

digital consumers co-creation self-service personalization
growth momentum smart sourcing emerging economies innovation hubs
social contracts sustainable tomorrow green innovation resource efficiency
adaptability simplification collaboration smarter organizations
new commerce micro payments mobility inclusiveness
cloud-based computing intelligence pervasive computing sensor networks
affordability healthcare economy prevention patient-centric

Building tomorrow's enterprise

What is not started today is never finished tomorrow.

– Johann Wolfgang von Goethe

Building tomorrow's enterprise

The future has a way of arriving unannounced, but winners are never taken by surprise. If the events of the last two years have brought us face to face with one reality, it is that enterprises need to be made future-proof. Even if the worst of times is behind us, the best of times will be ours only if we can seize the right opportunities.

In the changing world of today, opportunities have become inseparably linked with advances in IT. In our endeavor to future-proof the businesses of our clients, we at Infosys have identified seven key areas that are rapidly increasing in influence, and present great scope for IT-led innovations – Digital consumers; Emerging economies; Sustainable tomorrow; Smarter organizations; New commerce; Pervasive computing; and Healthcare economy.

We believe that realizing the full potential of these drivers is important for tomorrow's enterprise to forge ahead of its competition. It is by bringing new thinking and technological breakthroughs into existing ecosystems that enterprises can emerge stronger out of the downturn, and go fortified into the next generation of business.

We hope to see you in a better tomorrow.

The year at a glance

Indian GAAP – standalone

in Rs. crore, except per share data

	2010	2009	Growth (%)
Financial performance			
Income	21,140	20,264	4.3
Gross profit	9,581	9,119	5.1
Operating profit (PBIDTA)	7,360	6,906	6.6
Profit after tax ⁽¹⁾	5,755	5,819	(1.1)
EPS ⁽¹⁾ (par value of Rs. 5/- each): Basic	100.37	101.65	(1.3)
Diluted	100.26	101.48	(1.2)
Dividend Per share	25.00	23.50	6.4
Financial position			
Capital expenditure	581	1,177	(50.6)
Fixed assets	4,188	4,414	(5.1)
Cash and cash equivalents ⁽²⁾	14,804	10,289	43.9
Net current assets	13,131	12,288	6.9
Total assets	22,268	17,846	24.8
Debt	–	–	–
Net worth	22,036	17,809	23.7
Cash and cash equivalents / total assets (%)	66.5	57.7	–
Market capitalization	1,50,110	75,837	97.9

IFRS – consolidated

in Rs. crore, except per share data

	2010	2009	Growth (%)
Revenues	22,742	21,693	4.8
Gross profit	9,722	9,158	6.2
Operating income	6,910	6,421	7.6
Net income ⁽³⁾	6,219	5,975	4.1
EPS ⁽³⁾ (par value of Rs. 5/- each): Basic	109.02	104.89	3.9
Diluted	108.90	104.71	4.0

in US \$ million, except per share data

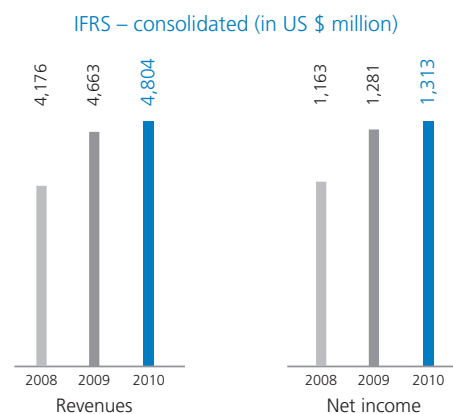
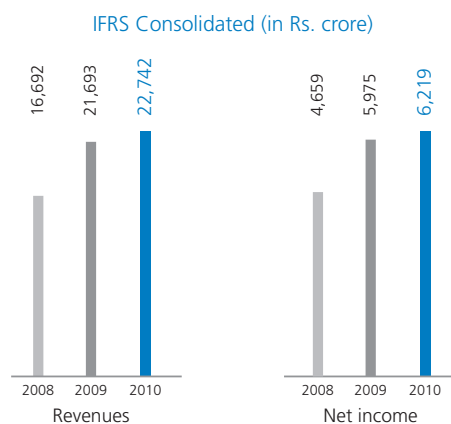
	2010	2009	Growth (%)
Revenues	4,804	4,663	3.0
Gross profit	2,055	1,964	4.6
Operating income	1,460	1,374	6.2
Net income ⁽³⁾	1,313	1,281	2.5
EPS ⁽³⁾ (par value of Rs. 5/- each): Basic	2.30	2.25	2.2
Diluted	2.30	2.25	2.2

Notes : 1 crore equals 10 million

⁽¹⁾ Before exceptional item

⁽²⁾ Includes investment in liquid mutual funds of Rs. 3,507 crore for fiscal 2010.

