The State of ICT Market Development in Saudi Arabia

Online, Field Work (x3) & Interviews: 2009 - 2010

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Riyadh, Saudi Arabia
Table of Contents

1. Executive Summary ........................................................................................................... 7
   1.1 Target Audience .............................................................................................................. 7
   1.2 Guidelines to Reader ........................................................................................................ 7
   1.3 About the Communications and Information Technology Commission (CITC) ................. 8

2. Survey Findings – Individuals & Households ................................................................. 12
   2.1 Respondent Ratings System .......................................................................................... 12
   2.2 Field & Online Surveys Market Findings ....................................................................... 13
   2.3 Individual/Household respondent profile and demographics ........................................ 13
   2.4 Public Awareness of CITC ............................................................................................ 14
      2.4.1 Public Awareness of CITC and its roles .................................................................... 14
   2.5 Mobile Services ............................................................................................................ 15
      2.5.1 Average Mobile Lines per Household ...................................................................... 15
      2.5.2 Number of Personal Mobile Lines used by Individuals ........................................... 16
      2.5.3 Reasons Behind Having Multiple Lines .................................................................... 17
      2.5.4 Awareness of Mobile Number Portability (MNP) & Consideration for Changing Mobile Operator ................................................................. 18
      2.5.5 Reasons for Changing the Mobile Operator ............................................................ 19
      2.5.6 Rating the Mobile Services’ Quality ....................................................................... 20
      2.5.7 Rating the Mobile Services’ Prices ........................................................................ 21
      2.5.8 Frequency of Changing Mobile Handsets ................................................................ 22
   2.6 3G Services .................................................................................................................. 22
      2.6.1 Awareness and Usage of 3G Services ...................................................................... 22
      2.6.2 3G Services Usage .................................................................................................. 23
      2.6.3 Reasons for Not Using 3G Services ....................................................................... 25
      2.6.4 Rating 3G Services’ Quality .................................................................................. 26
      2.6.5 Rating 3G services’ Prices .................................................................................... 27
      2.6.6 Annual Expenditure on Mobile Telecom Services .................................................. 28
   2.7 Internet Services through Mobile Networks .................................................................. 29
      2.7.1 Internet Through Mobile Telecom Services ............................................................ 29
   2.8 Fixed Telephone Services ............................................................................................. 32
      2.8.1 Fixed Line Household Penetration ......................................................................... 32
      2.8.2 Number of Fixed Lines Per Household .................................................................... 32
      2.8.3 Rating Quality of Fixed Line Services .................................................................... 33
      2.8.4 Rating Fixed Line Services’ Prices ........................................................................ 34
      2.8.5 Annual Household Expenditure on Fixed Line Services ........................................ 35

CITC - ICT Market Study (2009-2010)
2.9 Computers and Software ........................................................................................................ 36
  2.9.1 Household Personal Computer Penetration ........................................................................ 36
  2.9.2 Number of Desktops and or Laptops owned by households .................................................. 36
  2.9.3 Frequency period of changing Desktop or Laptop computer .................................................. 37
  2.9.4 Annual Household’s and Personal Expenditure on Computer Equipment, Software and Accessories .............................................................................................................. 38
  2.9.5 Percentage of individuals who use computers ..................................................................... 39
2.10 Household Broadband Internet Subscription ........................................................................ 39
  2.10.1 Household Internet Penetration and Internet Technologies Used ........................................ 39
  2.10.2 Households Usage of Wireless Routers .............................................................................. 40
  2.10.3 Number of Computers in the Household that Share the Same Internet Connection .......... 41
  2.10.4 Households Sharing the Internet Connection With Other Households ............................. 41
  2.10.5 Current & Planned Average Speed of Household Internet Subscriptions ......................... 42
  2.10.6 Reasons for households planning to increase Internet speed .............................................. 43
  2.10.7 Rating of the price of Internet provided to household .......................................................... 44
  2.10.8 Annual Household Expenditure for Broadband Internet Service ......................................... 45
  2.10.9 Rating the Quality of Broadband Internet Services ............................................................ 46
  2.10.10 Rating Broadband Internet Services’ Prices ...................................................................... 47
2.11 Individual/Household Bundled Services ............................................................................. 48
  2.11.1 Satisfaction level with bundled services ........................................................................... 48
  2.11.2 Services that might be considered with a bundled service offer ........................................ 49
2.12 Personal Web Pages ............................................................................................................. 49
  2.12.1 Individuals Owning or Managing Websites & Domain Names ........................................... 49
2.13 Electronic Services .............................................................................................................. 51
  2.13.1 Usage of ICT-based Payment Methods .............................................................................. 51
  2.13.2 Internet payment methods used by individuals ................................................................. 52
  2.13.3 Individuals Buying Products Online ................................................................................... 53
  2.13.4 Types of Products Paid for Using ICT-Based Payment Methods ......................................... 54
  2.13.5 Local & international websites that individuals seek to buy products over the internet ....... 55
  2.13.6 Developments needs of local e-commerce websites used by individuals ......................... 56
2.14 Electronic Banking ............................................................................................................... 57
  2.14.1 Individual ownership of a bank account ............................................................................. 57
  2.14.2 Online Banking Services ................................................................................................ 57
  2.14.3 Rating E-Banking Services’ Quality .................................................................................... 58
2.15 Pay Television Services ...................................................................................................... 59
  2.15.1 Individuals Watching Satellite TV Channels ....................................................................... 59
  2.15.2 Individuals Watching Satellite Pay TV Channels .................................................................. 59
  2.15.3 Individuals Subscribed to Pay TV services ....................................................................... 60
3. Survey Findings - Establishments ................................................. 66

3.1 Establishment Profile and Demographics ........................................ 66
  3.1.1 Establishments Sample Structure ........................................... 66
  3.1.2 Establishments’ Profile: ...................................................... 67

