



EXECUTIVE DIGEST

Building and transforming an emerging market global enterprise: Lessons from the Infosys journey

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Abstract The story of Infosys' growth and transformation from a \$250 start-up to its current market valuation of approximately \$26 billion provides one of the most pertinent lessons in leveraging India's strengths and managing the challenges faced by an emerging market global enterprise based in India. In this article, we present a wide-ranging interview with Infosys' current CEO, Mr. S.D. Shibulal, as he explains what he considers to be the core strengths of the company that made it successful in the past, lays out his vision for the company's future, and discusses in detail how he sees the company's transformation taking place over the coming years. The conversation uncovers several interesting themes and lessons for multinational enterprises in emerging as well as developed economies, including the relevance of being born global, values-based governance, the necessity of creating hybrid business models that infuse the 'India way' with local cultures and practices in global markets, leveraging strategic partnerships via co-creation and co-evolution, and the delicate balance between 'preservation-creation-destruction.'

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1. Celebrating India

At the 2006 World Economic Forum summit in Davos, Switzerland, delegates were treated to the sights, sounds, smells, and tastes of the 'India Everywhere' campaign, aimed at establishing India's image on the global corporate stage. Central to this celebration was Infosys Technologies. "We're going to showcase the arrival of the global Indian entrepreneur," said Nandan Nilekani, then-CEO of Infosys (Landler, 2006). As articulated by Khanna (2007, p. 122), "corporate

India had come of age and Nilekani and Infosys had organized the coming-out party."

In many ways, Infosys had become synonymous with the growth of the Indian economy and the country's emergence on the global stage as an information technology (IT) leader. Started in 1981 by a group of seven entrepreneurial individuals on a shoestring budget of \$250, Infosys grew rapidly over the years to sales of \$120 million in 1999, \$2 billion in 2005, and \$7 billion in 2011. In the process, Infosys spearheaded the rapid development of the Indian IT-services industry, and by 2012 the Indian IT-Business Process Outsourcing industry recorded revenues of over \$100 billion, 70% of which was accounted for by exports (NASSCOM, 2012). In parallel, following economic reforms, the Indian

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economy grew from a GDP of less than \$300 billion in 1991 to over \$1.7 trillion in 2011, achieving an annual growth rate between 6%–9% for much of the last 2 decades.

Now 30 years old, Infosys is facing the challenge of maintaining growth while staying true to its values and culture. Mr. S.D. Shibulal, one of the seven founders of the company, took over as the firm's fourth CEO in 2011 against a backdrop of severe global recession and financial crises in the U.S. and Europe, markets that account for more than 90% of Infosys' revenues. At that time, the company was also dealing with rapidly rising costs of hiring and retaining the talented workforce at home that drove much of the company's success, challenges in recruiting and training workers abroad, and intensifying competition that led to commoditization of some parts of the company's traditional business segments.

In this wide-ranging interview, Mr. Shibulal explains what he considers to be the core strengths of the company that made it successful in the past, lays out his vision for the company's future, and discusses in detail how he sees the company's transformation taking place over the coming years. Several themes resonate throughout the interview that provide a unique perspective on building and transforming a multinational enterprise from the ground up—an enterprise based in an emerging economy with its immense challenges, contradictions, and opportunities. We briefly summarize these themes next.

1.1. Born global in a flat world

From its inception, Infosys bet on technology helping to shrink cultural, geographic, and administrative distances. Its biggest innovation was a clever way to unpack work for clients and use labor cost and time zones to accomplish that work in different locations around the world at a fraction of the cost, thereby adding substantial value to the client's business. Thirty years later, the vision of a globally interconnected 'flat world' is more real than perhaps at any other time in history, where products, services, information, and capital can flow much more freely across borders. In this environment, as Mr. Shibulal suggests, one has to be born global. The concept of 'born global' is usually understood as referring to companies that establish a quick and significant international presence without first building a domestic base, though exact definitions vary in the literature (see [Fan & Phan, 2007](#); [Knight & Cavusgil, 2004](#)). The Infosys experience confirms many of the hypothesized antecedents for firms to be born global: limited size of the domestic market,

prior international experience and low risk aversion of the founders, and unique home country advantages that can be leveraged in multiple foreign markets. However, it also refutes many other factors that are thought to lead to creation and expansion of born global firms, such as proprietary industry knowledge, venture capital and other sources of international funding, and dense social networks. Importantly, the Infosys experience highlights the born global phenomenon from the perspective of an emerging market multinational enterprise (EMNE), which sets it apart from most other EMNEs that followed a more traditional path to internationalization that started with a strong domestic base (e.g., the Tata group in India, many EMNEs from China and Brazil).

