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EXECUTIVE SUMMARY

The SME segment is the growth engine of India economy. IT is a key strategic tool, which can help India SMEs get a competitive advantage in the global market place. However, there is a limited understanding of this segment in the industry. In order to create a broader awareness & appreciation of challenges SMEs face in India, Microsoft, as a responsible member of IT industry fraternity has taken on itself to help in this endeavor. Microsoft has joined hands with AMI-Partners - a well respected name in ICT research & consultancy worldwide in SME space to help develop a status report towards this objective.

Access Markets International (AMI) Partners, Inc. is an authoritative source of strategic advice, market intelligence and venture capital investment in IT, Internet, telecommunications sector. It has worldwide presence with offices in New York, San Jose, London, Tokyo, Singapore, Kolkata and Bangalore. It has helped shape the go-to-market SME strategies of more than 150 leading IT, Internet, telecommunications and business services companies over the last decade. The firm is well known for its IT and Internet adoption-based segmentation of the SME markets; its annual retainership services based on global SME tracking surveys; and its proprietary database of several thousand SMEs in the U.S., Europe, Asia-Pacific and Latin America.

The study was commissioned in September and final analysis delivered in the beginning of February, 2008. This initiative is undertaken to help create a better understanding around SMEs among various players in the Ecosystem. The intention is to disseminate these insights with the broader ecosystem in the country including Industry Bodies, IT companies, Policymakers and influencers to be used as an input in framing of strategic thinking and views on growth of SME in the country. This is proposed to be done as a continued initiative to track progress on various key parameters to build an ongoing value for the industry at large.

The key findings from this study are as below:

1. The level of optimism in business outlook for the coming year among Indian SMEs is very positive – businesses are continuing to invest more

2. No. 1 focus area for SMEs is growth in their topline revenue

3. No. 1 challenge for SMEs is increasing competition followed by pricing-pressure in the market and managing customer expectations

4. SMEs realize the need for technology to grow their business, further catalyzed due to business mandate by larger clients, global buyers and international regulatory norms

5. Decision-making for technology adoption still concentrated in the hands of business owners among SMEs

6. While more than half (58%) of Medium Enterprises are in the second stage of IT adoption wave, majority of Small Enterprises are still at the first stage

7. A significant democratization has taken place in usage of computers over the last five years

8. a) Gradual shift from voice to data as communication needs scale from primarily local to national and international long distance with expansion in SME business footprint

8. b) Internet penetration is growing – 60% in Small Enterprises and 96% in Medium Enterprises owning PCs

9. Future investments from Small Enterprises focused on basic infrastructure, while Medium Enterprises look for applications like ERP, VPN, firewall

10. Emergence of hosted applications is being observed with caution among SMEs

DISCLOSURE

- The Study was commissioned by Microsoft and delivered by Access Markets International (AMI) Partners, Inc., India

- Microsoft reviewed and provided feedback to AMI, but AMI maintained editorial control over the study and its findings

- The organizations interviewed by AMI for the study were selected by AMI based on a qualified statistical process of listing and sampling

- AMI has selected the SME sample through a statistically significant sampling process to represent the characteristics of the overall SME universe. The margin of error is 5.2% at 90% Confidence Level

BACKGROUND

Across the globe, Small and Medium Enterprises (SMEs) are a critical force – fueling respective economies and employment, and re-shaping both government policies and corporate strategies. Globally, SMEs comprise approximately 99% of all firms and employ between them about 65 million people. 0.68 Million businesses are anticipated to be added to the global pool of SMEs next year.

The reasons for the strategic importance of SMEs are as follows:

- SMEs contribute to employment growth at a higher rate than larger firms and they are anticipated to provide a very significant share of overall employment in the long term
- SMEs increase competitiveness of the marketplace and can curb monopolistic positions of large enterprises;
- SMEs can act as the seed-bed for the development of entrepreneurial skills and innovation

It is widely agreed that Brazil, Russia, China and India, four of the world's largest emerging economies (BRICs), have massive growth potential:

- Under the right conditions, the combined economies of these four could be worth more in US dollar terms than the G6 (Germany, France, Italy, Japan, UK and USA) by 2041;
- As early as 2009, the annual increase in total US dollar expenditure from the BRICs could be greater than in the G6.

The implications of this and the shift in demand from the developed to the developing world will be significant for businesses:

- As growth accelerates and per capita incomes rise in the heavily populated BRICs, they will become the world's most important consumer markets reducing world dependence on leading Western economies for global demand of goods and services
- India is a prominent economy in the BRIC group with a consistent rate of real GDP growth of 8.7%

Real annual GDP Growth in BRICs: 2000-2006
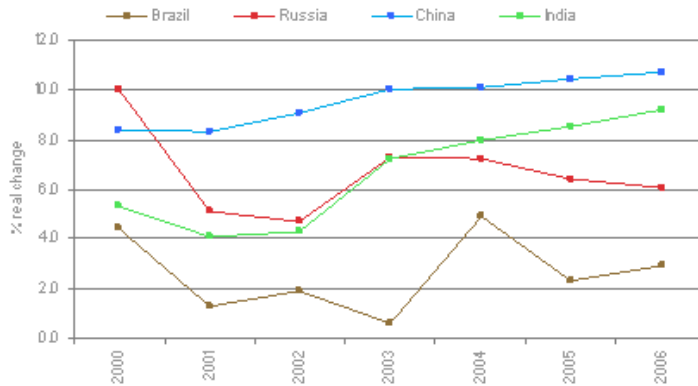
Source: Euromonitor International from International Monetary Fund (IMF), International Financial Statistics.

- Some emerging market trends in the BRIC region are:
    - High GDP growth rate, middle class affluence is boosting demand
    - Attracting significant foreign direct investment, focus on infrastructure development
    - Abundant supply of educated workforce at low cost, high potential for outsourcing work specially India
    - Government disinvestments of PSUs, domestic/global mergers/acquisitions in corporate space
    - Abundant agri/mineral resources being exploited now - Commodity markets expanding fast

Definition of SMEs

There is no universal definition of small and medium enterprises. There are certain objective standards, which classify the units depending on the number of employees, scale of turnover or PC installed base. However, employee based segmentation is the predominant segmentation approach followed across BRIC and Worldwide.