⁽³⁾ Includes income from sale of investments in OnMobile Systems Inc, USA of \$11 million (Rs. 48 crore), net of transaction costs, for the financial year ended March 31, 2010.



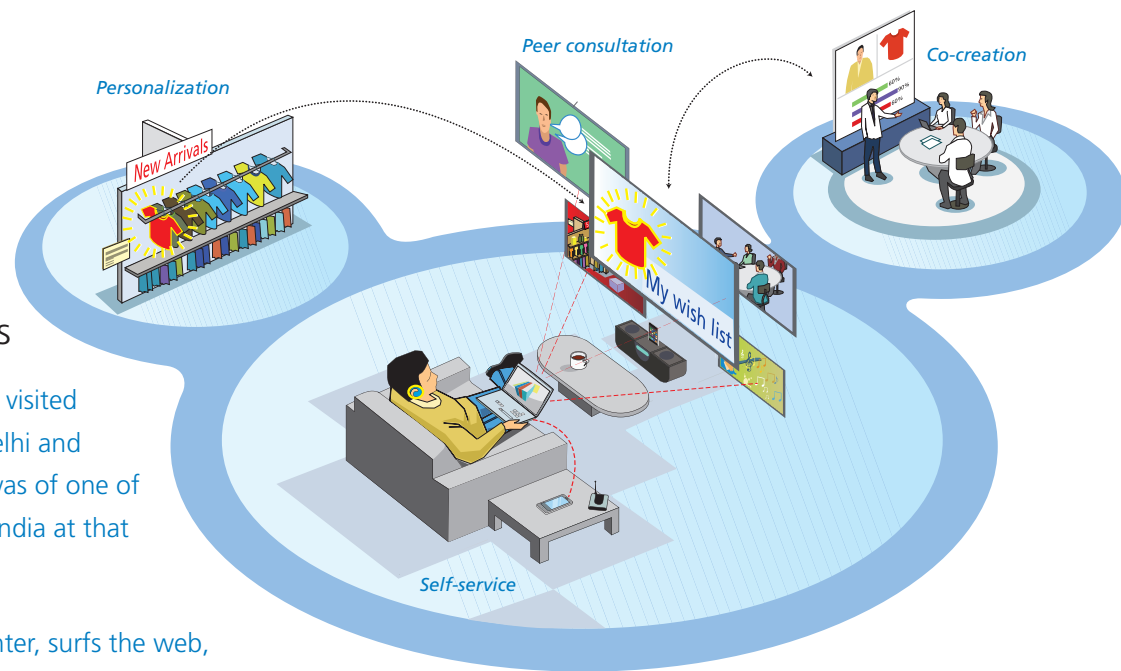
Digital consumers

In 1975, Meera Khanna visited an upmarket store in Delhi and bought a hair dryer. It was one of the two brands sold in India at that time.

In 2010, Rini, her daughter, surfs the web, reads consumer reviews, scours the frequently asked questions, posts online queries, and finally orders the hair dryer of her choice from an online shopping mall.

Digital consumers are redefining the value propositions in every industry. The role of the consumer is no longer passive. These digital consumers seek ubiquitous connectivity, transparency and information. Peer influence plays a significant role in their purchase decisions. Digital consumers do not depend on the organization for many things; they depend on themselves and each other. **Self-service** is a trend that is sure to redefine how enterprises of tomorrow engage with their consumers. Whether it is customer service, information exchange, product reviews or buying decision, the notion of 'self-service' is gaining prevalence very rapidly.

Active, informed and assertive consumers are going to demand greater personalization in the way products and services are delivered to them. This is the end of macro-segments leading to the rise of **N=1**, or engaging with each consumer, one at a time. Digital engagement, by its very nature, allows enterprises to customize and personalize relationships with their consumers and prospects. Enterprises of tomorrow would have to use IT innovatively to ensure the



effectiveness and economic viability of extensive personalization.