1.2. Values-based governance

Infosys has stayed true to its core values and mission statement. The company's mission to be the "most respected Indian corporation in the world" served to establish trust with global clients in the early days when most clients in the U.S. and Europe would have been reluctant to outsource work to a little-known Indian firm. More importantly, the values provided a consistent set of guidelines for management as well as the rapidly expanding number of employees. As Mr. Shibulal stresses, Infosys' approach to corporate governance is not only compliance based, but also values based. The company obeys and follows the laws of every country in which it operates, but values drive behavior. Infosys' engaged and dedicated employees, strong reputation at home and abroad, rapid growth, and continued financial success provide support to the hypothesis that values-based governance can lead to development of higher standards of behavior through shared values and encouragement of dialogue to interpret shared values ([Weaver & Trevino, 1999](#)). It also leads to more desirable and long-lasting impacts than following only rules and ethics programs that emphasize legal compliance, control, and discipline ([Paine, 1994](#)).

1.3. Hybrid business models in a connected world

The Infosys journey provides important lessons on how EMNEs adopt hybrid business models to succeed globally ([Khanna, Song, & Lee, 2011](#)). At one level, Infosys' values can be seen as being universal: integrity, transparency, and excellence are not culturally or geographically dependent. This fact helps the corporation relate to clients and partners around the world. However, several elements of the 'India Way' are also evident in Infosys practices.

Capelli, Singh, Singh, and Useem (2010) note four distinct characteristics of Indian businesses that offer lessons for businesses everywhere: (1) emphasizing social mission over maximizing shareholder value; (2) investing in human capital; (3) practicing the *jugaad* approach to problem-solving (or banging away at hard problems with a trial and error approach); and (4) favoring organic growth, partnerships, and value-chain innovations. Infosys' commitment to a social mission and concern for all stakeholders is evident in its engagement with the local community, its far-reaching sustainability initiatives, and its extensive work in remote regions of India through the Infosys Foundation. Its human capital investments include building employee commitment via a sense of reciprocity, employee empowerment to plunge into problems and create their own solutions, intensive investment in training and development despite tight labor markets and high turnover, and employee appreciation. In strategy formulation, Mr. Shibulal stresses the importance of sticking with and articulating the company's set of enduring principles, while leaving more flexibility for others in the firm to decide on specific target markets, products, and technologies.

1.4. Strategic partnerships: Co-creation and co-evolution

Strategic partnerships have always been critical to Infosys' success; however, the next phase of the company's evolution pushes these partnerships in new ways. First, Infosys is both expanding the partnerships and deepening them in order to co-create solutions with clients as well as other partners. Co-creation has been discussed and explored in many ways in the literature. One stream focuses on co-creation of experiences centered on products or services with active customer involvement in designing and shaping the experiences (Pine & Gilmore, 1998; Prahalad & Ramaswamy, 2000). Co-creation in business-to-business situations is less explored, though there is an extensive literature on knowledge sharing and joint innovation activities (see Noordhoff, Kyriakopoulos, Moorman, Pauwels, & Dellaert, 2011).

Co-creation figures prominently in Mr. Shibulal's vision of Infosys 3.0. A central feature of Infosys' ongoing transformation is the company's ability to generate higher value-added, intellectual property-driven business solutions that are critical to clients' continued profitability and growth. This strategy is meant to differentiate Infosys from intensifying competition in its traditional business segments, some parts of which are becoming commoditized.

Co-creation with clients is critical in achieving this shift. Moreover, co-creation with other partners in the wider innovation ecosystem—universities, research labs, governments, NGOs—enables Infosys to create new intellectual property, generate fresh ideas and solutions, and push the frontiers of knowledge and application more broadly.

The second theme apparent in Infosys' transformation is the idea of co-evolution. A sizeable literature has examined the concept of co-evolution, which refers to mutual adaptation between and evolution of organizational strategies and structures within an organizational environment (see Volberda & Lewin, 2003). Several authors have applied this perspective to emerging market contexts: see Luo and Rui (2009) for case studies of Chinese firms, Ahlstrom and Bruton (2010) for a study of entrepreneurial firms in Russia, and Rodrigues and Child (2003) for a study of co-evolution in the context of a Brazilian telecommunications company operating in a heavily regulated environment.

At Infosys, the strategic adaptation is in part a response to the changing environment. However, Infosys intends to achieve this transformation in parallel with, and in partnership with, its clients. To do this, Infosys is projecting future trends and challenges from its customers' perspective using its extensive network of partners as an organizational sense-making device. In order to help clients successfully meet the challenges of tomorrow, Infosys has to radically transform itself in much the same way as its clients do. 'Building Tomorrow's Enterprise' is a framework that guides internal investment and innovation priorities that parallel the transformation processes recommended to the clients. Co-evolution thus becomes a powerful force of adaptation to a complex, uncertain, and changing environment, and an effective strategy for mutual value creation with clients.