In the Indian context, the Government classifies SMEs on the basis of limit of historical value of investment in plant & machinery. Manufacturing units with investment upto Rs. 25 Lakh in plant & machinery are considered as Micro Enterprises, those with investment upto Rs. 5 Crore are considered as Small Enterprises and upto Rs. 10 Crore are considered as Medium Enterprises. In case of Service sector, the Micro enterprises are those with investment ceiling of 10 Lakh, the smaller enterprises are valued upto Rs. 2 Crore and Rs. 5 Crore for Medium Enterprises.

PURPOSE

The views and opinions expressed in this document are based on a survey conducted by Access Markets International (AMI) Partners, Inc. on India SMEs in Metro and Tier II cities.

The key objectives of this report are:

- Provide a perspective on SMEs across BRIC countries and worldwide

- What constitutes SME sector in India? How are they spread geographically and by vertical?

- What are the top business challenges for these businesses in the environment today?

- Role of ICT in their Business. How do they perceive it? What is the adoption curve?

- How has the user profile and usage evolved over the years? What are the drivers and barriers?

- How are new technologies impacting communication – Voice vs. data?

- What role is internet playing in business requirements and how is it evolving?

- What has been their experience – share some scenarios/case histories.

- Recommendations to drive IT as a tool of competitive advantage for Indian SMEs.

APPROACH & METHODOLOGY

A combination of Qualitative and Quantitative tools has been deployed in a systematic manner to obtain an overall perspective about SMEs in India.
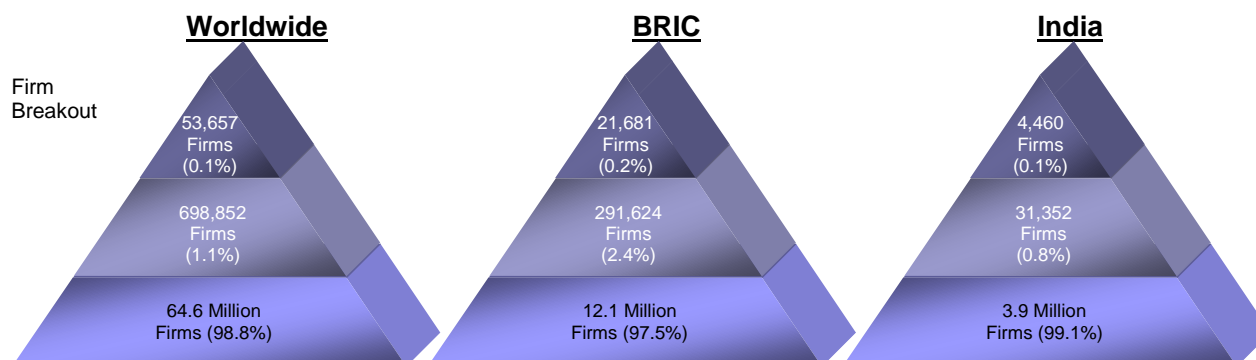
Qualitative Research

- The primary tool for Qualitative Study was Focus Group Discussions with Owners/Business Decision Makers and IT Managers/ Decision Makers

- A total of 6 Focus Group Discussions were conducted across Bangalore, Mumbai and Coimbatore. A mix of different verticals belonging to Manufacturing, Services and Retail sectors were maintained in the groups

- The Qualitative Study was designed to conduct an in-depth probing into mindsets of SMEs in order to gain insights about SMEs' behavior and attitudes regarding their business challenges, strategies, processes, technology adoption and different aspects of IT usage, both current and planned. The aim of the qualitative study was also to bring out trends and various other facets about SMEs that could be tested and substantiated in the quantitative phase of the study.

Quantitative Research

- A quantitative closed-ended questionnaire was administered among 250 Small and Medium Enterprises to validate the hypothesis developed based on qualitative phase – the margin of error is 5% at 90% Confidence Level

- AMI has proven experience in conducting studies in SME space across the world. In India, AMI has developed and maintains an extensive list of 15,000 SMEs, updated on a regular basis. This knowledge base was utilized to select and prioritize stratified sampling methodology for the survey.

- Face to face interviews were conducted by qualified field researchers from AMI across 5 major cities (Mumbai, Bangalore, Kolkata, Nagpur & Coimbatore).

- Samples for Small & Medium Enterprises have been drawn based on employee-size, vertical industries and number of PCs owned by these business across all locations, including HQ, all branches and factories/warehouses, as applicable

INDIA SME OVERVIEW

19% of the Global SMEs are located in the BRIC region. India SMEs constitute 6% of Global and 32% of BRIC SMEs.

Worldwide	BRIC	India

Firm Breakout

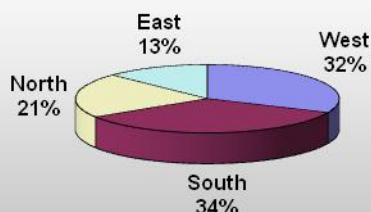| Worldwide	BRIC	India
53,657 Firms (0.1%)	21,681 Firms (0.2%)	4,460 Firms (0.1%)
698,852 Firms (1.1%)	291,624 Firms (2.4%)	31,352 Firms (0.8%)
64.6 Million Firms (98.8%)	12.1 Million Firms (97.5%)	3.9 Million Firms (99.1%)

The Small & Medium Enterprise sector constitutes 99% of the total businesses in India and contributes almost 50% to the country's GDP. Small enterprises constitute 99.4% of the country's SME universe.

