

## 10. LANGUAGE CD IMPACT STUDY

### Scope

The scope of this survey was limited to investigating the awareness and usage among respondent about the free CD in Pune and Mumbai. Further, users of the CD belong to one of the following five categories:

1. Persons who have received the CD and have taken no action.
2. Persons who have received the CD, seen the contents and yet have taken no action.
3. Persons who have received the CD, seen the contents, copied the material on the PC and not used the same.
4. Persons who have received the CD used the CD for a while and have now stopped using the CD contents.
5. Persons who have received the CD and are currently using the contents

### Sample Size

For the purposes of the quantitative research study, a sample of 200 respondents in Pune and 300 respondents from Mumbai were selected. This sample of 500 respondents was drawn from the following three consumer segments, which have the potential or need to use or who are currently using Devanagari (Marathi) language computing products, solutions & technologies on two

#### **Operating systems – Windows & Linux:**

Group 1: Home Users (the common man)

Group 2: Government offices

Group 3: Service providers in the domains of trade, tourism, telecom printing and other such Businesses the respondents from each of these categories had to be owners of a personal computer in order to qualify and must have the need to use Indian language computing products, solutions & technologies. A decision to carry out simultaneous quantitative studies, both in Pune and in Mumbai had been made.

### Quota Groups

#### **500 respondents:**

300 drawn from the C-DAC Mailing list

200 selected randomly

### Activity Flow

1. Approval of our approach plan for this research study
2. Secondary research & Qualitative fieldwork
3. Questionnaire development
4. Pilot (n =10 Pune)
5. Pilot debriefing
6. Quantitative stage
7. Data Collection (n = 200 in Pune & n = 300 in Mumbai)
8. Coding and data preparation
9. Analysis
10. Presentation
11. Final report available

## **I. Category specific research findings from Pune**

### **(a) A Sample profile of a typical home user**

The home user in Pune is essentially a married man from SEC B, 18-44 years old, a graduate full-time employee, who supervises small teams of up to 8 employees at work. This man is employed in either a commercial or industrial establishment earning less than Rs. 30,000 per month. The man may use Devanagari for occasional commercial Activity.

### **The Business category of home users**

The category mainly comprises of the Business segments of Private Home Users and Publishing Kiosks.

### **Personal computing habits in this category**

This category of home users in Mumbai prefers the Windows XP operating system and works with MS Office 2000/2003 software for its computing needs.

Text processor is the most intensively used Office Suite content by this Business segment.

### **Awareness and usage patterns of Devanagari language products, solutions & Technologies**

Mostly, the Marathi language applications are used on all computer terminals in the homes of Mumbai users, since the past three years (2005 onwards), for writing & editing short & long documents and for presenting material. Most home users prefer to work on phonetic keyboards. Half of the Home users surveyed in Mumbai have gone through the CD and find all the utilities on the CD to be equally useful.

### **Awareness and usage patterns of the free cd and its contents**

The most popular utilities on the CD among Mumbai Home Users are:

1. Marathi/Hindi language true type fonts with keyboard driver.
2. Marathi/Hindi language multi-font keyboard engine for the true type fonts.
3. Marathi/Hindi language Unicode compliant open type fonts.
4. Marathi/Hindi language Unicode compliant keyboard driver.
5. Generic font's code and storage code converter for Marathi/Hindi.

The free CD is rated Most User Friendly by the majority of Home Users in Mumbai.

### **Feedback**

Home users in Pune find Marathi language true type fonts with keyboard drivers & the Marathi typing tutor most useful. The former is the most commonly used CD utility on home computers. Only half of sample of home users surveyed are still using the utilities on the CD that they found useful.

### **(b) Government organizations**

Almost all government agencies surveyed in Mumbai have been using Marathi language applications since the past 1-2 years (2006/07 onwards), but are unwilling to disclose the number of computer terminals at office that facilitate these applications.

These government agencies prefer the phonetic or typewriter keyboard layouts & use Marathi language applications mainly for writing & editing short documents, presenting material and for analyzing large volumes of data.

Equally popular software for Devanagari applications is font enabled language utility & commercially provided software's. Other commercially available software like Akruti and such others is preferred the least.