3.2 Public Awareness of CITC & Its Role (Est.) .................................. 67
  3.2.1 Establishments’ Awareness of CITC and its Role ........................ 67

3.3 Mobile Services ............................................................................ 68
  3.3.1 Mobile Allowances Offered by Establishments to employees .......... 68
  3.3.2 Consideration of Changing Mobile Service Provider and Reasons .... 69
  3.3.3 Reasons that keep establishment with its current mobile operator .... 71
  3.3.4 Rating Mobile Services’ Quality (across all service providers) ........ 71
  3.3.5 Rating Mobile Services prices (Consolidated) .............................. 72
  3.3.6 Usage, Quality & Prices of PMR, GMPCS and GPS Services .......... 73
  3.3.7 Establishments’ Annual Expenditure on Fixed & Mobile Services .... 74

3.4 Wireless Technologies Usage ....................................................... 75

3.5 Fixed Telephone Services ............................................................. 75
  3.5.1 Number of Fixed Lines Used Per Establishment Segment .............. 75
  3.5.2 Rating Quality and Prices of Fixed Line Services ......................... 76
  3.5.3 PBX Usage and Type of Used PBX ........................................... 78
  3.5.4 Establishments’ Call Center Experience .................................... 79

3.6 Computers, Servers and Software ................................................ 80
  3.6.1 Establishments’ Computer Penetration & Types of Servers Used .... 80
  3.6.2 Types of Software Used ....................................................... 81

3.7 Establishment Networks .............................................................. 82
  3.7.1 Utilization of LAN and WAN Technologies ................................. 82
  3.7.2 VPN Services and Remote Access ............................................ 83
  3.7.3 Establishments providing Wi-Fi service for the public .................... 84
3.8  Internet and e-Services ................................................................. 85
    3.8.1  Internet & Broadband Penetration ........................................... 85
    3.8.2  Reasons for not having internet broadband ................................ 86
    3.8.3  Public and Private Establishments first contact with the Internet ........ 87
    3.8.4  Establishments’ average current & planned Internet speeds ............. 88
    3.8.5  Internet and e-Services .......................................................... 89
    3.8.6  Rating Internet Services’ Prices ............................................. 90
    3.8.7  Rating Internet Services’ Quality ........................................... 91
    3.8.8  Establishments Annual Expenditure on Broadband Internet Services .... 92
3.9  SME, L&VL and Government Websites ........................................... 93
    3.9.1  Presence of Websites ............................................................ 93
    3.9.2  Establishments reasons for not owning website ............................ 93
    3.9.3  Establishments Websites Hosting Location ................................... 94
    3.9.4  Usage of Local & Generic Domains for Websites ........................... 95
    3.9.5  Establishments reasons for not owning website ............................ 95
    3.9.6  Advertising Methods Used by Establishments ............................... 98
3.10  e-Banking ................................................................................. 98
    3.10.1  ICT Payment Methods Used by Establishments .............................. 98
    3.10.2  Establishments use of internet payment methods ........................... 99
    3.10.3  Establishments’ Usage of Online Banking ................................... 103
3.11  ICT Expenditure .......................................................................... 104
    3.11.1  Establishments’ Annual ICT Expenditure For Investigated ICT Services & Products ................................................................. 104
3.12  Bundled Services ......................................................................... 106
    3.12.1  Satisfaction levels, reasons and aspired service bundles .................. 106
3.13  Special Services ........................................................................... 108
    3.13.1  Penetration of Special Services at Establishments ........................... 108
3.14  Issues and Complaint Handling .................................................... 109
    3.14.1  Issues with Service Providers and Destination of Complaints .......... 109
    3.14.2  How Complaints Against Service Providers were Handled ............... 110
3.15  Investment .................................................................................. 111
3.16  Research and Development Expenditure ........................................ 112
    3.16.1  Spending on Research and Development (R&D) ............................. 112
3.17  Research Collaboration with Universities ....................................... 115
3.18  ICT Promotion ............................................................................ 116
    3.18.1  ICT Promotion Initiatives Provided by Establishments ................. 116
4.  Survey Findings - ICT Services and Technology Suppliers ................. 117
    4.1  ICT Services and Technology Supplier Profile & Activities ................ 118
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1</td>
<td>ICT Services And Technology Supplier Profiles</td>
<td>118</td>
</tr>
<tr>
<td>4.1.2</td>
<td>ICT Services and Technology Suppliers Lines of Activity</td>
<td>119</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Company Registration Procedure Efficiency</td>
<td>120</td>
</tr>
<tr>
<td>4.2</td>
<td>Awareness of CITC and its Role</td>
<td>120</td>
</tr>
<tr>
<td>4.3</td>
<td>Marketing, Sales &amp; Growth Activities</td>
<td>121</td>
</tr>
<tr>
<td>4.3.1</td>
<td>ICT Services and Technology Suppliers products and services promotion activities</td>
<td>121</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Market Penetration and Growth Strategies</td>
<td>123</td>
</tr>
<tr>
<td>4.3.3</td>
<td>Marketing budgets</td>
<td>124</td>
</tr>
<tr>
<td>4.4</td>
<td>Consumer Needs and Demand Analysis</td>
<td>125</td>
</tr>
<tr>
<td>4.4.1</td>
<td>ICT products and services needs &amp; demand analysis</td>
<td>125</td>
</tr>
<tr>
<td>4.4.2</td>
<td>Products &amp; Services Growth/Decrease Expectations</td>
<td>127</td>
</tr>
<tr>
<td>4.5</td>
<td>Initiatives to Increase Adoption &amp; Usage</td>
<td>127</td>
</tr>
<tr>
<td>4.5.1</td>
<td>ICT Products and Services Initiatives</td>
<td>127</td>
</tr>
<tr>
<td>4.5.2</td>
<td>Financial Facilities To Customers</td>
<td>129</td>
</tr>
<tr>
<td>4.5.3</td>
<td>Consumer Training Strategies</td>
<td>130</td>
</tr>
<tr>
<td>4.6</td>
<td>Effectiveness of the IP protection laws in KSA</td>
<td>130</td>
</tr>
<tr>
<td>4.6.1</td>
<td>Rating Regulatory Performance</td>
<td>131</td>
</tr>
<tr>
<td>4.6.2</td>
<td>Implementation Channel for Solutions</td>
<td>132</td>
</tr>
<tr>
<td>4.7</td>
<td>Products/Services Life Cycle Forecast</td>
<td>133</td>
</tr>
<tr>
<td>4.8</td>
<td>Adoption forecast for the short term</td>
<td>134</td>
</tr>
<tr>
<td>4.9</td>
<td>Research and Development Activities</td>
<td>134</td>
</tr>
<tr>
<td>4.10</td>
<td>Growth Forecasts</td>
<td>135</td>
</tr>
<tr>
<td>5.</td>
<td>Service Provider Interviews - Current and Future Services</td>
<td>136</td>
</tr>
<tr>
<td>5.1</td>
<td>Current ICT Services</td>
<td>136</td>
</tr>
<tr>
<td>5.2</td>
<td>Future ICT Services</td>
<td>137</td>
</tr>
<tr>
<td>5.2.1</td>
<td>List of Future ICT Services</td>
<td>137</td>
</tr>
<tr>
<td>6.</td>
<td>Further Reading</td>
<td>138</td>
</tr>
<tr>
<td>7.</td>
<td>Thank You Letter</td>
<td>139</td>
</tr>
</tbody>
</table>
1. Executive Summary