AMI Partners estimate that there are 3.98 Million SMEs in India. A vertical industry-wise break-up of these businesses reveal that retail (41%) and manufacturing (17%) are the top two verticals constituting 58% of this universe of SMEs. From a regional analysis of SMEs – the west and south comprise 66% of the SME universe.
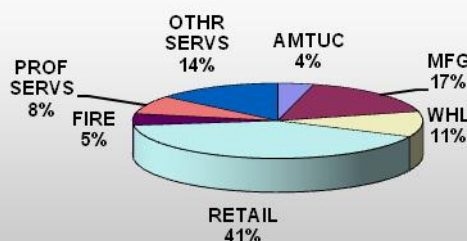
SME UNIVERSE DISTRIBUTION BY CITY TIERS

Tier I Cities 63%	Tier II Cities 25%	8% Tier III Cities

INDIA SME UNIVERSE DISTRIBUTION BY REGION

East 13%
West 32%
North 21%
South 34%

INDIA SME UNIVERSE DISTRIBUTION BY VERTICALS

OTHR SERVS 14%
AMTUC 4%
MFG 17%
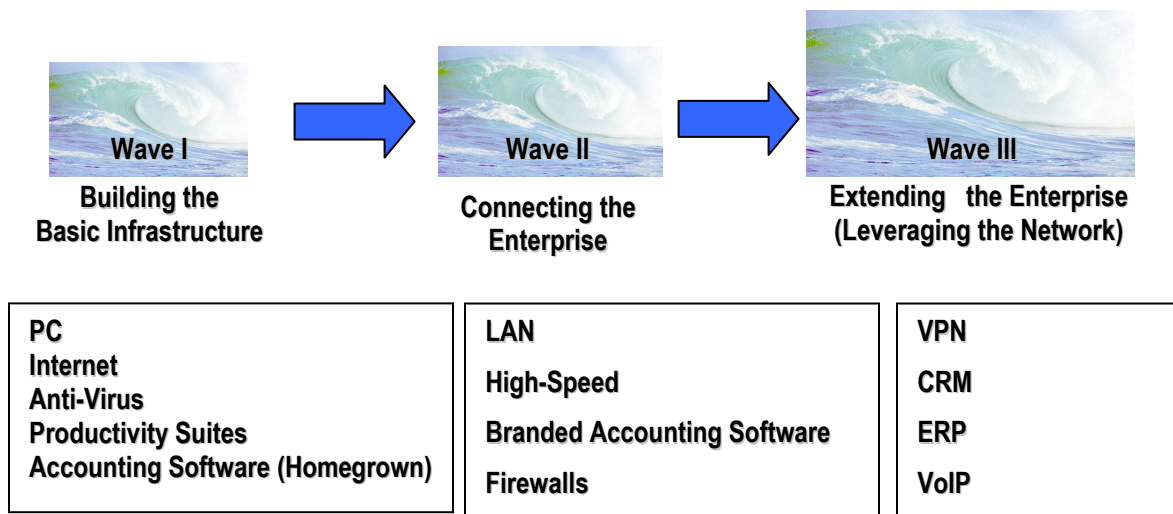PROF SERVS 8%
FIRE 5%
WHL 11%
RETAIL 41%

(PROF SERVS = Professional Services, OTHR SERVS = Other Services, AMTUC = Agriculture, Mining, Transportation/Telecommunication, Utilities & Construction, MFG = Manufacturing, FIRE = Financial Institution, Real Estate, WHL = Wholesale)

As a business evolves, it faces increased challenges in the following areas:

- Customers are more demanding, higher levels of customization
- More customer touch-points
- Employees are more geographically dispersed
- Increased requirements for accountability/formality
- Evolving decision making, organization, business processes, ecosystem partners/channels, & service/support needs

As a result, typically SMEs go through three distinctive phases of IT deployment - from building infrastructure solutions to deploying connectivity solutions and ultimately enterprise solutions for extending their business reach with their remote locations, customers and business partners.

Three Waves of IT Adoption

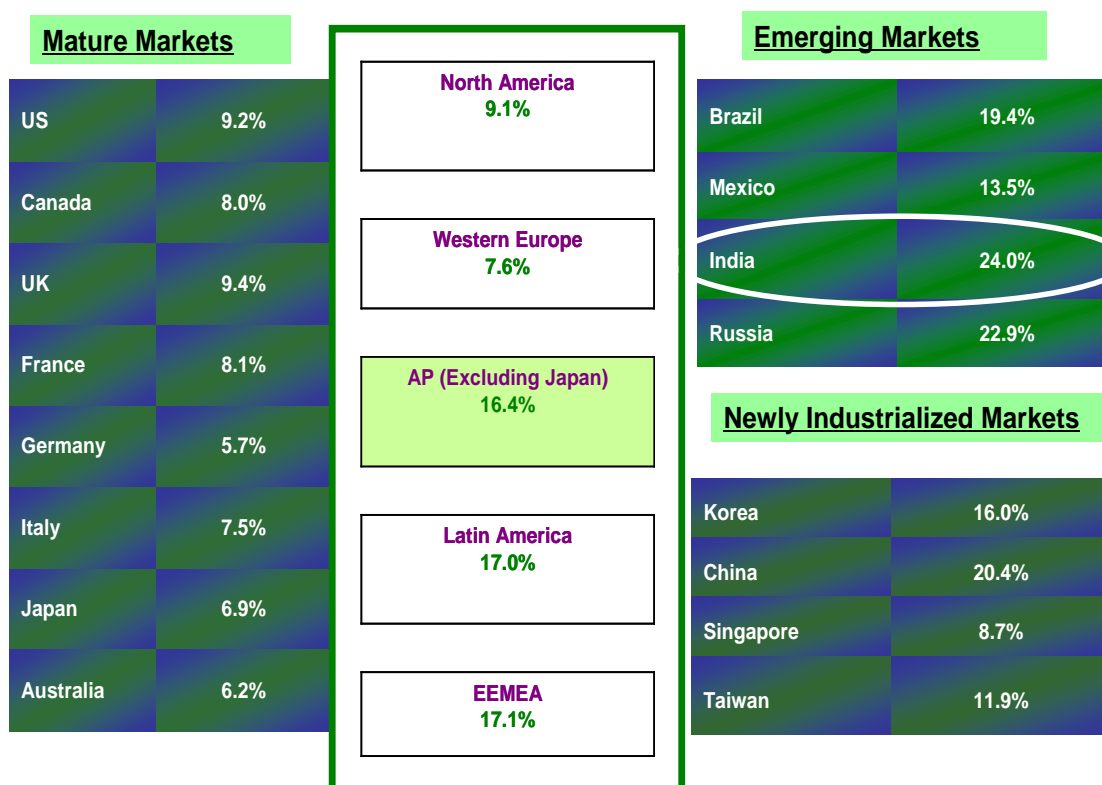| Wave I	Wave II	Wave III
Building the Basic Infrastructure	**Connecting the Enterprise**	**Extending the Enterprise (Leveraging the Network)**
PC **Internet** **Anti-Virus** **Productivity Suites** **Accounting Software (Homegrown)**	**LAN** **High-Speed** **Branded Accounting Software** **Firewalls**	**VPN** **CRM** **ERP** **VoIP**