1.5. Preservation, destruction, creation

Govindarajan and Trimble (2011) argue that for companies to endure, CEOs must attain a balance of managing the present, selectively destroying the past, and creating the future. At the time when Infosys' goals were to grow its consulting and systems integration business and become an end-to-end services provider, it moved from preservation toward destruction and creation. This shift coincided with what Mr. Shibulal describes in this interview as Infosys 2.0 and was largely achieved during 2000–2011. Infosys 3.0 lays out Mr. Shibulal's vision to keep rejuvenating Infosys into the future while "preserving the present and selectively destroying the past."

2. Interview

2.1. Driven by values: The roots of success

Sudheer Gupta & Daniel Shapiro: Infosys is synonymous with the growth of IT and the IT-enabled services industry. From the \$250 initial investment in 1981 to the current market valuation of \$26 billion, the Infosys story has been recounted many times over. You have been there from the very beginning, and are now leading the company through perhaps one of the most important transitions in its history. In your opinion, what were the most significant factors that accounted for Infosys' success?

S.D. Shibulal: The root of Infosys' success is in its vision statement. We started out by being different. From the beginning, we decided we wanted to be a globally respected company. That vision statement then drives everything else. There are five factors that define what we did. First, we made sure that we stressed performance to all our stakeholders: employees, clients, investors, partners, and community. Second, we set out to establish a global standard in delivery of IT-based services. We invented the Global Delivery Model, which meant that we could do the work anywhere in the world wherever it was best conducted—where the best talent is available and where it makes the most economic sense with the least amount of acceptable risk. No one else had done that before. Infosys was the first Indian company to list on the NASDAQ. Many others have followed since then, but we will always be the first. No one can take that away. Third, we invested in building world-class technical and physical infrastructure. For example, our campus in Bangalore is state of the art. Our Global Education Centre in Mysore has a built-up area of over 1.4 million square feet, employs over 800 full-time educators, and can train 14,000 individuals at any time. Fourth, we looked for the best talent. We went to the top universities and hired the brightest graduates. In everything we did, we always looked for the most talented people. Fifth, from the very beginning, we focused on quality rather than price. It would have been very easy for us to be the low-cost provider. It is easy to compete on price. But instead, we decided to stress quality and delivering value to clients. We do no advertising, no billboards. So we were imaginative, we were pioneers; we stressed performance to all stakeholders and focused on quality; we adopted global standards and set new industry standards. In a sense, we were born global and had a strong set of consistent values that helped us grow and transform.

How does the vision statement drive the behavior and decisions of the company? How is it implemented within the organization?

The vision statement can be divided into three parts: global, respected, and corporation. Each of these can be broken down into a number of basic principles. Our clients should be global, our employees and investors should be global, our business practices should be global, and we should meet or exceed global standards. Regarding respect, you want to run the business in a legal and ethical manner; you should be honest, transparent, non-hierarchical, and deliver performance to all the stakeholders. Corporation is about accountability, sustainability, and social contract; it is about being an institution and choosing long term over the short term. This is one pillar of our organization.

The second pillar is our value system. It is condensed into what we call C-LIFE: Client Value, Leadership by Example, Integrity and Transparency, Fairness, and Excellence. That value system drives Infosys to have the highest levels of corporate governance, transparency, and ethical standards while consistently delivering value beyond our clients' expectations.

The third pillar of the organization is our business model, which we term PSPD: Predictability, Sustainability, Profitability, and De-risking. We want to make sure the business is predictable, sustainable in the long term, profitable (since we believe profit is a reflection of the value we provide to clients), and de-risked in multiple dimensions. All this will eventually lead to running the corporation at the highest levels of legal and ethical standards.

Can you expand on the company's corporate governance activities?

Our corporate governance activities are a logical extension of our values and our commitment to all stakeholders. We strongly believe our standards need to extend beyond the law; that our actions should satisfy the spirit of the law, not just the letter of the law. We follow and comply with globally accepted best practices including the Euroshareholders Corporate Governance Guidelines 2000, recommendations of the Conference Board Commission on Public Trusts and Private Enterprises in the United States, the United Nations Global Compact Policy, and corporate governance guidelines of six countries. Infosys has been rated at the highest levels of corporate governance by independent organizations such as CRISIL (a Governance and Value Creation Level 1 rating) and ICRA (CGR 1, the highest rating on the scale; we are the first company in India to achieve this).

Beyond ratings and standards, we have always believed in being very transparent. Our mantra is: "When in doubt, disclose." One of the cornerstones of our corporate governance philosophy is to communicate externally with all our stakeholders, in a truthful manner, how the company is run internally. We have always been proactive in disclosing information above and beyond what is needed for reporting requirements. We believe it has helped us gain the trust of our stakeholders, and stay true to our mission statement.