The key objective of this study is to support the development of market driven regulations, policies and ICT initiatives. To date it is the most comprehensive survey report on the state of ICT growth and development in the Kingdom of Saudi Arabia. This report is a consolidation of a number of qualitative and quantitative research projects and activities conducted on the Kingdom of Saudi Arabia’s Information and Communication Technologies (ICT) sector, it covers key supply side stakeholders and numerous demand side consumers spanning individuals/households, private and public sector establishments.

1.1 Target Audience

1. Leaders or professionals working actively in the KSA ICT sector
2. Knowledge economy teachers and students
3. ICT products, services and solutions manufacturers/wholesalers/resellers
4. Existing/Prospective license holders for Telecommunication/IT/Media Broadcasting Services
5. ICT Investors

1.2 Guidelines to Reader

While reviewing this report we encourage our readers to look for clues on how ICT products, services and solutions can help you in your personal and business community. Countless number of opportunities exists to increase your personal and establishment’s productivity, employee’s satisfaction, reduce costs, and generate new valued added services or sales through the use of ICT products, services and solutions. Whether you’re an individual or an establishment, with the rapid development of Saudi Arabia’s Information and Knowledge Economies it is essential for you to develop your own understanding of the benefits of ICT to remain competitive on a national and global level.

Embracing technology for competitiveness and profitability is not a new venture in the Arab World. Knowledgeable readers upon revisiting the rich Arab world history will no doubt see the many benefits brought about by the effective and efficient use of technologies of the time i.e. telescopes, measuring tools, maps and ships. Therefore in the spirit of past and future successes we encourage all readers to share their
knowledge, experience and individual benefits gained through the use of ICT products/services and solutions within their personal and professional life’s and networks.

As one of the first comprehensive market studies for the Saudi Arabia Information and Telecommunications Market all readers of this ICT Market Study Report will no doubt gain useful data, information and generate their own insights to use within both personal and business lives Insha’Allah.

Important note: any direct or indirect interpretations that may be implied through the report are solely of the authors and not of the CITC. All data and information collected in 2009 and 2010 presented in the report represent only the opinions and perceptions of the various consumer segments and opinions of ICT Stakeholders in Saudi Arabia.

Furthermore, on behalf of CITC, the market studies department thanks all respondents and participants for sharing their experiences and feedback over the course of the research planning and data collection phases. If you have any comments or suggestions helpful in improving the usefulness of this and future reports please contact us through market_survey@citc.gov.sa.

1.3 About the Communications and Information Technology Commission (CITC)

The Telecom Act was approved in 2001, and the Telecommunications Bylaw was later issued in the year 2002. Since then, Saudi Arabia’s Information & Communications Technology (ICT) market witnessed a number of significant developments which CITC is striving to protect and grow through balanced, fair and sustainable regulatory practices and initiatives. Early market reforms and liberalization activities resulted in the licensing of the incumbent Saudi Telecom Company (STC), its corporatization process as well as the liberalization of some services such as VSAT and data. By 2004, the liberalization of mobile and data markets through the licensing of new entrants resulted in the introduction of competition to the sector. By 2006, CITC smoothly transitioned its regulatory framework from technology specific to a technology neutral regime continuing however its service specific boundaries. In 2007, the fixed-line market was liberalized, and various regulatory frameworks were developed through open public consultation processes designed to probe the rapidly evolving market needs. In 2008 alongside the updated National Frequency Plan a number of Fixed Services were issued as part of the liberalization process.
Expanding the scope of previous market research activities concluded in 2005, CITC in 2009 embarked on a comprehensive ICT Market Study to gauge the ‘pulse’ and needs of ICT Industry. The study’s conclusions are intended to serve as CITC’s prime input for its continuous regulatory reforms, initiatives and facilitate KSA on its journey to an Information Society & Knowledge Economy. Any proposed initiatives or reforms will be evaluated through scientific methods focusing on the market needs to create the appropriate level of competitiveness, yield affordable, high quality and innovative services in line with international standards.

The Market Research efforts discussed in this report are part of a program of projects undertaken by CITC called “ICT Market Study Project”. The aim is to study the current status of KSA ICT supply, adoption and usage of ICT services in addition to the CITC rules and regulations’ impact on the sector in terms of promoting existing and new services, sector investments, and needed or associated regulatory reforms.