#### **Personal computing habits in this category**

Windows XP operating system is preferred by most government offices that use MS Office 2000/2003 software for their computing needs. The Office Suite content used most frequently by government offices in Pune is the spreadsheet, presentation software and the text processor.

#### **Awareness and usage patterns of Devanagari language products, solutions & Technologies**

Almost all government agencies surveyed in Pune use Marathi language applications on more than 75% of terminals at office, since the past three years (2005 onwards). These government agencies prefer typewriter keyboard layouts & use Marathi language applications mainly for writing & editing short documents, for programming for in-house applications, for consultancy or for writing or receiving electronic mails.

Surprisingly, an overwhelming majority of government agencies in Pune reported to have not received the CD.

#### **Feedback**

The CD utility found most useful by government agencies in Pune, one which they are still most commonly using is the Marathi language true type fonts with keyboard drivers. Government agencies in Pune do not rate the CD very highly. It is rated either as "User Friendly" or as "Neither User Friendly not User Un-Friendly". Very few of them rate the CD as "Most "User Friendly".

#### **(c) A sample profile of a typical service provider**

The service organization belongs to the sectors of Defence, Finance or Agriculture and provides its services in the domains of Printing/DTP, Finance or Trade. This service provider has been in the present service occupation or Business for either 3-5 years of for more than 10 years, operating from one single place, with a staff of up to 10 or 20 Employees.

#### **The Business category of service providers**

A service provider in Pune belongs to either the SOHO or OEM Business segment or is a Research Organisation (Publishing).

#### **Personal computing habits in this category**

Most service providers in Pune use Windows XP operating system and prefer MS Office 2007 software for their computing needs. The Office Suite content used most frequently in this category is the text processor or presentation software.

#### **Awareness and usage patterns of Devanagari language products, solutions & Technologies**

Most of the service providers surveyed use Marathi language applications on more than 75% of computer terminals, on Microsoft XP built keyboard layouts since the past three years (2005 onwards), mainly for writing & editing short & long documents.

The most popular software for Devanagari applications is commercially available software like AkruTi. Software commercially provided by C-DAC is preferred by very few service providers.

### **Feedback**

Among these, all the respondents in the sample in this category ranked Marathi/Hindi language spell checker as the most useful utility but extremely small numbers of them are still using this utility on their computer. Marathi decorative fonts design tool is the most commonly used CD utility on the computers of service providers in Pune. Service organizations report Marathi language Unicode compliant open type font as the most non-useful utility on the CD.

The free CD evokes a strong positive response among service providers on its being user friendly with the majority of respondents rating it as “User Friendly” or “Most User Friendly”.

## **II. Category specific research findings from Mumbai**

The home user in Mumbai may figure in the database with the GIST group as a married man either from SEC A or from SEC B, 25-29 years old, a diploma holder who works full-time and who supervises small teams of up to 16 employees at work. This man is employed in either the financial sector or in a Communications & IT firm or in a commercial or industrial establishment earning between Rs. 10,000 to Rs. 30,000 per month.

### **(a) The Business category of home users**

The category mainly comprises of the Business segments of Private Home Users and Publishing Kiosks.

### **Personal computing habits in this category**

This category of home users in Mumbai prefers the Windows XP operating system and works with MS Office 2000/2003 software for its computing needs. Text processor is the most intensively used Office Suite content by this Business segment.

### **Awareness and usage patterns of Devanagari language products, solutions & Technologies**

Mostly, the Marathi language applications are used on all computer terminals in the homes of Mumbai users, since the past three years (2005 onwards), for writing & editing short & long documents and for presenting material.

Most home users prefer to work on phonetic keyboards. Commercially available software like AkruTi and such others is preferred by a lesser number of home users. Half of the Home users surveyed in Mumbai have gone through the CD and find all the utilities on the CD to be equally useful.

### **Feedback**

The most popular utilities on the CD among Mumbai Home Users are:

1. Marathi/Hindi language true type fonts with keyboard driver.
2. Marathi/Hindi language multi-font keyboard engine for the true type fonts.
3. Marathi/Hindi language Unicode compliant open type fonts
4. Marathi/Hindi language Unicode compliant keyboard driver.
5. Generic font's code and storage code converter for Marathi/Hindi.