The process usually develops sequentially in a wave-like fashion as follows:

I. **Building the basic infrastructure** – acquisition of PCs, peripherals, productivity suites and business applications, basic web sites, internet access and security are typical examples. There are 1.38 million India SMEs who have already built their basic PC infrastructure (phase I); Internet adoption is quite healthy at 60%+ penetration; however a lot remains to be done to enhance IT infrastructure in terms of website, broadband, security modules, etc.

II. **Connecting the enterprise** – adoption of connectivity solutions – LANs, servers, transactional web sites, high speed access, collaborative applications, firewalls are a few examples. Approximately 0.36 million India SMEs have built some or all aspects of phase II.

III. **Extending the Enterprise (Leveraging the Network)** – deployment of enterprise applications (ERP/CRM), remote-access solutions (RAS, VPN), Wide Area Networking (WANs), VoIP, networked storage (SAN/NAS), intranets, managed security solutions. Less than 2% (0.03 million India SMEs) have deployed some aspects of phase III; indicating that penetration of these solutions is still at an embryonic stage within India SMEs.

Various regions' SMEs are at different stages of adoption. The relative positions of various countries stage of adoption point toward continued growth in IT spend across the global SME space, though, driven by differing regional imperatives and technologies.

IT SPEND GROWTH RATES OF SMEs - BY COUNTRY

Mature Markets

US	9.2%
Canada	8.0%
UK	9.4%
France	8.1%
Germany	5.7%
Italy	7.5%
Japan	6.9%
Australia	6.2%

North America
9.1%

Western Europe
7.6%

AP (Excluding Japan)
16.4%

Latin America
17.0%

EEMEA
17.1%

Emerging Markets

Brazil	19.4%
Mexico	13.5%
India	24.0%
Russia	22.9%

Newly Industrialized Markets

Korea	16.0%
China	20.4%
Singapore	8.7%
Taiwan	11.9%

DETAILED FINDINGS

1. "The level of optimism in business outlook for the coming year in Indian SMEs is very positive – businesses are continuing to invest"

SMEs throughout India are expanding rapidly – both in terms of hiring and additional branch offices.

- 80% are expecting 11% growth in their revenues in the next 12 months
- 52% of the 3.98 million Indian SMEs are planning to add an average of 2.2 employees per business-next year
- 16% of SMEs are anticipated to add new branch offices to increase geographic reach and improve infrastructure.

Expecting Revenue growth	Add employees	Add Branches	% of SME
80%	50%	15%	
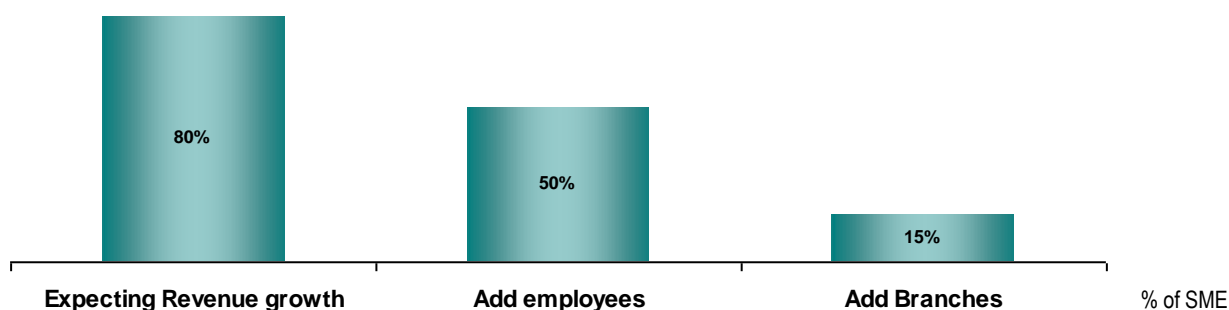
2. "No. 1 focus area for SMEs is growth in their topline revenue"

- 55% of SMEs mentioned that increasing revenues is their primary business goal
- Higher profit actually comes second in line – only 23% of businesses indicated that increasing profits is their primary business goal
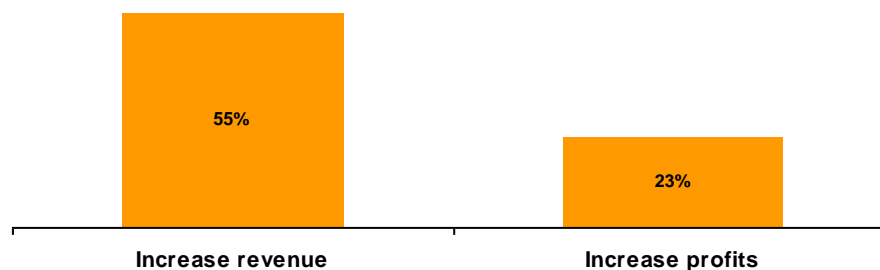
Increase revenue	Increase profits
55%	23%

3. "No. 1 challenge for SMEs is increasing competition followed by pricing-pressure in the market and managing customer expectations"

- The most vital external business challenge for SMEs is rapidly increasing competition both from foreign players as well as peers from within the country; this has been top-ranked by 67% of SMEs.