**The Household/Individuals Field Survey**: provided valuable market insights. Mobile penetration rate reached 132%. The field and online survey indicated that although still ‘expensive’, subscribers rated mobile services as ‘very good’. The mobile ARPU reached 182/SAR/Line. Fixed telephony household penetration reached 68% of surveyed households. Fixed services received ‘excellent’ quality rating, though their prices were regarded as ‘moderate to expensive’. The Fixed line ARPU reached 177 SAR/month/line.

Household computer penetration reached 58.1% and household internet penetration reached 53.5% of surveyed households with DSL forming 80% of internet technologies used at homes. The survey concludes that the average household internet speed is currently 724 Kbps with a year-on-year growth of 82%. Subscribers rated Internet prices as ‘moderate to expensive’ and the quality of offered internet as ‘good to very good’.

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2 For further information see National Information & Communication Technologies Plan –www.mcit.gov.sa
3 Visit CITC website for the latest figures available in ICT Quarterly Indicators Report – www.citc.gov.sa
Based on rapidly growing internet user penetration rates (see previous CITC Quarterly Indicator Reports), alongside the field survey CITC for the first time conducted the **The Online Household/Individual Survey**. The main purpose was to determine or identify the varying awareness, needs, demands, adoption and usage levels across both field and online individual/household respondents. Based on the comparison of results across both field and online surveys strong evidence suggests the online users have greater ICT Literacy levels, understand the benefits ICT can bring to the personal and business life, have greater appetite for new products and services, are more inclined to use electronic transactions, self help and value added services provided over fixed, mobile and internet.

**The Establishments Survey** investigated several business segments from SOHO, Small and Medium size establishments (SME), Large, Very Large (L&VL) private establishments to Governmental (Gov) establishment’s usage and adoption of ICT services. All establishments rated the fixed services’ quality as ‘excellent’, nonetheless rated the prices as ‘expensive’. SMEs, L&VL, and governmental establishments’ expenditure on fixed services reached 7654 SAR/year, 80607 SAR/year and 262202 SAR/year respectively. 26.6%, 78%, and 79% of all software used in SMEs, L&VL and governmental establishments respectively utilize Arabic language.

39.6% of SMEs, 90.8% of L&VL and 92.5% of governmental establishments use the internet. While the average internet speed of SMEs stands at 650 Kbps, speed at L&VL and governmental establishments are estimated at 1.76 Mbps and 7.54 Mbps respectively. SMEs and L&VL establishments rated internet services as ‘Expensive’, while the Governmental establishments rated them as ‘Very Expensive’.

**A comprehensive Service Providers Survey** was conducted to identify the current services which were found to be aligned with the international service provisions for wholesale, business and consumer sectors in KSA. The study investigated new services planned for introduction in the KSA market including new-technology based services designed to utilize improved Worldwide Interoperability for Microwave Access (WiMAX), Long Term Evolution (LTE) and fiber optic technologies.

Earlier market research activities conducted by CITC were designed to focus on consumers and telecom operators. Taking into consideration the rapidly evolving domestic and international ICT market landscape, the enabling role of large ICT Services and Technologies Suppliers within the ICT value chain the project was re-scoped to ensure all key stakeholder contributing to the efficiency of the industry be included.

**The ICT Services and Technology Suppliers Survey** observed that 62% of the respondents provide ‘Software integration/Business solutions’, ‘Consultancy services’, ‘Maintenance & asset management services’ and ‘Telecom core integration/solutions’. The average marketing budget, as percentage of total revenue, has reached 4.1% in 2009.
Most of the interviewed ICT services and technologies listed initiatives aimed to increase the ICT products and services professional awareness and usage across their various customers segments. However, only few presented successful initiatives helping increase the ICT usage across various employee and society segments. Only 30% of ICT services and technologies offer financial facilities to their customers. 77% of the interviewed establishments own local training centers for products and services, and 62% provide online training. On the job training of university/vocational appears to be low as ICT services and technologies only enroll on average 9 such students a year. However based on feedback the enrollment number is expected to double in 2012.
2. Survey Findings – Individuals & Households

The following sub-sections detail the major findings gathered from the qualitative and quantitative research.

Section 2 summarizes the major findings of the field and online surveys for individuals and households. Section 3 summarizes the establishments’ findings and presents various observations relevant to SMEs, large & very large establishments in addition to governmental agencies.

2.1 Respondent Ratings System

During the field survey’s respondents were provided with show card including similar figure to efficiently capture responses for question requiring ratings (e.g. from very unsatisfied to very satisfied, see respective footnotes for further details.

![Figure 2: ICT Value Chain- Individuals & Households Consumers]
2.2 Field & Online Surveys Market Findings
Section 2 summarizes the major findings from the field and online surveys with respondents representing individuals and households.

![ICT Value Chain - Individuals & Households Consumers](image3.png)