The value of deep engagement extends beyond personalization. What is exciting the enterprises the most is the ability to engage with their end-users through dialog, feedback and interaction in real-time, helping them gain consumer insights like never before. Today, an enterprise can have direct formal and informal contact with their consumers and prospects. Such large-scale daily conversations with consumers, coupled with unstructured data analytics, provide deep insights for enterprises. This makes them realize their dream to actively listen to the consumers and proactively involve them in the **co-creation** of new products and services.

We partner with our clients to get the best out of this new scenario by leveraging structured and unstructured analytics, facilitating an active interface between enterprises and their next-generation consumers through social networks, and by formulating innovative platforms for co-opting the new.

Emerging economies

We are witnessing a reverse trend in innovative solutions from emerging economies making an impact on businesses in the advanced markets. ICICI is India's second largest bank with an asset base of about US \$81 billion (as on March 2010) and over 20 million customers. It is expanding its international business in countries such as the United Kingdom, United States, Germany and Canada through a variety of service delivery channels including internet and mobile banking. Supporting its international growth plan is our universal banking solution, Finacle™.

Our solution enabled ICICI Bank achieve competitive advantage by a rapid roll-out of new products and faster customer service through multiple self-service platforms. The bank is now managing its global operations by delivering rich customer experience across channels, centralizing processing hubs and ushering in automation to excel in a multi-country environment.



Emerging economies now provide global enterprises the opportunity to engage with millions of consumers for new products and services. Enterprises need to re-engineer their business processes and technology platforms for their suitability to build **growth momentum** in emerging economies. The traditional approach of adopting standardized processes and systems from the developed economies poses significant challenges in these markets. For example, the innovative application of mobile technology and web-based services has led to the development of new products, services and business models for the emerging economies.

Successful enterprises are opening up their innovation processes and are collaborating with complementary ecosystem partners. Enterprises need to nurture and develop their innovation capabilities in emerging economies and not transport and localize the products and services developed elsewhere. Each of the emerging economies needs its own **innovation hubs** to respond rapidly to the differing needs, maturity and price points. For example, the ability to integrate product lifecycle management and supply chain management data is helping enterprises manage organizational information effectively across the industry value chain.

Enterprises are disaggregating and globalizing their innovation processes. Emerging economies are attractive destinations for **smart sourcing** because enterprises are moving independent work modules to locations based on factors such as availability of the right talent, cost, consumer proximity and co-location with manufacturing facilities. However, they need to shift the mindset from 'owning the resources' to working through networks to leverage the talent and resources available in emerging economies. The new technology and innovation hotspots are the emerging economies. Enterprises need to leverage emerging technologies with the right set of ecosystem partners. Doing so will pay them rich dividends now and in the future.

Sustainable tomorrow

In 2008, a reputed confectionery company based in the U.S. reduced its carbon footprint by 20%. The company's complex distribution network in Western Europe covered more than 44 million kilometers a year in shipments. Analyzing shipment data and using it to modify logistic operations helped the company evolve business practices that cause least harm to the environment.

Can we afford to take sides today in the conflict between global economic and global environmental interests? It is beyond debate now that we must invest in a sustainable tomorrow, in a world that is threatened with extinction by its inhabitants recklessly disturbing its unique and delicate balance.

Businesses have a significant impact on the environment through their use of energy and other environmental resources, and the emissions from their operations. Society, in the form of markets, governments, investors, the local community and employees, demands demonstration of concern and action from businesses. Hence, businesses have an unwritten **social contract** to factor environment as an important dimension of their operations and products. At the same time, governments of emerging economies and developing countries have a responsibility towards their citizens to ensure that environmental sustainability is achieved in a climate of continued economic growth.

Rising costs and scarcity of energy and resources impact long-term economic sustainability of businesses, and are among the top pressures driving



their sustainability agenda. Improving energy efficiency and reducing **resource intensity** is often the first and most important step toward achieving sustainability. This is driving the focus around energy efficiency in operations, transport, buildings, devices, equipment and in harnessing alternate energy sources.