- 48% of businesses feel that 'pricing pressure' in today's market place is a major challenge for them. 33% of SMEs feel that they are unable to cope with the escalating volume of customer demands. They also feel that the nature of customer demands has become more complex, this has led to need for customization and bringing in uniqueness in their offering to gain competitive advantage – "*Billing: need to automate. Customers do not have to wait for so long in queues as our POS facility is very efficient. Using queue busters (portable thermal printers for billing). By this means customers with 2 or 3 items do not have to wait for so long, as billing agents will approach them"– A small busy retail store in Chennai*
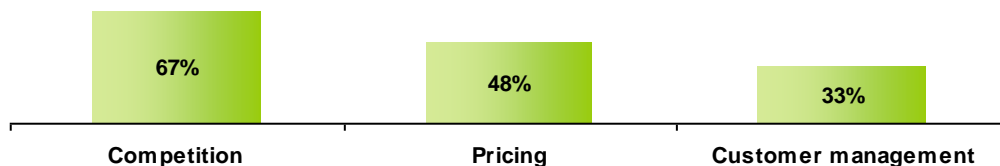
67%	48%	33%
Competition	**Pricing**	**Customer management**

4. "SMEs realize the need for technology to grow their business, further catalyzed due to business mandate by larger clients, global buyers and international regulatory norms"

Key motivators for IT adoption are:

- Need to scale operations to manage rapidly growing business volumes, as felt by 50% of SMEs

- A need to increase efficiency of business operations - mentioned by 41% of SMEs

Further factors driving their continued investment in ICT are:

- Influence of large business buyers and international customers (according to 39% SMEs)

- Keeping up with latest technology trends - 39% of SMEs mentioned this – "*We feel laptops , wireless connectivity etc make an impression on clients and give a more professional look" - Comments from a small consulting firm*

- Regulatory compliance (30% of SMEs)

- Increased marketing & awareness building efforts by IT vendors and Channel partners (21%)

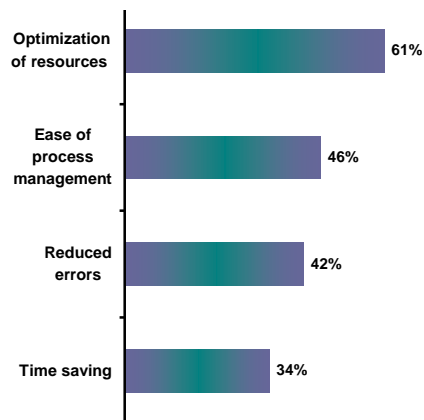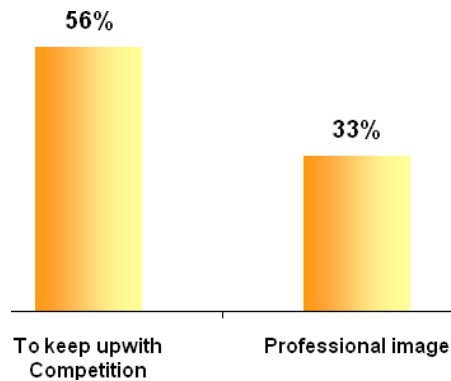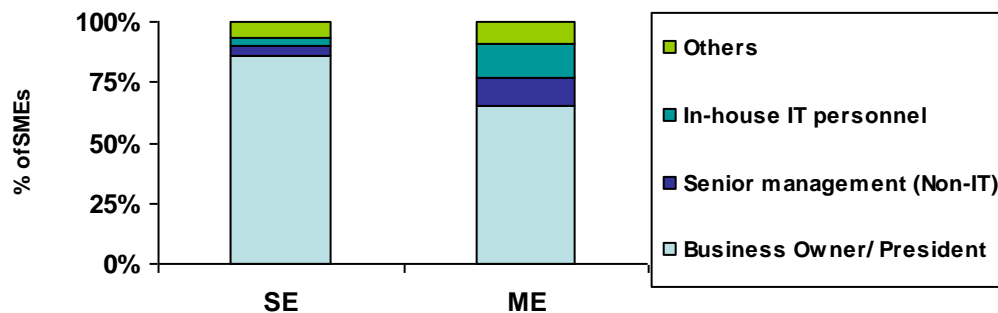**Perceived Benefits of Technology adoption**

OPERATIONAL BENEFITS

Optimization of resources — 61%
Ease of process management — 46%
Reduced errors — 42%
Time saving — 34%

IMAGE RELATED BENEFITS

56% — To keep upwith Competition
33% — Professional image

5. "Decision-making for technology adoption still concentrated in the hands of business owners among SMEs"

- The final decisions for any IT purchase are made by business owners for 90% of SEs and 65% of MEs

- The role of in-house IT personnel as influencers in final IT purchase decision-making is limited to 14% of MEs and only 3% of SEs

Legend:
- Others
- In-house IT personnel
- Senior management (Non-IT)
- Business Owner/ President

6. "While more than half (58%) of Medium Enterprises are in the second stage of IT adoption wave, majority of Small Enterprises are still at first stage"

- A majority of SEs are still in the First -Wave of Information Technology adoption; i.e. building a basic infrastructure. Penetration of basic technologies like Internet and broadband has reached 60% and 38% of small businesses; respectively. However, most of Medium Businesses have already crossed the First Wave – all of them have at least one PC. Further, penetration of Internet and high-speed Internet have reached near-saturation at 98% and 87% of MEs; respectively.