**Figure 3: ICT Value Chain - Individuals & Households Consumers**

2.3 Individual/Household respondent profile and demographics

<table>
<thead>
<tr>
<th></th>
<th>Field Survey</th>
<th>Online Survey</th>
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<tbody>
<tr>
<td>Total Sample Size</td>
<td>1514</td>
<td>2872</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>54.8%</td>
<td>55.3%</td>
</tr>
<tr>
<td>Female</td>
<td>45.2%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>12.5%</td>
<td>3.7%</td>
</tr>
<tr>
<td>20-39</td>
<td>71.5%</td>
<td>82.7%</td>
</tr>
<tr>
<td>40-69</td>
<td>15.7%</td>
<td>13.0%</td>
</tr>
<tr>
<td>60-79</td>
<td>0.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Saudi Nationality</td>
<td>69.1%</td>
<td>89.2%</td>
</tr>
<tr>
<td>Geographic Distribution</td>
<td></td>
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<tr>
<td>Riyadh</td>
<td>30.2%</td>
<td>42.1%</td>
</tr>
<tr>
<td>Jeddah</td>
<td>17.6%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Eastern Region</td>
<td>7.5%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Mekkah &amp; Medinah</td>
<td>13.1%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Rest of KSA</td>
<td>31.6%</td>
<td>29.9%</td>
</tr>
<tr>
<td>Household Head % of Respondents</td>
<td>19%</td>
<td>59.6%</td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Education</td>
<td>52%</td>
<td>73.7%</td>
</tr>
<tr>
<td>Elementary to Secondary Education</td>
<td>44.7%</td>
<td>26.3%</td>
</tr>
<tr>
<td>Average Income KSR/Year</td>
<td>47.7</td>
<td>163</td>
</tr>
<tr>
<td>Average Household Size</td>
<td>5.6</td>
<td>6.3</td>
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![Respondents' Profiles for Field & Online Surveys](image4.png)

**Figure 4: Respondents’ Profiles for Field & Online Surveys**
2.4 Public Awareness of CITC

2.4.1 Public Awareness of CITC and its roles

“Do you know what the Communications and Information Technology Commission’s role is?” (Multiple Choice)

54.7% of surveyed individuals were aware of CITC, of which 53.4% indicated CITC’s role includes regulating the telecommunications market. These percentages indicates over 50% of the survey populations are unaware of CITC’s main function as telecommunications market regulator.
2.5 Mobile Services

2.5.1 Average Mobile Lines per Household

“How many mobile lines are there in your household including yours?”
Both the field and online surveys reveal that the average number of household mobile lines is estimated at 4.6 lines per household.

![Figure 6: Mobile Lines Household Penetration (Field Survey)](image1)

![Figure 7: Mobile Lines Household Penetration (Online Survey)](image2)
2.5.2 Number of Personal Mobile Lines used by Individuals

“How many mobile lines do you personally use?”

The use of multiple mobile lines among individuals has become a trend. According to the survey results more than a quarter of respondents are using many personal mobile lines. On average =1.32 lines/Individual (mobile penetration =132%) and 1.61 lines/Individual from the field and online survey’s respectively.

![Number of personal mobile lines used by Individuals (Field Survey)]

![Number of personal mobile lines used by Individuals (Online Survey)]
2.5.3 Reasons Behind Having Multiple Lines

“Why do you use more than one mobile line?”

When respondents were asked ‘Why do you use more than one mobile line’, 52% of field respondents and 38% of online respondents indicated primary reason as being ‘had to keep a line as people know the number’. 47% of respondents indicated ‘cost saving’ as the second most important reason for multiple lines and 42% indicated ‘separate lines for business and person use’ was reason to have multiple mobile lines for field respondents.

The findings show consumers tend to split between their personal and business mobile usage through multiple mobile usage.

![Figure 10: Reasons behind Having Multiple Mobile Lines (Field Survey, Multiple Choice)](image)

![Figure 11: Reasons behind Having Multiple Mobile Lines (Online Survey, Multiple Choice)](image)
2.5.4 Awareness of Mobile Number Portability (MNP) & Consideration for Changing Mobile Operator

“Are you aware that you can now change your mobile operator in Saudi Arabia for free without changing your phone number (Mobile Number Portability)?”
The online respondents showed 92% awareness compared to 75% of field respondents when asked ‘Are you aware that you can now change your mobile operator in Saudi Arabia for free without changing your mobile number’.

“Taking into account that you can keep your mobile number, would you consider changing your mobile operator to any other existing operator in the market?”
In the same course, 75% of field respondents may do not consider changing mobile operators while 61% of online respondents similarly do not consider changing mobile operators.

Figure 12: Awareness of Mobile Number Portability & Consideration for Changing Mobile Operator
2.5.5 Reasons for Changing the Mobile Operator

“Why would you consider changing your mobile operator?” (Multiple Choice)
The major reason indicated by field and online respondents were mainly to receive better rates and packages and better quality of service. More than 40% of online respondents indicated that receiving better customer care and innovative products as important reasons for considering changing the mobile operator.

Figure 13: Reasons for Changing Mobile Operator (Field Survey, Multiple Choice)

Figure 14: Reasons for Changing Mobile Operator (Online Survey, Multiple Choice)
Q32 “Do you use the Internet service through your mobile handset provided by your mobile operator?”

At 56%, online survey respondents are much more inclined to use the mobile Internet services provided by operators on their personal handheld devices compared with 11% of field survey respondents.

![Figure 15: Mobile device Internet usage (Field and Online Survey)]

### 2.5.6 Rating the Mobile Services’ Quality

“How do you rate the quality of service provider mobile services? (Consolidated figures)

Looking at the overall satisfaction rating for quality of mobile services 4.05 (very good) and 3.22 (good) was reported from field and online respondents respectively. Online respondents gave lower ratings to mobile services’ quality (average 3.22), with customer care, coverage and signal strength receiving the lowest ratings.

![Figure 16: Consolidated rating the Quality of Mobile Services (Field Survey)]

---

4 Poor, Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
2.5.7 Rating the Mobile Services’ Prices

“How do you rate the prices of service provider mobile services?”

On average across both field and online respondents rated\(^5\) prices of mobile service as ‘moderate to expensive’. While the field survey participants on average rated the price at 3.39, the online respondents rated the mobile services prices at 3.71. For both surveys, mobile calls to international destinations, mobile roaming service and mobile internet service received moderate to expensive price ratings.

---

\(^5\) Very Cheap, Cheap, Moderate, Expensive, Very expensive is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
2.5.8 Frequency of Changing Mobile Handsets

“How often do you change your Cellular handset?”