That mission statement is pretty amazing, given it was written in the 1980s by a small group of people and has references to sustainability, corporate governance, and shared value creation. That was way ahead of its time.

Actually, the mission statement was more of a debate, and Mr. Narayana Murthy played a very large part in it (see [Raman, 2011](#)). He was a visionary and provided the intellectual leadership. The seven founders of Infosys had complementary skills. We all put the organization ahead of ourselves. We got in without an exit plan. We were committed. We were in it for the long haul.

There were seven people with \$250 in hand and no brand and no other kind of support, so we could be ambitious and aim at anything—to be the largest, the biggest—but we decided instead to be the most respected. And this is not an end state; this is a journey. Even for respect, what worked for you today is not going to work for you tomorrow.

Now that Infosys has operations and employees all over the world and is recruiting locally in most countries of operation, how do you make sure those values get translated across the workforce, especially given such a large global footprint?

First, our values are culturally, geographically, and time invariant. Client value, leadership, integrity, fairness, excellence—these are not local to any culture or geography. These are universal values. But there are different flavors of implementation and articulation. The examples I use to demonstrate those values are different in the U.S. from the ones I use in India, the Philippines, or Russia. Nonetheless, they are very strong. The most important thing about values and principles is that you must convey them with regularity. This is particularly important for us because we have thousands of people joining the organization every month. We have a certain amount of time set aside to explain the values in each and every one of our recruitment and induction programs.

Second, at Infosys, leadership by example is a value in itself. We, the top management team, don't ask people to do something we ourselves are not able to do. Whatever it is—whether commitment, going the extra mile, or being in front of the client—the top management team is definitely willing to lead, and is leading, by example.

The third point is to be very strict when it comes to violations of our values. We have a zero tolerance policy on this aspect, irrespective of the seniority of the individual. It is very clear: It doesn't matter who or where you are in the organization; you will be penalized if you violate the values.

2.2. Building a global enterprise from an emerging market base

Infosys has operations and clients in over 32 countries and employs over 153,000 people around the world. Its headquarters are located in India, where it also has 32 of its 70 global development centers and state-of-the-art training centers that educate thousands of employees every year. How significant to Infosys' success is its home base being in India? What specific advantages or disadvantages does this location offer?

India has many strengths. People speak English, the country graduates 700,000 engineers every year, and the education system functions well and produces very capable people. The talent in India is mobile and easy to train. After years of 8.5% annual growth, India has become a hub of activity for global companies. The focus has now shifted from cost, to access to talent, to being an innovation hub. For example, we recently launched Airtel Money, the first service of its kind. [Airtel Money services are developed and offered jointly by Infosys and Bharati Airtel, a large, integrated telecommunications company. The service allows customers to make cashless payments and settlements through their mobile phones.]

In India, GE developed an electrocardiogram that can perform ECGs for \$1. Nowhere else could that have been done. [See [Govindarajan and Ramamurti \(2011\)](#) for more on the concept of reverse innovation.] But India is full of contradictions. It has been growing at 8.5%, yet 350 million people still live below the poverty line. So there are challenges. Infosys leveraged India's strengths and invested in overcoming and augmenting its weaknesses. For example, our training and development center in Mysore is one of the biggest and finest. It can house 14,000 trainees at a time. They get intensive 6-month training that prepares them to meet the most demanding client needs. We spend approximately \$180 million a year on training.

A recent article (Khanna et al., 2011) suggests what accounted for Samsung's success was a hybrid business model that mixed Western best practices with those of a Japanese-Korean model. Would you consider your business model to be a hybrid in some way?

Our markets are global: 96%–97% of Infosys' revenue comes from outside India—63.9% from the United States, 21.9% from Europe, and 12.6% from the rest of the world. India contributes only about 1.6%. As such, our model had to be hybrid. But I want to expand on how this is hybrid. First is from the perspective of talent. We have people of 88 different nationalities working for us. We are investing heavily in hiring locally in all of our markets. In North America, we have been hiring 600 people annually. In China, we have 3,000 people; almost all of them are Chinese. In the Philippines, we have 3,000; almost all of them are Filipino. So in all our global markets, we are recruiting locally. We believe this is a necessity to compete in today's global market. Second is a behavioral and philosophical perspective. From the beginning, we stressed that we would be a non-hierarchical, merit-based organization and focused on recruiting and growing talent. This was driven by our value system, our vision statement. It was in our DNA.

The sequence of your market entries is unusual for an emerging market firm in that you chose to enter the most difficult, the U.S. and Europe, first. How did you arrive at that decision? In particular, can you comment on how Infosys acquired the knowledge to become the global competitor it is today?