- A much lesser proportion of small businesses are in Wave II ('connecting the Enterprise'). 21% of small businesses have adopted basic networking like LAN; servers are utilized by only 10%. However, penetration of similar technologies is much higher for MEs – 58% of them possess servers

- A minuscule proportion of Indian small businesses have reached the Third Wave of Technology Adoption; 'Extending the Enterprise"- penetrations of relatively advanced technologies like ERP is just 2%. A larger proportion of Medium Businesses have crossed over to the Third Wave. Penetration of high-end technologies like ERP and WAN are substantially higher as compared to SEs - at 19% and 15%; respectively - *"We had a single PC 15 years back…then we had finance and pay roll, now we have ERP to get full benefit of the product we have to connect all Factories also, so we have leased lines, WAN, VPN since we have 8 branches all over India"*- A medium size manufacturing company

7. "A significant democratization has taken place in usage of computers over the last five years"

- Democratization of PC usage - PC usage has extended to junior management. Earlier, only senior management was the user. Five years back, usage of PCs by junior personnel was observed within 35% of SMEs – this figure has risen to 80% now

- Some PC-based applications that continue to remain frequently used are:
  - Book-keeping/accounting (continues to display high usage levels – rising from 69% to 93%)
  - E-Mails (rises from 53% to 93% usage of SMEs)

- Dropping Internet prices and easy accessibility has boosted online applications of VoIP –from 6% to 14% and online purchase – from 5% to 23%

- Affordability enhances the usage of portables - 22% of SEs and 80% of MEs own laptops "*10 years ago, we had to go and stand in the exchange and wait - for brokers it was very difficult but now we sit on a lap top and trigger of button can purchase crores worth in a moment". – A Stock Broking firm*

- Businesses appreciate the aesthetic and image connotations of newer technologies – hence gradual shift observed towards flat panel TFT monitors; an increase from 6% to 25%

8. "Gradual shift from voice to data as communication needs scale from primarily local to national and international long distance with expansion in SME business footprint"

The communication needs of SMEs are still significantly voice-driven – voice comprises 68% and 56% of local and intra-office communication needs of SMEs. The proportion of data-driven communication rises to 77% for interstate and international communication.
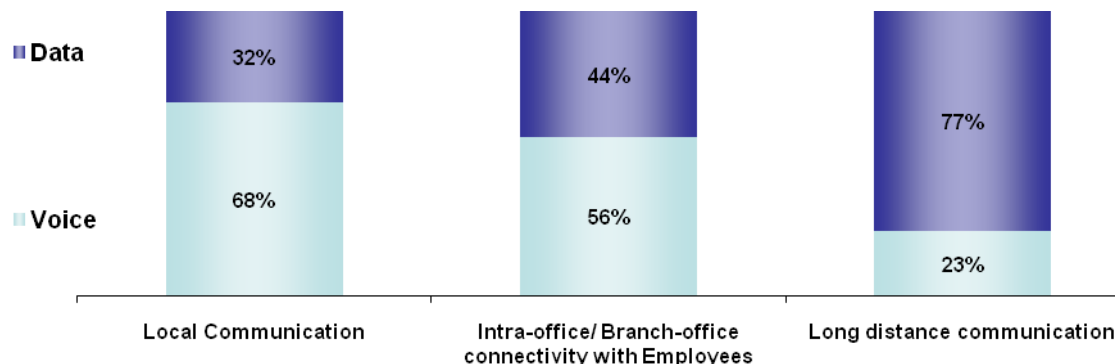
"Internet penetration is growing – 60% in Small Enterprises and 96% in Medium Enterprises owning PCs

- Active efforts by Private & Public Sector Telecom companies leading to increased affordability of the Internet have led to an increase in Internet penetration. 60% of Small Enterprises are connected to the Internet while Internet deployment has reached near-saturation at 96% for the Medium Enterprise segment. Apart from traditional applications of Internet usage like E-mails, search engines, there has been an emergence of newer applications:
    - Online bill payment (a rise in usage from 25% to 46%) [1]
    - Instant messaging (26% to 65%)

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[1] Penetration refers to proportion of Internet-using SMEs

- E-ticketing (12% to 42%)
- Online trading (16% to 30%).

"Internet allows faster transactions and turn around time. Helps us generate invoices, get details of quotations and send answers to clients immediately within seconds…we can also obtain clarifications from them promptly"

9. Future investments for Small Enterprises focused on basic infrastructure, while Medium Enterprises look for applications like ERP, VPN, firewall"

For SEs:

- 75% of SEs plan to upgrade or deploy additional hardware next year

- Improving overall telecommunications infrastructure for better collaboration with ecosystem members like customers, employees and suppliers is a key focus area for 61% SEs

- 72% of SEs have expressed need for increased Internet connectivity speed

For MEs:

- 62% of medium businesses assign high-importance to implementation of business application software like ERP and other process management systems

- Consolidation of server and storage solutions for achieving an integrated system is an important strategic solution, as said by 40% of MEs

- 36% feel that implementation of secure network systems like VPN and network firewall is a strategic focus area for the future

- Utilization of business analytics for exercises like demand forecasting has been pointed out to be of importance by 22% of businesses

10. "Emergence of hosted applications is being observed with caution among SMEs"

- Usage of hosted applications is still at an embryonic stage within Indian SMEs; around 4% of SEs and 15% of MEs are using them. However it is likely to take off at a faster rate as SMEs become gradually aware about the multiple benefits of hosted applications – lower cost, hassle-free operations, available expertise of service providers, etc.

  "We use hosted email system – this facilitates our mailing system and gives a professional image. No need for a IT person to maintain own server, do not need to know the technicality"

SUMMARY OF RECOMMENDATIONS:

SME sector is the back bone of the economy. It is imperative for the ecosystem Policymakers, Regulators, IT companies and financing intermediaries to come together to help them be competitive in the face of local and global competition and contribute to country's growth.