According to the field survey individual mobile subscribers on average change their mobile handsets every 15 months. Similarly online respondents on average change their mobile handsets every 16.4 months.

![Frequency to Change Mobile Handsets (Field Survey)](image1)

![Frequency to Change Mobile Handsets (Online Survey)](image2)

2.6 3G Services

2.6.1 Awareness and Usage of 3G Services

“Do you know what 3G services are?” and “Which of the following 3G services do you know?” Although 79.2% of mobile subscribers from field survey and 91.7% of mobile subscribers from online survey know what 3G services are, 3G services usage levels are still low. Both surveys indicate video calling and high speed internet as the most widely known 3G services.

![Individuals Rating the Prices of Mobile services (Online Survey)](chart1)
2.6.2 3G Services Usage

"Which of the following 3G services do you use?"

Across both field and online respondents Video Calling and High Speed Internet over 3G are the most used services across all 3G Services.

---

Figure 21: Awareness of 3G Services (Multiple Choice)

Figure 22: 3G Services Usage by Mobile Subscribers (Field Survey, Multiple Choice)
“How often do you use the 3G service?”
Compared to traditional services the use of 3G services is minimal. Field respondents on average indicated using 3G services once every 3.6 days, while online respondents indicated use once every 2.1 days.
2.6.3 Reasons for Not Using 3G Services

“What are the reasons for not subscribing to 3G?” (Multiple Choice)
Approximately 84% of field respondents and 43% of online respondents’ primary reason for not using 3G services was because they felt no need for 3G services. At approximately 40%, the second reason for not using 3G services for both respondent types is felt to be ‘expensive’.

Figure 26: Reasons for not using the 3G Services (Multiple Choice)
2.6.4 Rating 3G Services’ Quality

“How do you rate the Quality of service provider 3G Services?

While field respondents rated the 3G services’ quality an average of 3.60 (good to very good), online respondents gave it a lower average rating of 2.81 (fair to good).

Figure 27: Rating Quality of 3G Services (Field & Online Surveys)

---

Poorn Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. 'I don’t know’ response was available option.
2.6.5 Rating 3G services’ Prices

“How do you rate the prices of service provider 3G services?”
Across both respondent groups on average 3G services prices were rated between “moderate to expensive”. On average, field and online respondents rated 3G services prices as 3.88 and 3.81 respectively.

Figure 28: Rating the Prices for 3G Services (Field & Online Surveys)
2.6.6 Annual Expenditure on Mobile Telecom Services

“How much did you spend over Mobile services over the past 12 months?”

For both field and online respondents who have a mobile we can see from the below figure that the majority are spending between 500-4000 SAR on mobile services per year.

![Bar chart showing annual expenditure on mobile telecom services for field and online surveys.](chart.png)

Figure 29: Annual Expenditure on Mobile Telecom Services (Filed & Online Surveys,
2.7 Internet Services through Mobile Networks

2.7.1 Internet Through Mobile Telecom Services

“Have you used the Internet over the past 6 months?”
The surveyed field respondents 60% used internet over the last 6 months.

Figure 30: Internet Usage over the last 6 months (Field Survey)

“Have you used the Internet through mobile telecom networks over the past 6 months?”
At 70%, online survey respondents used mobile Internet services provided by operators compared with 20% of field survey respondents.

Figure 31: Internet usage through mobile telecom networks (Field and Online Survey)

“Do you have a Mobile Internet subscription that you personally use inside and outside your home?”
At 87%, of field and 75% of online survey respondents do not have a Mobile Internet Subscription used inside and outside of the home.

Figure 32: Mobile Internet Subscriptions status for use inside and outside the home (Field and Online Survey)
“How do you rate the Quality of Mobile broadband Internet services for your personal use inside and outside your home?” (Consolidated figures)

The perceptions across various attributes for mobile broadband internet services both inside and outside the home are listed below. Overall online survey respondents were less satisfied across all service attributes compared to field survey respondents.

**Field Survey**

![Field Survey Chart]

**Online Survey**

![Online Survey Chart]
“How much do you spend YEARLY for Mobile personal Internet?”

For both field and online respondents who have a mobile and have used internet through subscription we can see from the below figure that the majority are spending between 500-4000 SAR on mobile personal Internet per year. Amongst online respondents 26% are not aware of their mobile personal internet expenditure.

![Chart showing annual expenditure on mobile personal Internet services for field and online respondents.](chart.png)

Figure 35: Annual Expenditure on Mobile Personal Internet Services (Field and Online)
2.8 Fixed Telephone Services

2.8.1 Fixed Line Household Penetration

“Are you subscribed to the fixed line service?”
Results for fixed line household subscription show 68% for field survey and 88.8% for online survey.

Figure 36: Household Subscriptions for Fixed Line Service (Field & Online Surveys)

2.8.2 Number of Fixed Lines Per Household

“How many fixed lines do you have at home?”
The average number of fixed lines is estimated at 1.09 and 1.4 lines per household for field and online surveys respectively.
2.8.3 Rating Quality of Fixed Line Services

“How do you rate the Quality of Fixed Telephony services?”

Looking at the overall satisfaction ratings\(^7\) for quality of fixed line services 4.23 (very good) and 2.93 (fair) was reported from field and online respondents respectively. Across both survey it can be observed that field respondents gave higher ratings across all attributes related to fixed lines services.

\(^7\) Poor, Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
2.8.4 Rating Fixed Line Services’ Prices

“How do you rate the prices of the Fixed Phone services?”

Field and online respondents rated the fixed services’ prices as “moderate to expensive”. International calls were considered the most expensive.

![Figure 39: Rating Prices of Fixed Lines Services (Field & online Surveys)](image)

“Q57. How do you rate the Quality of Prepaid Calling Cards?”

Looking at the overall satisfaction ratings for quality of prepaid calling cards very good and fair was reported from field and online respondents respectively. Across both survey it can be observed that field respondents gave higher ratings across all attributes related to prepaid calling card services.