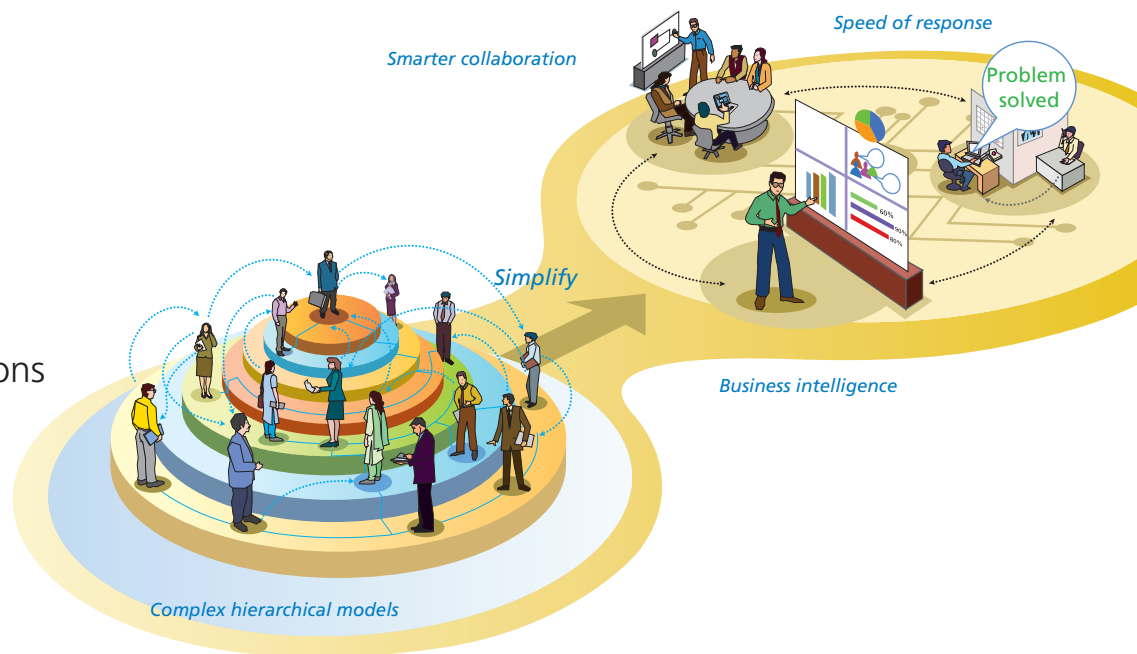
Technology is emerging as a key enabler in managing resource usage and efficiency. We have used technology to measure and monitor energy consumption data at granular levels in our campuses. Insights gained from analysis of this data enabled focused initiatives resulting in a per capita saving of 10% in energy consumption and energy bills over the last year.

Addressing issues of environmental sustenance and resource conservation without impacting growth calls for what can be termed as '**green innovation**'. Enterprises can drive their 'go green' goals through innovations in IT, communications, engineering and in materials and processes while also opening up newer possibilities for growth. We use our technology and innovation capabilities to offer solutions to clients in areas such as Smart Grid, Intelligent Building Design and Management, and Green Logistics, in conjunction with partnerships and alliances that bring complementary capabilities. Incidentally, it was Infosys that provided the analytics solution that helped the American confectionery company reduce its carbon footprint.

Smarter organizations

The existing IT system was proving to be too slow for the scale and complexity of operations at the offices of a major American logistics and mail services company. The information delays were affecting its revenue collection, customer satisfaction and operational efficiency. The company was looking for a 'cost and time-effective' solution. We developed just the right solution, thus reducing the delay from eight hours to 15 minutes for 200,000 daily checkpoints. It also helped the company track the business processes and provide timely customer updates. In addition, the revenue cycle was reduced through on-time capture of checkpoints for 30,000 daily shipments.

As an enterprise expands in terms of products, locations, employees and suppliers, and finds ways to meet the needs of increasing regulations, its operations get more and more complex. This also leads to duplication of work and loss of knowledge. In recent times, several enterprises have realized that the slide in their revenue or productivity is the result of their complexities rather than external factors. Simplification reduces risks and frees up cash. IT-led innovation should **simplify** and create a single digital nervous system for the enterprises to enable faster flow of information. Single instances, virtualization and legacy modernization are some of the most important candidates for simplification. Technologies exist, what we need is the commitment to innovate and simplify.



