. But the Finacle team decided such an approach would take too long. Mr. Fernandes described the approach:

> One of the advantages we had was that Infosys was a large company with a global brand and a lot of credibility. So, as we started globalizing, we said we should start with banks that were either at the top or in the middle—typically, banks in the middle that were very ambitious and wanted to reach the top. They were large enough to afford to invest, and we'd try to get them to leapfrog one or two generations of technology.

Because building dedicated sales teams was prohibitively expensive, the Finacle team created multiple models for working with partners. They sold through local IT service providers and through global hardware and software providers, such as HP, IBM, Microsoft, and Sun. Finally, they began experimenting with selling through Infosys's services units. As Infosys and Finacle both expanded, their geographic footprints started to overlap.

Finacle won a major contract in 2001 with Amsterdam-based ABN AMRO, the 14th largest bank in the world. The bank wanted to pilot a centralized banking solution in the Asia Pacific region and chose to launch in India before expanding to other countries. It was a demanding client, but the Finacle team felt they had lived up to expectations. ABN AMRO quickly became a flagship client, symbolic of the direction in which the Finacle team wanted to go. Subsequently, Finacle won contracts with Arab National Bank in Saudi Arabia and DBS Bank in Singapore, each among the largest banks in their respective regions.

There were relatively few banks, usually fewer than 100, in every country in which Finacle operated (in contrast to the United States, where the proliferation of small banks, credit unions, and community banks numbered in the tens of thousands). The Finacle team applied extreme care helping clients install Finacle, knowing that technology leaders in countries with a small number of banks were tightly networked and that even one failed implementation could sink the product's chances in that country. Implementing Finacle could be a delicate process that required a great deal of organizational insight and judgment. It was not just a technological change; it was a heavy-duty organizational change, one that made information much more transparent and shifted power from branches to the central office. (For example, loan-granting authority might shift from branches to headquarters.) The Finacle team tried to work with clients that understood the change-management challenge and were committed to success.

Despite Finacle's explosive growth, Mr. Vaidya continued to face challenges associated with running a product unit within a very successful services company. He explained,

> In a product game, the stakes are higher. You have to invest far in advance of returns, compared to services. Further, Infosys's entire reporting and evaluation structure is suited for services business. Some of the parameters for evaluation didn't make sense for a product business. Fortunately, Infosys's senior management team listened. They were willing to make changes to the business metrics they monitored when I told them why certain metrics did not make sense for Finacle.

K. Dinesh, one of Infosys's founders, elaborated on the senior management team's approach to evaluating Finacle:

> We understood that you have to wait four to five years to get returns and that returns were nonlinear. It's a higher risk-return profile than we see in services. Products could take off, or they may not. You can't apply PSPD to products until

> you have a tremendous number of them, and we have one. Further, the fact that Finacle was expanding the Infosys brand into new geographies was always a consideration.

Mr. Vaidya elaborated on the pressures he faced:

> An even bigger challenge was trying to understand how to do business in so many countries. Although our revenue was small as a percentage of Infosys's total revenue, we operated in many more countries, and that added complexity. Finally, we operated in developing countries, many of which lacked transparency. We would never permit bribes, but our partners and our salespeople could have bribes swirling around them. Because we had low revenues compared to Infosys as a whole, I was always worried about any negative publicity or anything at all that could damage Infosys's reputation. Those are the kinds of things I lived with.

Mr. Vaidya insisted that all partners sign ethics letters and refused to give partners any advance payments; Infosys paid them only when deals closed.

A Slow Year

Finacle faced another risk: market volatility. Infosys's services-oriented business units generally engaged in multiyear contracts with predictable revenue streams. With product sales, on the other hand, the preponderance of revenue came in all at once. In every industry during downturns, companies defer capital investments, including major new software installations. A hiccup in a customer's industry can choke a capital equipment supplier.

In 2004, the banking industry hiccupped, and Finacle suffered. Customer after customer deferred decisions to purchase software. From explosive growth rates during 2001–2003, revenue actually *fell* 15 percent and healthy profits turned to losses. The Finacle team connected the decline to the NASDAQ crash a few years earlier. They had seen counter-cycles in banks, because when stock markets turn down, investors move funds from equities to simple bank deposits. The process inevitably reverses itself, however.

Mr. Vaidya had numerous detailed reviews with Infosys's senior management team that year. The team understood the dynamics of capital investments and held investment in Finacle steady, asking for only minor cutbacks. And, in fact, growth rocketed upwards for Finacle once again in 2005, particularly international growth.