We took a leap of faith. We bet on two trends: (1) technology will become ubiquitous, and (2) globalization will drive everything else. Everything we did was based on these two principles. We leveraged these two trends. We figured out that work could be done anywhere in the world and delivered to clients using technology. And that led us to the United States; it is the biggest market in the world, so we had to be there. Like I said before: We were born global.

Still, how did you establish a presence in the U.S.? Unlike Tata, for example, you did not have an existing brand name that you could extend to technology services.

We used partnerships. We had a partner in the U.S. that handled marketing and client relations for us. Our first client was DEC (Digital Equipment Corp). We also had a joint venture with Kurt Salmon and

Associates that generated the clients and leads for us. We had our own clients starting in 1986, and the first U.S. office with direct sales was opened in 1992. Working with partners is one of our core strengths, and we continue to leverage that strength even today through our strong network of partner ecosystems.

2.3. Change and continuity: Challenges, adaptation, values, and commitments

Given that your market is heavily North American and secondarily European, and given the severity of the financial crisis in those areas, how is it affecting Infosys? Is it leading you to think about more geographical diversification? Is it leading you to consider other changes to your business model?

I think it's important to understand the Infosys journey in a different dimension. We are now in what we call Infosys 3.0. We've gone through a huge transformation over the last 12 to 18 months, one which is now largely complete. We have done a number of things that I will now explain. To conceptualize a timeframe, Infosys 1.0 ranged from 1981 to 1995/96; during this period, some very fundamental things occurred. We pioneered the Global Delivery Model in the early 1980s and it has now become the de-facto industry standard. We listed on the Indian stock exchange in 1993. We chose three strategic actions: to focus on people, quality, and infrastructure. Regarding the first, we decided that we would recruit the best, and retain and enable them. Regarding the second, we decided to adopt global standards and compete on quality, not price. It was a very difficult choice to make at that point; for example, in 1994 we had to disengage from one of our largest clients—which accounted at that time for 40% of our revenue—because that account did not align with our principles of quality versus price. Regarding the third, we concentrated on the world-class infrastructure that I spoke about earlier.

If you look at the ingredients of Infosys today, 20 or 30 years later, you will see the impacts of these decisions. On the people front, we still recruit the best talent from top universities. We have created the largest and best infrastructure for education and training. On the quality front, we have adopted every global standard there is: ISO, CMM, NDS9000, and all such certifications. And we have used that as a mechanism for continuous improvement. We invest heavily in research and development: our Infosys Labs research group is comprised of about 1,000 people, our products base is about 3,000 people, and we have filed approximately 140 patents. This all occurred in Phase 1.0.

Then we progressed to Infosys 2.0. Based on revenue, Infosys was 95% Application Development and Maintenance upon entering this phase. We realized that if we wanted to strengthen our partnerships with our clients, if we wanted to become more relevant to our clients, we needed to expand our service plans. So over the last 15 years, we have become a full-service organization. Today, Application Development accounts for 38% of our revenue; we get 31% from Consulting and System Integration; and somewhere between 5%–8% each from infrastructure management, independent validations, business process management, and engineering. We have become a true end-to-end service provider.

Another goal of 2.0 was to become more global. Hence, Infosys expanded its footprint to continental Europe. At the end of Phase 1.0, we were 90% U.S.; today that has come down to 63.9% U.S., 21.9% Europe, and 12.6% rest of the world. We wanted to build strong consulting and system integration capabilities; we had none at the start of this phase. From 1999 to today, we have done a number of things and we now earn about 31% of our revenue from consulting and system integration. So during 2.0, we changed our portfolio from the service perspective, from the client perspective, and from a geographical perspective. We have evolved our capabilities drastically, and the revenues went up from \$300–\$400 million to \$6–\$7 billion last year. That's Infosys 2.0.

About a year ago we launched Infosys 3.0, and it is driven by the next set of goals and the next set of challenges. If you look at the industry, three major challenges emerge. First, the industry is very linear; if you want more revenue, you recruit more people. This means that as time goes by, the number of people you will need to recruit—high-quality people—will keep going up. Thus we believe in the long term, it will become increasingly harder to find these candidates in India or anywhere else. Second, some part of the business is getting commoditized; it is becoming very difficult to differentiate in spaces such as application and maintenance. Third, clients are looking for higher and higher value. These are the industry parameters.

When we assessed these challenges approximately 18 months back, prior to Infosys 3.0, we realized that we needed to move to the next phase. When you create strategy, it is very easy to become internally focused. But we put the client in the center and asked: What does this mean to the client and how do we address the client's needs? We came up with three priorities: higher business value to our clients, more relevancy to our clients, and strengthening partnerships. Value, relevancy, and partnerships: that led to Infosys 3.0.