In today's dynamic business environment, enterprises have to **collaborate and learn** faster than ever before. Traditional methods of knowledge exchange are no longer sufficient for today's global enterprises. Technology makes it possible for people across the globe to collaborate, exchange thoughts and have an immersive experience in an informal learning environment. Together, these improve comprehension and enhance retention – which goes towards creating a smarter organization. And, beyond this, IT makes it possible to infuse the right knowledge to the right person, at the right time. Through personalization, smarter organizations are reducing the information clutter and realizing significant gains in workforce productivity.

To sustain and succeed in uncertain times, enterprises need to continually **adapt** to the rapidly changing market conditions. Technology can help model, track and optimize results. Smarter organizations integrate planning and performance management processes, systems and metrics with their corporate architecture. They link business goals, predictive models and day-to-day activities with real-time data through connected systems. This provides them with an enhanced ability to understand the present and predict the future – thus reducing uncertainty. It enables smart organizations to make fact-based decisions dynamically and rapidly to increase their probability of success.

New commerce

A barber in Bangladesh could not afford the rent for a shop space. So he bought a mobile phone and a motorbike instead, scheduling appointments by phone and going to his clients' homes. This was more convenient for clients and he was able to serve a larger client base and charge higher fees.

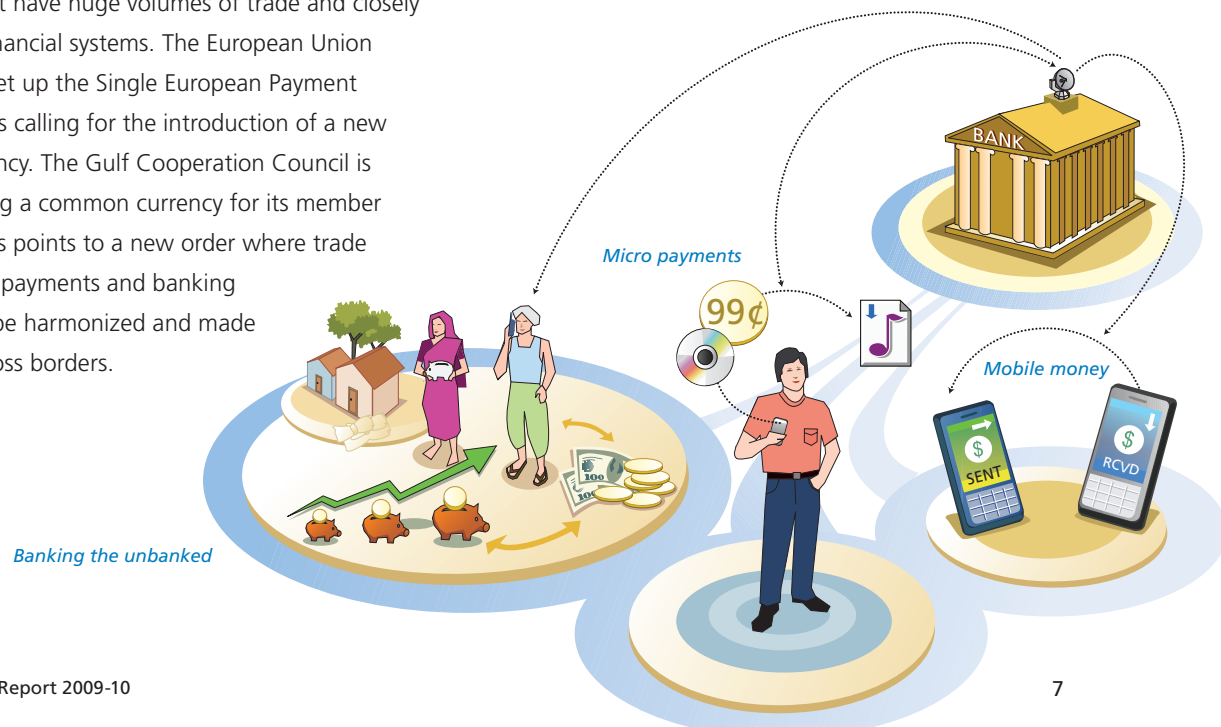
Mobility is opening up new business possibilities. Digitization and Virtualization are overcoming the geographic barriers for the knowledge-driven industry. Business treaties among countries are causing talent to be mobile. In emerging economies for instance, where penetration of credit cards is low, approximately four billion people have mobile phones. With mobile phones now so commonplace, new opportunities beckon. Mobile money, for instance, allows cash to travel as quickly as a text message.