A New Era

That year, Mr. Vaidya relinquished the leadership role of Finacle to Mr. Fernandes and took on a new role in the Infosys Leadership Institute. Mr. Fernandes believed there was still a huge opportunity for Finacle:

> Most of the banks around the world are still running on systems that were written in the '70s or '80s. The replacement cycle will take 10 to 15 years; that's how long it took with ERP, and we are only just beginning.

The opportunity was there but competition was fierce, even in remote corners of the world. Finacle was up against its two global rivals for a small bank project in Nepal, for example.

The Finacle team continued to invest in advancing their core product. They had far more feature requests from customers than they could ever fulfill. At a bare minimum, Finacle had to stay ahead of regulatory change in every country in which it operated. Flexibility remained a higher priority than functionality, however. Functionality was easy for competitors to duplicate, flexibility was not. As Infosys targeted larger banks, the flexibility to interoperate with a wider range of other software products became crucial. Scalability was as important as flexibility. By 2004, Finacle was capable of handling millions of transactions every day.

Finacle advanced in big leaps by acquiring a customer-relationship-management module and a treasury module, both part of a plan to build towards a more "universal" banking solution. The company also added more functionality for mobile banking. One client had reduced transactions in branches from 100 percent to 30 percent of total transaction volume in just a few years. Through a partnership with SETLabs, the Finacle team investigated options for improving the underlying software architecture to ensure the product remained powerful as hardware evolved.

Sumit Virmani, a software industry veteran with a marketing focus, joined the Finacle team in 2004 and made it his goal to build the Finacle brand into the number one banking-software brand in the world. That meant establishing a presence in large banks in the developed world. He doubled the size of Finacle's marketing group from 8 to 16 people and expanded their activities well beyond "pre-sales." After identifying every client, including the specific individual who would likely make the purchase decision, Mr. Virmani expanded communications across multiple channels, including advertising and events, and created a new publication to build the perception of Finacle as a thought leader.

As Infosys targeted large banks, the sales process evolved. To maximize the potential for impact on large banks, Finacle needed to bring all of Infosys's strengths to bear. The product had great potential for large organizations, but achieving it required a much larger consulting and services component in the sale. Finacle was no longer just software; it was a long-term transformation program. In one memorable victory, the Finacle team upstaged a competitor and up-sold a customer, a Swedish bank, from a one-year implementation to a four-year transformation program. As the Finacle product grew, the Finacle team was able to hire the best consultants, perfect their implementation processes with the help of Infosys's quality assurance team, and build their success in such long-term transformation efforts.

Mr. Virmani wanted the brand to convey success in such transformations, communicating that Infosys could help banks transform and implement the most efficient, reliable, and secure processes. According to Mr. Virmani,

> Marketing is a science, and its effectiveness can be easily measured. One can measure multiple parameters: brand awareness, brand perceptions, share of voice, lead generation, traffic patterns on the website, and more.

Geographic overlap was increasing between Finacle and other Infosys business units. The company worked to identify opportunities for integrated sales. One of the first was with ANZ bank in Australia, where Infosys not only installed Finacle, it provided a wide range of related services. The Finacle team believed an integrated "One Infy" approach was important when approaching the largest banks, where installations might cost $50 million to $150 million or more. On its own, Finacle, only a $100 million unit, might not be viewed as a credible choice, but as part of larger Infosys, it looked much stronger. Infosys's enterprise solutions group developed its own Finacle practice, helping Finacle further drive geographic expansion as it helped drive its own growth.

Conclusion

Mr. Mangipudi reflected on Finacle's 13-year story:

> Product businesses require a longer time of gestation. Over the long term, we won. Some of Infosys's new services, like Independent Validation Services, have grown faster and, naturally, there is some healthy competition. But we are in very different games, and Finacle is now a flagship product not just for Infosys but for the Indian software industry. The company stuck it out through hard times, understanding the potential and maintaining high aspirations. We've now partnered with many banks in their transformation journeys, but the story is hardly over. We still need to fully establish ourselves on the global stage.

As of 2006, Finacle had yet to enter the United States or Japan, markets that required heavy product development efforts and promised heavy competition. But at home in India, Finacle spread widely. Of 23 banks that had implemented centralized banking solutions, 15 used Finacle. Revenues had surpassed the $100 million mark (see Exhibit 1), and head-count neared 2,500. Finacle was installed in more than 50 countries and more than 100 banks.

Exhibit 1: Finacle Revenues (US$ Millions)

	FY ‘99	FY ‘00	FY ‘01	FY ‘02	FY ‘03	FY ‘04	FY '05	FY '06
Revenue	**2.5**	**5.5**	**10.1**	**21.7**	**34.7**	**29.5**	**48.6**	**81.86**