The foundation of Infosys 3.0 is built on a number of initiatives. First, we launched this new strategic framework called 'Building Tomorrow's Enterprise.' It has seven themes, and is an innovation framework not only for us but also for our clients. Why? Because when we looked at our clients and had multiple conversations with them, we could clearly see that their focus was quite similar to ours: growth, differentiation, and return on investment. We considered the next 50 years and thought: what do our clients need in order to continue the journey of growth, differentiation, and return on investment? That led us to identify the aforementioned seven phenomena, or seven global trends, we believe they have to leverage for ongoing success. And if we have to be relevant to them—and we have to—we must deliver innovation in those themes. As our clients are trying to leverage those themes, we need to know those themes; we need to expect them and have intellectual property in them. Hence, it is a framework for innovation for our clients and us. It is also a framework for investment. That is a very interesting thing that emerged.

So what are the seven themes under Building Tomorrow's Enterprise (BTE)? They are: Digital Consumers, Emerging Economies, Sustainable Tomorrow, Healthcare Economy, New Commerce, Pervasive Computing, and Smarter Organizations (see [Table 1](#)). These themes cut across industries. They are relevant for every business. Look at retail: 49% of a typical retailer's revenues now flow from online channels, which are becoming more and more attractive to consumers than conventional channels. Every business needs to understand how to engage consumers in emerging markets. The third theme is 'Sustainable Tomorrow,' as we believe sustainability is going to become very important.

We firmly believe that healthcare is going to become a global issue. The healthcare economy is obviously huge for the United States, where it now represents 21% of the GDP. The only country in the world that can afford 21% is the U.S. If you look at India, China, or Africa, I think it [the share of GDP accounted for by healthcare spending] is more like 0.21%.

The fifth theme is what we call 'New Commerce.' This is the impact of mobility, micro-commerce, and inclusivity. We believe that commerce today is restricted to about 2 billion people in the world, probably even less because the remaining 4 billion are outside the banking system and the digital revolution. In India alone there are 991 million cellphones, 38% of which are smartphones. So 90% of Indians' first Internet experience occurs via their mobiles. It is a completely different paradigm. The

Table 1. Building tomorrow's enterprise: Summary of seven key themes

Digital Consumers	New technologies have redefined consumer behavior. Digital consumers are motivated by several factors including personalization, innovative experiences, peer influence, transparency, and ubiquitous connectivity. Enterprises of tomorrow need to adapt and develop capabilities to engage and connect with consumers.
Emerging Economies	Emerging economies are generating most of the economic growth in the world today. Understanding how to operate in these markets is a key challenge for tomorrow's enterprises. Major areas where enterprise capabilities need to be developed are: understanding consumers, using emerging economies as hubs of innovation and talent, and developing an ecosystem of local partners.
Sustainable Tomorrow	Long-term sustainability of businesses is dependent on stable and peaceful societies, preservation of our ecosystem, and sustainability of our environment. Business sustainability needs to be driven through three key ideas: social contracts, reducing resource intensity, and green innovation.
Healthcare Economy	Rising costs and access to healthcare continue to be pressing issues. Healthcare will impact countries not only socially and economically, but will also threaten competitiveness of enterprises. Improving affordability, preventing diseases, and increased patient-centricity and involvement in decision-making will drive healthcare in the future.
New Commerce	New commerce is about engagement and creating value for all market participants. Technological innovations are helping businesses reach previously underserved segments more effectively via new channels and new business models. Three key trends in new commerce that will shape tomorrow's enterprises are inclusivity, mobility, and micro-commerce.
Pervasive Computing	Technology is enabling everyday objects to become smarter and more interactive, and is revolutionizing the way humans interact with the world around them. Enterprises will need to provide a seamless user experience across multiple devices and networks, and analyze vast amounts of data collected through these networks. Intelligence, cloud-based computing, and sensor networks will shape evolution of pervasive computing and how organizations differentiate themselves.
Smarter Organizations	Smarter organizations will have to focus on three key aspects in the future: simplification, adaptability, and learning & collaboration. With rising complexity, increasingly diverse workforce and volatile market conditions, organizational survival will depend on how they tackle these three areas.

Source: www.infosys.com (Building Tomorrow's Enterprise: View Points). Summarized by the authors.

other two themes are 'Pervasive Computing' and 'Smarter Organizations.' The first is a technology theme; the second is an organizational theme.

In addition to Building Tomorrow's Enterprise, we re-organized ourselves into a new structure, which is more of a matrix. In our business, the biggest value to the client is at the intersection of peak domain capability and technology capability. For example, we need to bring together our strengths in designing multi-country systems and process re-design in Singapore. That requires deep domain capability in industry and technology capability. So we re-organized ourselves to enable this new strategic direction.