Common payment areas are coming of age in countries that have huge volumes of trade and closely integrated financial systems. The European Union has already set up the Single European Payment Area. China is calling for the introduction of a new reserve currency. The Gulf Cooperation Council is contemplating a common currency for its member states. All this points to a new order where trade transactions, payments and banking systems will be harmonized and made seamless across borders.

With the evolution of technology, consumer behavior is changing like never before – consumers increasingly want to pay for a song and not for the entire album; someone wants an article and not the entire book. Sellers are responding by inventing new ways to address **micro** demands. Typical instruments like credit cards find it tough to enable purchases below US \$1. Opportunities in micro payments lie in enabling technology to support a huge volume of low-value transactions.

Small-value transactions usher in an **inclusive** commerce – microfinance and rural banking have emerged as bottom-of-the-pyramid commerce solutions. There are about 1.7 billion working adults in the world who earn less than US \$2 a day, and have no access to basic banking and financial services. This is the long tail of banking that can be tapped and served. Microfinance is spreading into developed economies too – institutions from the developing world are opening microfinance branches in countries such as the U.S. Incidentally, Finacle™ is deployed across 2,000 branches of regional rural banks in India, leading the financial inclusivity initiatives in the country.

Technology has morphed commerce in a manner that has made it mobile, enabled it to shrink to micro chunks and crisscross into the lives of more people like the barber from Bangladesh.



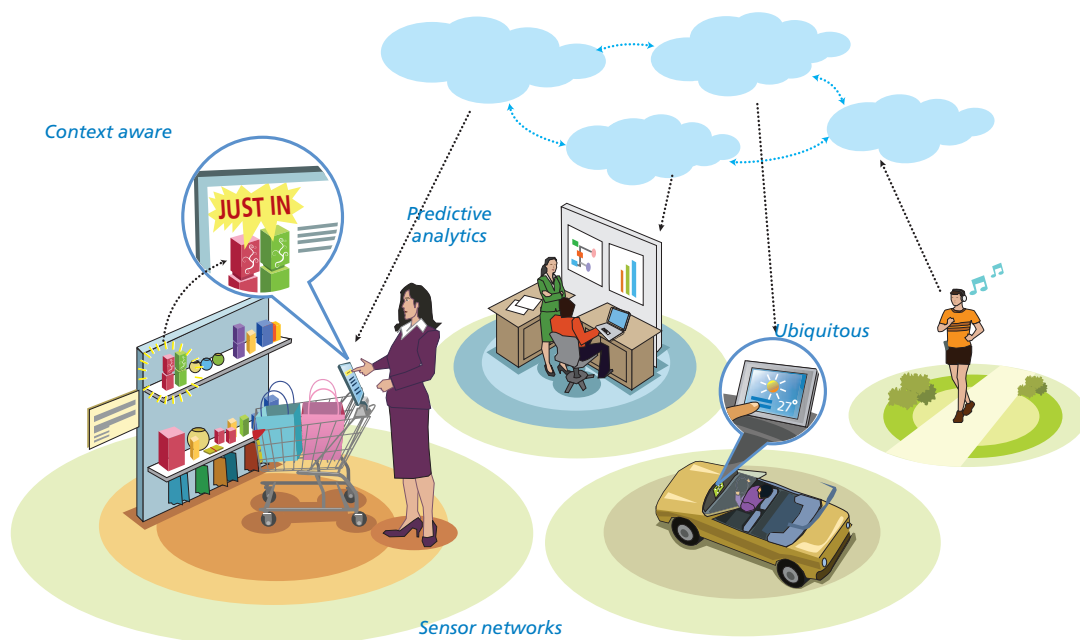
Pervasive computing

A pill, containing medicine and a tiny digestible sensor made from food ingredients and capable of transmitting wireless messages like a cellphone, may soon help remind patients about missed drug doses. Proteus Biomedical, a California-based company pursuing intelligent health products, has developed Ingestible Event Markers (IEM) – tiny, digestible sensors activated by stomach fluids after they are swallowed.