The free CD is rated Most User Friendly by the majority of Home Users in Mumbai.

**(b) Government agency**

The administrative/controlling authority of this agency is the State Government. Belonging to the Departments of Health & Family Welfare, Communications & IT and Education, this government office is staffed with up to 60 employees or up to 101 employees.

**Personal computing habits in this category**

Windows 98 operating system is preferred by most government offices that use MS Office 2000/2003 software for their computing needs. The Office Suite content used most frequently by government offices in Mumbai is the text processor, spreadsheet, presentation software and database software.

**Awareness and usage patterns of Devanagari language products, solutions & Technologies**

Almost all government agencies surveyed in Mumbai have been using Marathi language applications since the past 1-2 years (2006/07 onwards), but are unwilling to disclose the number of computer terminals at office that facilitate these applications.

These government agencies prefer the phonetic or typewriter keyboard layouts & use Marathi language applications mainly for writing & editing short documents, presenting material and for analysing large volumes of data. Equally popular software for Devanagari applications is font enabled language utility & commercial software.

**Feedback**

Government agencies in Mumbai rate the CD as either User Friendly or as Most User Friendly. The most popular utilities on the CD among Mumbai Government Agencies (as among the home users also) are:

1. Marathi/Hindi language true type fonts with keyboard driver.
2. Marathi/Hindi language multi-font keyboard engine for the true type fonts.
3. Marathi/Hindi language Unicode compliant open type fonts.
4. Marathi/Hindi language Unicode compliant keyboard driver.
5. Generic font's code and storage code converter for Marathi/Hindi.

**(c) A sample profile of a typical service provider**

The service organization belongs to the sectors of Defense, Finance or Agriculture and provides its services in the domains of Printing/DTP, Finance or Trade. This service provider has been in the present service occupation or Business for either 3-5 years or for more than 10 years, operating from one single place, with a staff of up to 10 or 20 employees.

**The Business category of service providers**

A service provider in Mumbai belongs to either Publishing or Data Processing Business segment or is a Corporate Company.

**Personal computing habits in this category**

Most service providers in Mumbai use Windows 2000/XP/98 operating systems and prefer MS Office 2000 software for their computing needs. The Office Suite content

used most frequently in this category is the text processor or presentation software. Drawing Utility is the least used Office Suite content.

### **Awareness and usage patterns of Devanagari language products, solutions & Technologies**

Most of the service providers surveyed use Marathi language applications on all computer terminals, on phonetic keyboard layouts since the past two years (2006 onwards), mainly for writing & editing short & long documents and for doing calculations using spreadsheets. The most popular software for Devanagari applications is software commercially provided by C-DAC.

Utilities provided by Windows for using Indian languages are preferred by very few service providers. Almost half the service providers have gone through the CD and all of them find all the utilities to be almost equally useful to them. This group of service providers continues to actively use the CD utilities till date.

### **Feedback**

The most commonly used CD utility among service providers is Marathi/Hindi language true type fonts with keyboard driver while the least commonly used utility is Marathi/Hindi language OCR.

Among the service providers in Mumbai, the least useful utilities are:

1. Marathi/Hindi language Unicode compliant open type fonts
2. Marathi/Hindi language Unicode compliant keyboard driver
3. Marathi/Hindi version of Bharatiya OO (Open Source)
4. Marathi/Hindi language spell checker
5. Dictionaries English/Marathi/Hindi
6. Marathi/Hindi type assistant
7. Marathi/Hindi Microsoft Word tools
8. Marathi/Hindi language transliteration tool for Windows
9. Marathi/Hindi language OCR
10. Marathi/Hindi Wordnet

The free CD evokes a favorable response among service providers with most of them rating the CD as either User Friendly or Most User Friendly.