We also did two other things: we changed our name from Infosys Technologies to Infosys, because we are now more domain-oriented than technology-oriented, and we shortened our vision statement; it now only states that we'd be a "globally respected corporation." That's it. We felt that was powerful enough.

So, we accomplished four objectives under Infosys 3.0: a new name, a sharper vision statement, a new strategic framework, and a new organizational structure. To summarize, we are undertaking a new journey in response to three factors. First are the industry challenges I talked about. The biggest is talent: we believe our dependency on high-quality

talent will come down—but only about 20% or so, not very drastically—because the service industry is and will remain very people-oriented. Second is value to clients: we are trying to create a portfolio, which is very relevant to our clients. So how do you provide value? Through relevancy, intellectual property, superior execution, and driving efficiencies. The new framework allows us to do all of these things. Third is strengthening strategic partnerships. In this new framework, we will participate in all the activities of the client: we will take part in transformation of their work through consulting and system integration, which is about deep domain capabilities and deep business knowledge; consulting and program management capabilities; and developing local knowledge and local people. That is why we are recruiting locally. If you are going to do retail in Germany and we are going to help you transform your supply chain in English, that's not going to fly. You have to talk to them in German. You have to understand their supply chain, not the Indian supply chain. It requires us to create global talent. So we're addressing the industry challenges *and* we have led our own business model evolution. We have definitely taken a difficult and unbeaten path.

In what sense is it unbeaten? How is what you are doing different from what your major competitors are doing?

There's a choice to be made. It's similar to the choice we made in the 1990s—similar in one way, but much more complex. Let me explain. In the 1990s, Indian doctors and engineers were getting paid 20 times less than local doctors and engineers in the United States. We could have simply said that we would compete on price. We could be the lowest price provider. It would have worked. . .but not for 20 years. That is because price, by itself, is not a competitive advantage. Your speed and imagination; your ability to execute; your deep capabilities and knowledge—this is competitive advantage. So when we invested heavily in recruiting the best talent, in getting all those global certifications—CMM Level 4, Level 5, and so on—it was a difficult choice. It was more effort, more expense, and more change. Similarly today, you have a choice to make. You can be the commodity provider and create volume, or you can create a portfolio that is more balanced. As I said earlier, there are certain parts of this business that are becoming more commoditized. There, the only thing you can do is compete on price and create the highest volume. It will give you growth in the short term, and probably high growth. But in the long term, it is the same story: you cannot compete and you cannot

differentiate. So we have taken the path of creating a balanced portfolio. If you look at our business and IT operations, which account for 62% of our revenue and are driven by efficiency and automation, some parts of that business are becoming commoditized, not the whole part.

We are trying to balance that with other segments where we can differentiate, but we are of course not giving up this space. You cannot tell a client: "I will only do the most profitable work for you, but not the rest." At the same time, we are actively growing our consulting and system integration work that is more domain-oriented, much more capability-based, which has higher revenue productivity, and involves working with the boardroom rather than the back office. In addition, we are establishing the product and platform space, which is truly a new space, a blue ocean space where we're trying to convert cap-ex to op-ex for the clients. So we will own the intellectual property, make all the upfront investments, and provide solutions to the client on a pay-per-use basis or through licensing. It is a completely different model, one that is very intellectual property-oriented. And it is not service; it is actually a product space. Many organizations cannot move from service to products; they do not even try to combine them.

That's why I said we are treading a tough path. In some of these areas we do not have full capability. For example, in the products and platforms space, the only very successful product we have right now is Finacle, which accounts for about 4.8% of our revenue. Our total revenue from this space is, I think, 5.5%. But we have taken an aggressive aspiration that one-third of our revenue will come from this space over the next 7 years. That is a pretty aggressive target.

How is this different from your major competitors? What do they aspire to?

As we look at it, we compete with two kinds of corporations. One type is the Indian SIs (system integration companies), primarily in the business and IT space, not in the consulting and systems space. We also compete with the global SIs in the transformation, consulting, and systems integration space. Our consulting and systems integration revenue has gone up to 31%; I think the Indian industry average is less than 20%, which means most of the others are below that. So we have taken the initiative of creating a strong consulting and integration space. It is more challenging, more volatile, and more prone to global ups and downs as it is not an annuities-based business. Therefore, I describe the path we have chosen as the path of creating a

balanced portfolio made up of three parts: transformation, operation, and innovation.

2.4. The future: Globalization, emerging markets, and the flat world

Infosys is a unique business in this world of globalization. Based in India, it earns only a small portion of its revenues from that country. And the company has only recently moved into China. What do you think about Infosys in these markets?