– *The Telegraph, Calcutta, February 4, 2010*

Can you close your eyes and think of everything around you, yourself included, as a computer? This would perhaps be the simplest way to convey the idea of pervasive or ubiquitous computing. The term Pervasive Computing was first popularized by Mark Weiser in his seminal 1991 paper, 'The Computer for the 21st Century', that described his vision of ubiquitous computing. Weiser's version of Pervasive Computing related to the creation of environments involving computing and communication capability, which seamlessly integrated with end users.

Pervasive computing is one of the major pillars on which tomorrow's enterprises are being built. By turning nearly everything into a computing device, pervasive computing is making it imperative for enterprises to reach their end users through a multitude of devices – both wired and wireless. Users in turn are accessing content and applications through multiple channels as well as social networks, resulting in an exponential growth of data that need to be constantly monitored and analyzed.



Intelligent enterprises are drawing inferences as well as key decision points by analyzing data about their customers, competitors, vendors, markets, products as well as services. Enterprises are able to garner localized, specific intelligence using **sensor networks**, thereby enabling them to develop innovative products and services that are better aligned to market needs.

As computer technology progresses further, virtually everything, from the coffee mug to the human body, can be embedded with a chip or sensor that will record, store and provide data while integrating with other devices and networks in real time. Just-in-time computing and storage using **cloud-based computing** platforms and services are resulting in commoditization of infrastructure thereby enabling enterprises to optimize computing and storage power.

We are working towards leveraging the Software as a Service (SaaS) platform for our Finacle™ Core Banking solution. This helps our banking clients that operate in a specific geography or with a specific line of function like deposit products. The implementation mode promises easy deployment that is highly critical for our banking clients venturing into new markets and exploring additional avenues for business, with focused product lines.

Healthcare economy

A Fortune 500 retail company is known for its innovative employee healthcare offerings. It surprised market observers by managing to keep its healthcare cost flat from 2005 to 2009. The company realized that 70% of its healthcare costs were the result of lifestyle patterns, and 74% of these costs could be attributed to four largely preventable chronic conditions: cardiovascular disease, cancer, diabetes and obesity. It encouraged its employees to adopt healthy lifestyles by reducing the annual premium (by US \$780 for the individual and US \$1,560 for the family) if an employee passed all the tests for preventable conditions. The company estimates that the U.S. can save \$800 billion by adopting a similar approach.

Does the demand and consumption of healthcare affect the economy? Issues related to scarcity in health-related amenities, and the social causes of health-affecting lifestyle and behavior might significantly alter the economics of the healthcare sector. Cost, inconsistent quality and accessibility are some of the key challenges in healthcare delivery across economies. The **affordability** of healthcare is affected by factors like rising elderly population living well beyond their earning years, and increased incidence of chronic diseases, among others. According to experts, 30% of the healthcare delivered in the U.S. is unnecessary. IT can minimize errors and redundant diagnostic tests and treatments, while ensuring better healthcare delivery through patient data analytics, evidence-based medication, paperless transactions, etc.

Current healthcare practices focus on symptoms and regard the patient as a passive recipient of service.

Patient-centric care has to consider the patients' values, involve them in clinical decisions, offer information and ensure transparency and self-care. With IT integration, patients can be accorded personal attention through seamless communication and interactions with their care providers.

As healthcare costs rise, consumers are looking for healthy alternatives in everything they consume. Enterprises are promoting healthy work life, insurers and providers are offering programs that support wellness, prevention, and early detection. **Prevention** is another focus area. A significant portion of future healthcare spending will be on vaccines, genome sequencing and other means of preventing chronic conditions. Several healthcare providers have enlisted social media to promote preventive healthcare. Bioinformatics and patient data analytics would play a critical role in improving prevention statistics. The shift from cure to prevention provides a huge opportunity for investing in wellness. The trend of considering healthcare across sectors such as manufacturing, retail, financial services, travel and tourism has already begun to transform established business models.

Our expertise in software and technology R&D was used in the initiative led by the Council of Scientific and Industrial Research (CSIR) to develop Genome Informatics on the tuberculosis bacterium. We aim to use similar expertise to coordinate between multiple players in the healthcare sector, thus enabling our clients to get maximum benefits from the major shifts in the sector.