1. One of the biggest challenges SME face is the lack of awareness with respect to technology solutions available to them. There is need for a concerted joint effort among all IT majors with Industry bodies and public institutions for the following:

    a. Conduct IT Awareness Seminars for Business Owners/Entrepreneurs, to promote the use of IT, have successful adopters share the stage and help others learn from their experience.

    b. Promote forums of users moderated by experts from various IT companies, where SME representatives can share pain points /challenges and benefit from each other's successful Best practices.

    c. Leverage the power of the Web - create a joint Portal to serve as a central repository of information for SMEs on ICT related issues, helping them choose the right technology, understand various uses/features in depth and share case studies in similar scenarios. It can also facilitate self running learning modules on IT skills targeted at various audiences in SME organizations.

    d. Create Industry exchange programs for bringing together and sharing best practices from BRIC nations and developed western countries.

    e. Institute awards to recognize excellence in driving Business growth/efficiency using IT. This can spur enthusiasm and a healthy spirit of competition among SMEs to excel in this area.

2. SME's do not have access to manpower which understands & can drive IT adoption and deployment in their organization. This hampers their speed of their progress on IT adoption curve.

    a. One way to address this is to leverage the IT reseller Channel, which can act as advisors to SMEs on their IT needs. They can actually provide the scale to reach SMEs spread across a diverse country like India.

b. There is a lack of skilled channel partners who can actually service the need of SMEs. All IT vendors need to educate and motivate their Channels to promote IT adoption among SMEs, which will also provide them a future revenue stream.

c. IT vendors need to invest in training the IT resellers and their staff on understanding and servicing needs of SME segment beyond technology trainings.

d. At the policymaker's level, IT needs to get included /integrated into the basic professional curriculum starting at ITI/polytechnic level, so as to generate a stream of IT Savvy workforce for the future both for SMEs and IT Reseller channel.

3. IT adoption can be accelerated by making funds easily available, since managing cash flow and working capital is a challenge for most SMEs. Work has already been done in this area by bodies like SIDBI & SMERA, but needs to be sustained and scaled up to next level.

4. This can be further spurred by tax friendly policies and benefits from Government on ICT infrastructure related investments by the Government.

5. Another important action is to closely track emerging technologies - availability and successful adoption of solutions in the area of web services, which can drastically reduce upfront costs and take away the complexity of managing IT infrastructure in-house. This is a function of spread of high quality internet broadband in the country and SMBs comfort with the idea of having their data hosted outside their premises

ANNEXURE – CASE STUDIES OF SME

1. Small Business IT adoption – A case Study

- **Nature of business: Networking solutions**
- **Number of Employees: 70**
- **Number of branches: 5**
- **Annual Turnover: Rs 40 crores**

The journey from a traditional family-run business to the new world economy of IT:

Starting from a traditional family business supplying coal to steel plants, a leap into the world of IT- it is a story of individual foresight and the urge to venture into unknown territories.

While doing his graduation in Commerce, Mr. Lodha simultaneously started taking a software engineering diploma course. The spirit of entrepreneurship running high in the family, soon he had started a software development firm. There he came across Mirror Servicing Link, a unique solution which required servers for implementation. This was used on Software Fault Tolerance (SFT) solution and primarily used in verticals such as banking, hospitals, newspapers, where 24x7 uptime is critical.

Hence the logical next step became an entry to the hardware trading business to support this solution. Soon, all major hardware vendors or OEMs who used to provide the SFT solutions became their clients.

IT adoption over time:

The company started with two employees- one marketing person and an office boy, operating from a small home office with an assembled computer, a dot matrix printer and a UPS.

Even basic phone connection was a problem. They tied up with a local PCO booth about 2 km from their office for STD, ISD and Fax facilities. *"We used to tell our customers to fax us. We had a deal with him, he would charge 10 rupees for each fax and he had a guy with a bicycle who would deliver the fax to us".*

Gradually they built up the distribution model for networking products. This triggered the need to change the accounting software. Adopted an accounting solution which was suitable for very small organizations and as business grew, there was need to upgrade to a better accounting software package – taken up a branded Accounting Solution. Another PC was added to accommodate growing staff. Since the accounting system used was simple, it was not taxing on the infrastructure and hence the same PC could be used for other jobs such as software development, Word documents.

Mr. Lodha relocated to Bangalore and started another venture providing total networking infrastructure solutions, providing components - both active and passive components, such as modems, routers, hubs, panel etc. Average client profile is 40% R&D, software development companies, Government institutions and educational institutions, 35-50% corporate customers, and rest is from mixed verticals.

Today they have 68 people and still counting. The mobile sales staffs are given laptops & senior managers have Smart phones. Telecom rates are conducive to higher usage of cell phones etc. Other IT adoption includes: E-mail client, a mix of collaborative tools. Internal communication is through mails via mail servers and all branches have a broadband connection. VoIP is used to communicate during foreign travel to save costs. *"We will be connected with Smart phones with wireless connectivity, get connected into a messenger service."*

They have adopted CRM solution to have a better understanding and control on their valued clients.

Future Adoption plan - Need gaps:

"Our organization is really growing at a fast rate. Every year we are growing at 100%. We are planning for expansion, planning of opening up offices abroad this year itself. So it will be a quite a bit tough to manage the supply chain and the accounts. Number of people is also increasing. All this leads to a need for an integrated solution. We will need software specific for SME kind of enterprises" **- They are considering an ERP solution.**

Another need being driven by increasing focus on customer satisfaction is the need for information on need gaps with respect to product and solution offerings.

"It is important for me to know whether there is a need for a product for certain customers which we have neglected, some information by which, I can really improve my product and solution, type of

market, target segment identification, when to sell, whom to sell to ... Business intelligence is also critical for me"

What inspires them to invest in technology:

"If it provides me ease of operation, where I can reduce dependency on the people, I will go for it. Also if it helps me prove my products and solutions that am giving to my customers, then I will invest in it"

There is an apparent need to build in greater efficiencies and translate that into customer satisfaction. Also, there is a need to keep up with the technology that the customers likely to demand.