I think we entered both the Indian and Chinese markets late. We believe that in these markets, the Global Delivery Model really does not work. We entered the Indian market very differently. For example, the work we are doing with the Income Tax department's Central Processing Center is a classic example of our operations in India. We have completely transformed the whole income tax process. We processed 22 million income tax returns last year, all electronic and tracked. Airtel Money is another example, as we talked about earlier. So I believe that in the Indian market, we have to follow a completely different paradigm.

We look at China in two different ways. First, next to India, China has the largest talent pool. One of the industry challenges I mentioned was the need to recruit a large number of talented people. So if we recruit large numbers of people in any other country, the obvious choice would be China. We have over 3,000 people there now and we have committed \$150 million to building a large campus, which is already in progress. So we are looking at China as the second-largest talent pool in the world, but it is not English speaking. The second important issue is the Chinese market, which we entered only in the last 2 or 3 years. It is unique and we are not a joint venture; Infosys China is a subsidiary. That has its own peculiarities. The Chinese revenue is quite small—about \$103 million.

Do you foresee China as a competitor?

Definitely, but China must first overcome a lot of challenges. The country produces scores of engineers, and very good ones, but they are not speakers of English. Management depth is still low, and business practices are not global. However, I am quite confident China will overcome this. It's very similar to what we talked about earlier in terms of competitor strategies: each player has taken a different path, and it is not about who is right or wrong. We believe that we at Infosys have taken a path of creating a balanced portfolio: more difficult, more long term, and more sustainable.

Infosys, and other Indian companies, were to some degree the inspiration for Thomas Friedman's (2005) contention that "the world is flat." Other commentators, most notably Pankaj Ghemawat (2007), have suggested otherwise, arguing that various types of distance—such as culture and language—make the world more regional. What is your view?

In my mind, 'flat world' is a synonym for globalization. Over the past 30 years, the world has advanced in multiple dimensions because of globalization. It has created employment, improved quality of life, and reduced the cost of goods. As a force of progress, globalization will continue and not abate. Facing tough times and rocky economic environments, as we are today, many people will reconsider these arguments. I can clearly see some elements of protectionism, barriers to mobility of people and talent. But I think in the long term, as a world for us to co-exist, globalization will continue to be a very important force for progress.

As an organization, Infosys gambled on going global; we took a leap of faith. We were in the technology business and said we would deliver it from one part of the world to another. Even today, only 30% of our work gets done in local markets; the other 70% is performed in our development centers around the world. The skills required have changed over time since we now do much more complex work. Our aspirations are different, too: we want to do consulting, customize to local conditions, be in markets like France and Germany, and have to speak the local language. But I don't think anything has changed in our original theses, our original beliefs about a globalized environment. Everything is a journey, not an end. I still believe that globalization will continue.

Can you operate anywhere in the world using the same business model that worked for Infosys in the past? Would you have to customize as you enter more and more markets globally?

You have to act locally. What is that cliché? "Think globally, act locally." Every market has its own peculiarities, and you must be able to create and leverage advantages in that market. Historically for most corporations, internationalization was an afterthought. But the first questions startups are asked today regard their plans for going global. When are you entering Europe as a market? When are you using India for development? When are you entering China for manufacturing? Where is your R&D center: Is it going to be in Chicago or split between Bangalore and Chicago? I think many of

those flat world questions have become part of the ecosystem. You have to be born global or else you're redundant. But as I said before, we are going through a difficult period now—a tough economic situation—so there is a natural tendency to raise barriers and protectionism.

Do you predict any major bumps along the Infosys 3.0 journey?

It's a very challenging and aspirational journey. The internal challenges are finished and we are now in Infosys 3.0 execution mode. Some things are not easy to overhaul. If you have different products and platforms, and say you want to increase revenue from 6% to 30%, I don't believe that it can be easy. It has to be organic, and your plans have to be adjusted along the way. Whenever you do these things, clients have to accept you—but I don't view that as a serious challenge. The biggest challenge is that we are going through this transformation during a difficult period in a tough economic environment.

Infosys has been very consistent from the beginning in that it stuck to company strategy, upheld values and mission, and maintained commitment to the long run. In light of the economic downturn, and being listed on stock exchanges in the U.S. and India, do the markets not exert pressure toward short-term thinking?

Of course. But when we speak of the long term, we still believe in short-term progress. We don't believe in saying something that will be realized 7 years from now and expect carte blanche for the next 6. We believe that long term is made up of a series of short terms, and we want to see short-term progress. So if we plan and say that in 7 years we want to earn 30% of revenue from products and platforms, we want to show gradual progress—5%, 9%, 14%, 18%, 23%, 26%, 30%—over the interim. That's first and foremost. It's also very important that we articulate to the market exactly what we are trying to do. We don't want to compromise performance, and must be transparent in the choices we are making. We have managed this so far and need to continue to do so.

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