### **Summary: Overall impact of the free CD**

#### **Awareness of the free CD in Pune**

Overall, only 1/3rd of respondents surveyed among home users in Pune city have gone through the free CD. All of them are listed in the GIST database. Few government organizations or service provider are aware of the free CD. The most useful utility among all Pune respondents is

1. Marathi/Hindi language true type fonts with keyboard driver
2. Marathi/Hindi Microsoft Word tools
3. Marathi/Hindi Dictionaries
4. Marathi/Hindi language spell checker

Half of the respondents in Pune are still using the utilities on the CD. The utilities most intensively used by the respondents are:

1. Marathi/Hindi language true type fonts with keyboard driver
2. Marathi/Hindi language multi-font keyboard engine for the true type fonts
3. Marathi/Hindi decorative fonts design tool

More than half of all respondents surveyed in Pune perceive the free CD to be User Friendly.

### Awareness of the free CD in MUMBAI

Less than ½ of the respondents surveyed among home users in Mumbai city have gone through the free CD. All of them are listed in the GIST database.

Not too many government organizations & service providers are aware of the free CD. All the utilities on the free CD are found extremely useful by all respondents in Mumbai.

Almost all the Mumbai respondents are still using the utilities on the CD. The utilities most intensively used by the respondents in Mumbai are:

1. Marathi/Hindi language Unicode compliant open type fonts
2. Marathi/Hindi language multi-font keyboard engine for the true type fonts
3. Generic font's code and storage code converter for Marathi/Hindi
4. Marathi/Hindi language Unicode compliant keyboard driver
5. Marathi/Hindi language true type fonts with keyboard driver

More than half of all respondents surveyed in Mumbai perceive the free CD to be Most User Friendly.

	Awareness of the free CD	Usage of the free CD	Most useful & intensively used utility of the free CD	Perception of the free CD
PUNE	Low to Very Low	Average	Marathi/Hindi language true type fonts with keyboard driver	User Friendly
MUMBAI	Average	Extremely High	Marathi/Hindi language	Most User Friendly
			Unicode compliant open type fonts	
			Marathi/Hindi language multi-font keyboard engine for the true type fonts	
			Generic fonts code and storage code converter for Marathi/Hindi	
			Marathi/Hindi language Unicode compliant keyboard driver	
			Marathi/Hindi language true type fonts with keyboard driver	

\*\*\*

## **About Prof. Rekha Govil:**

Prof. Rekha Govil (born on September 15, 1955) academician by profession and a scientist by spirit. She started her career with Bhabha Atomic Research Center (BARC), Mumbai as Scientific Officer in Nuclear Physics Division in 1979. Afterwards, she served Banasthali Vidyapith as Head, Computer Science Department and later on as Dean, Apaji Institute of Mathematics and Applied Computer Technology for a long period, demonstrating administrative as well as academic excellence. Off late she joined Jayoti Vidyapith, another women university, as Vice-chancellor, where she served till her sudden demise on September 10, 2008.

Prof. Rekha Govil excelled in all her endeavors ever. During her education, she stood first among girls in Rajasthan in the Secondary School Examination. She did her B.Sc. from Banasthali Vidyapith, and M.Sc. in Physics from Rajasthan University, always securing highest ranks. She completed her Doctorate in Nuclear Physics from BARC, Mumbai in 1983.

Even in a short span of her teaching career, the educational values culminated by her, have already begun to reflect research scholars and students all over the world. Her contribution to the field of academics is published in the form of her numerous books and research articles which she authored and co-authored with her students. She worked endlessly for the promotion of computer education and information technology among the masses. She promoted IT in Hindi, through Vigyan Shabdmala (Online Science Dictionary), Akanksha (E-learning software for children in Hindi), Prabodh (tutoring system in Hindi and many more such creations. She was associated with projects such as “Gyan Jyoti” funded by DoIT & C, Govt. of Rajasthan, Jaipur, and “Gyan Udyog”, funded by ( TDIL, MCIT, Govt. of India, New Delhi ) designed to spread computer awareness and inculcate entrepreneurship among rural women. Many papers, books, articles to her credit, her efforts were also recognized at national level, as she was part of many national and state level educational and scientific committees and councils.

She always promoted the cause of women empowerment through professional education. She will always be remembered as an epitome of hardwork, perfection and dedication.

**Prof Rekha Govil in some events.**