2. **Medium Business IT adoption – a Case Study**

- **Nature of business: Manufacture of Electric Horns for Automobile Industry**
- **Number of branches: 3 including factory**
- **Annual Turnover: Rs 76 crores**

The story of how IT found its way into a traditional, small scale manufacturing business.-

Roots India, a Coimbatore based Electrical Automotive Component Manufacturing Company started operations in 1970 under the leadership of a dynamic Mechanical Engineer who had been educated in the USA in auto component industry.

Till 1981, it was a very small business with 33 employees and no computers. Subsequently with gradual expansion, the first computer was bought in 1987 for Payroll processes. The pain point was that as the company grew, and number of employees increased rapidly (200-250), they started to face problems in managing pay rolls manually. Salaries which used to be given on the first of the month were now being delayed till the fourth. Simultaneously, the financial accounting was developed with D Base III Plus. In this venture they got help from the auditor's son, a CA with computer knowledge - *"In 1987 we bought one computer and automated accounts and pay roll. Immediately we knew the potential of this technology and within 3 years we bought 4-5 computers. Soon we felt the importance of networking and we wanted to implement the inventory and slowly the functional areas also spread."*

Next steps:

A need for networking was soon felt. Peer to peer networking was adopted to operate 2-3 computers together as a network.

By 1990, the first program was developed in-house for inventory management.

The trigger came from need to share information and work effectively.

"Somebody will be keying in the inventories and somebody will be using Database. Same database will be used for these two methods. Inward and outward are done by two computers. There is need that the two computers should talk to each other so that they can use the same database for doing the two activities."

CAD is another area where they saw a lot of potential. Again some senior staff members got trained in Auto CAD which was subsequently imparted to the draftsmen.

"In Coimbatore we can say that we are the pioneers in adopting CAD in the manufacturing sector. "

In 2004, they implemented a branded ERP package. The triggers came from several places.

Over usage of an old package; latest developments in ERP packages; problems with database; a growing need for SCM, CRM and other integrated packages; fast growth within the organization and also expansion in geographic locations etc.

Current IT usage:

They have 90 desktops and 12 laptops. Laptops are mainly used by people who are on travel and are supported by data cards

They use collaborative tools for tasks like booking of meeting rooms, arranging meetings and sharing ISO documentation notes and find it very useful.

Storage is managed by hardware mirroring and using RAID (Redundant Arrays of Inexpensive Disks). For security they are using firewalls at the periphery of their network.

Executives are given handheld devices- Palm Trio PDA for scheduling their work and mailing. It can be hooked up to the PC when they come back to office and synchronize it. VoIP is used as a cost effective communication tool to manage the communication between US sales office and other sales branches in India.

They use a document management as well as a collaborative tool where all can have individual portals and design them accordingly.

For connectivity and communication they are now using leased lines. They are planning to go for wireless RF (Radio Frequency) to connect their branches. In fact, work has already started on this front.

The motivation behind this is that RF offers an advantage of no variable cost and a higher bandwidth, around 11.5 mbps. In communications, PRI (Primary Rate Interface) line is used effectively.

In the near future, there are plans to make the campus WiFi enabled and to set up VoIP with other branches.

What inspires them to invest in technology?

The driving force or inspiration behind any technology adoption in Roots came from enlightened senior management who encouraged and gave freedom to employees to experiment with technology, shared know-how gathered from exposure to other best practices elsewhere in the world and not shied away from investing in the 'best' solutions.

Roots has seen the actual benefits from IT and hence as an organization it does not hesitate to try out new technologies. For example, since the implementation of branded ERP package, the productivity has increased by 50% and the employee size is reduced. ***"We are seeing the benefits ourselves and get the motivation to invest in IT from that."***

GLOSSARY

Information Sources:

- *AMI-Partners SME Global Forecast Model* - AMI applies a forecasting process that synthesizes inputs from multiple sources, e.g. Economic Data (GDP, CPI, economic & political factors reported by various economic agencies), Primary Research, Supply-side Data, Secondary Research (Published data by research, companies, associations, press, etc.). This Model reports the Global IT Spending and Technology Penetrations for multiple countries.

- *Websites* - Wikipedia, Euromonitor International from International Monetary Fund (IMF), International Financial Statistics

- **AMI-Proprietary Three-Wave Model for Analysis of Technology Penetrations**

- **AMI SME database gathered over years of primary research**

Industry Definitions:

- **AMTUC -** Agriculture/ Mining/ Utilities/ Transportation/ Construction/ Telecommunication

- **FIRE -** Finance/ Insurance/ Real Estate

- **Professional Business Services -** Accounting, auditing & bookkeeping, Advertising & consulting, Computer & data processing, Engineering & management, Legal & PR services, Photocopying & photography

- **Other Services –** Healthcare, hospitality, Information & Media, motion pictures, amusement and recreation services, legal services, social services, museums, art galleries, botanical gardens, membership organizations, engineering and management services, and services not elsewhere categorized

Other Abbreviations:

- **PC =** Personal Computer
- **GDP =** Gross Domestic Product
- **HQ =** Head Quarters
- **IT =** Information Technology
- **ICT =** Information & Communication Technology

- **SME** = Small & Medium Enterprises
- **PC SMEs** = PC-owning Small & Medium Enterprises
- **BRIC** = Brazil, Russia, India and China
- **PSU** = Public Sector Units
- **CP** = Channel Partners
- **FGD** = Focus Group Discussion
- **PDA** = Personal Digital Assistant
- **LAN** = Local Area Network
- **WAN** = Wide Area Network
- **VPN** = Virtual Private Network
- **VoIP** = Voice over IP
- **SAN** = Storage Area Network
- **NAS** = Network Attached Storage
- **RF** = Radio Frequency
- **PRI** = Primary Rate Interface
- **ERP** = Enterprise Resource Planning
- **CRM** = Customer Relationship Management
- **POS** = Point of Sale
- **OEM** = Original Equipment Manufacturer