![Field Survey](image)

---

88 Very Cheap, Cheap, Moderate, Expensive, Very Expensive is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.

5 Poor, Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
2.8.5 Annual Household Expenditure on Fixed Line Services

“How much did you spend over fixed telephone line services over the past 12 months?”

For both field and online respondents who have a fixed line at home we can see from the below figure that majority are spending between 500-4000 SAR on fixed line services per year.
2.9 Computers and Software

2.9.1 Household Personal Computer Penetration

“Do you own a computer for your personal use?”

The Field survey indicated a household personal computer penetration of 58.1%, while online survey indicated a penetration of 93%.

![Figure 42: Household Computer Penetration (Field & Online Surveys)](image)

2.9.2 Number of Desktops and or Laptops owned by households

“What is the total number of laptops at your home?”

“What is the total number of desktop computers at home?”

For households equipped with computers, both surveys indicated higher ownership of laptops than desktops. The field survey reveals households own 1.18 Desktop computers and 1.5 laptops on average, indicating an emerging trend towards more laptop usage. This trend together with multiple mobile lines and adoption of 3G service trend may suggest increase in mobility preferences of consumers. Comparison between the online and field survey reveals higher PC and Laptop ownership amongst online respondents as indicated in figure 1V.
2.9.3 Frequency period of changing Desktop or Laptop computer

“How often do you change your desktop or laptop?” (One choice)

For households who own desktop PC/laptop, respondents were asked ‘How often do you change your desktop or laptop?’ The below table summarizes percentages across field and online survey.

---

**Figure 44: Frequency of changing laptop and desktop (Field Surveys)**

**Figure 45: Frequency of changing laptop and desktop (Online Surveys)**
2.9.4 Annual Household’s and Personal Expenditure on Computer Equipment, Software and Accessories

“What is the household and personal expenditure spent on Computer equipment, Software and accessories over the past 12 months?”

For both field and online respondents annual expenditure on computer equipment, software and accessories is primarily between 500-4000 SAR per year. 35% of field respondents are not making such purchases.

Figure 46: Annual Household Expenditure on Computer Equipment, Software & Accessories


2.9.5 Percentage of individuals who use computers

“Do you use computers?”
The survey investigated the percentage of computer users. The below table provides for results for this inquiry:

<table>
<thead>
<tr>
<th>Percentage of individuals who use computers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals Use Computers</td>
<td>65.8%</td>
</tr>
<tr>
<td>Individuals Do not Use Computers</td>
<td>34.2%</td>
</tr>
<tr>
<td>Total respondents</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

2.10 Household Broadband Internet Subscription

2.10.1 Household Internet Penetration and Internet Technologies Used

“Is Internet used at your home?”
Responses to field survey indicate household internet penetration is 53.5%, while online survey indicates 96% penetration levels.

![Household Internet penetration (Field & Online Surveys)](image)

“What type of broadband Internet do you use at home?”
According to the field survey, DSL formed 80.8% of internet technologies used at households, while the online Survey indicated that DSL formed 79.5%.
2.10.2 Households Usage of Wireless Routers

“Do you have a wireless router installed at home to access your Internet connection wirelessly?”

Comparison of usage for wireless routers shows 47.5% for field and 76.2% online survey respondents.

2.10.3 Number of Computers in the Household that Share the Same Internet Connection

“Do you share the Internet connection with other households or other apartments in the building?”
According to field and online survey 1.57 and 2.5 respectively represent the number of computers sharing the same internet connection within a household.

![Figure 50: Number of Household Computers Sharing Same Internet Connection (Field and Online Survey)](image)

### 2.10.4 Households Sharing the Internet Connection With Other Households

“Do you share the cost of the Internet connection with the other households or apartments in the building?”

For the first time in KSA, the survey investigated the number of households that share the same internet connection.
Respectively the field and online surveys revealed that 9.4% and 15.8% of internet enable households are sharing their internet connection with neighboring/nearby households. This finding can be attributed to wireless routers usage; as 45.1% (Field survey) and 76.2% (online survey) of internet enabled households use a wireless router. 84.0% of field respondents who share their internet connection also share its cost.

2.10.5 Current & Planned Average Speed of Household Internet Subscriptions

“What is the speed of broadband Internet at your home?”

Field survey indicates an average current internet speed for household subscriptions of 724 kbps. However, for the same survey, the average planned speed over the coming 12 months period is expected to reach 1.316 Mbps, indicating 82% year on year growth. The Online survey indicates an average current internet speed for household subscriptions of 1.22 Mbps. However, for the same survey, the average planned speed over the coming 12 months period is expected to reach 6.14 Mbps, indicating 402% year on year growth.

“If you plan to increase the Internet broadband speed at your home, to which speed do you want to upgrade?” (One Choice)

For the respondents who have internet at home approximately 48% have plans to make some form of upgrade to their internet speed, the table below presents approximate percentage breakdown for planned speeds.
<table>
<thead>
<tr>
<th>Internet speed upgrade</th>
<th>Field Survey</th>
<th>Online Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t want to increase the speed</td>
<td>52.4%</td>
<td>18.7%</td>
</tr>
<tr>
<td>128 kbps</td>
<td>0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>256 kbps</td>
<td>1.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td>512 Kbps</td>
<td>4.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>1 Mbps</td>
<td>21.3%</td>
<td>14.2%</td>
</tr>
<tr>
<td>2 Mbps</td>
<td>8.4%</td>
<td>11.1%</td>
</tr>
<tr>
<td>4 Mbps</td>
<td>5.7%</td>
<td>20.2%</td>
</tr>
<tr>
<td>8 Mbps</td>
<td>2.7%</td>
<td>5.4%</td>
</tr>
<tr>
<td>10 Mbps</td>
<td>1.1%</td>
<td>5.5%</td>
</tr>
<tr>
<td>16 Mbps</td>
<td>0.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>20 Mbps</td>
<td>1.4%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Respective Sample Size</td>
<td>100.0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Figure 53: Planned internet broadband upgrades (Field and Online Survey)**

### 2.10.6 Reasons for households planning to increase Internet speed

*“What is the reason for increasing the internet speed?” (Multiple Choice)*

For the 48% of households planning to upgrade the internet speed over the coming 12 months, the survey investigated the reasons for such plans as depicted in the figures below (multiple choice).

**Figure 54: Reasons for households to increase internet speed (Field and Online Survey)**
2.10.7 Rating of the price of Internet provided to household

“How do you rate the price of the broadband services at your home?” (Single Choice)

The field survey investigated rating the prices of Internet provided to households. The table below provides respondents price ratings for Internet. For the field survey, 61% rated internet provided to the household between very cheap to moderate and 39% expensive to very expensive. 10% respondents did not know. 18% of respondents of online survey indicated internet prices as moderate, whereas, 39% as expensive or very expensive.

![Field Survey Bar Chart]

![Online Survey Bar Chart]

Figure 55: Rating Prices of Internet Services (Field and Online Survey)
2.10.8  Annual Household Expenditure for Broadband Internet Service

“How much does it cost on a YEARLY basis the broadband Internet at your home?”

For both field and online respondents annual expenditure for Internet Services is primarily between 500-4000 SAR per year.

![Figure 56: Annual Household Expenditure over Internet Services (Field & Online Surveys)](image-url)
2.10.9  Rating the Quality of Broadband Internet Services

“How do you rate the Quality of Internet services used at your home?”

While field survey respondents overall rated broadband internet services at 3.84 (good to very good), online respondents rating was of 2.40 (fair to good).

![Field Survey Rating Graph]

![Online Survey Rating Graph]

Figure 57: Rating the Quality of Household Broadband Internet Services (Field & Online Respondents)

---

10 Poor, Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. ‘I don’t know’ response was available option
2.10.10 Rating Broadband Internet Services’ Prices

“How do you rate the price of the broadband services at your home?”

Looking at the rating\(^{11}\) of field respondents for broadband services’ prices the majority of 79% revealed prices as (moderate to expensive) and majority of 80% as (expensive to very expensive) for online respondents.

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\(^{11}\) Very Cheap, Cheap, Moderate, Expensive, Very Expensive is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
2.11 Individual/Household Bundled Services

2.11.1 Satisfaction level with bundled services

“What is the level of your satisfaction with the bundled services offers?”
Looking at responses from both field and online survey it can be observed that poor awareness levels and lack of subscription to bundled service offers constitute the majority of responses.

“If not satisfied, what are the reasons?”
At approximately 74% the majority of field respondents are satisfied, with 30% very satisfied and 54% satisfied. The main reasons of dissatisfied individuals/households included ‘Weak technical support’ and bundled ‘offers are too difficult to understand’.
2.11.2 Services that might be considered with a bundled service offer

“What are the services that you wish to be bundled together?” (Multiple Choice)

The survey investigated various services which individuals/households might consider within a bundled offer. The figure below provides associated findings.

![Bar chart showing awareness and satisfaction levels for bundled services](image)

**Field Survey**
- Fixed Telephony: 36.9%
- Mobile Telephony: 41.7%
- Internet Services: 23.2%
- TV subscription: 11.2%
- Electricity: 33.6%
- Water: 22.4%
- All of the above: 14.1%
- None of the above: 23.8%
- Others: 0.6%

**Online Survey**
- Fixed Telephony: 34.0%
- Mobile Telephony: 31.1%
- Internet services: 36.4%
- TV subscription: 14.9%
- Electricity: 22.7%
- Water: 18.9%
- All of the above: 30.2%
- None of the above: 28.5%
- Others: 7.0%

*Figure 60: Awareness and Satisfaction levels for bundled services (Field & Online Surveys)*

Analysis reveals that fixed telephony services and mobile services in addition to ‘electricity’ are the highest services that are preferred by individuals to be considered in bundled offers.

2.12 Personal Web Pages

2.12.1 Individuals Owning or Managing Websites & Domain Names

“Do you own or manage a personal website?”
The field and online respondents who own or manage a personal website are reported as 5% and 17% respectively.

"Please indicate your websites various domains “(Multiple Choice)

Both field and online survey results revealed significant difference between ownership or management of generic domains versus local domains. With the launch of Saudi Domain Name registration process\textsuperscript{12} and the introduction of Arabic Domain Names the usage of local domain names is expected to increase.

\textsuperscript{12} Individuals or establishments interested in registering a Domain Name Registration can find more information at http://www.saudinic.net.sa

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CITC - ICT Market Study (2009-2010)
2.13 Electronic Services

2.13.1 Usage of ICT-based Payment Methods

“Do you use any of the listed payment methods?” (Multiple Choice)

The survey explored the usage of several ICT-based payment methods namely online payment, payment through ATM (Automatic Teller Machine) and payment through telephone interactive voice recognition (IVR) system. Amongst the 37% field survey respondents who are using ICT-based payments the most common form is through Bank Automatic Teller Machine at 93%. From the 84% online respondents who are using ICT-based payments, ‘Online Payment’ and ‘Payment through Bank ATM’ received similarly high usage levels.

![Pie chart showing usage of ICT-based payment methods](image1)

![Bar chart showing usage of ICT-based payment methods](image2)

Figure 63: ICT based Payment Methods Used by Individuals (Field & Online Surveys, Multiple Choice)
2.13.2 Internet payment methods used by individuals

“Which of the below payment methods do you use through the Internet?” (Multiple Choice)

Amongst field survey respondents using internet for payments approximately 45% and 38% preferred to pay ‘Through Credit Card’ and ‘... through Internet Banking’ amongst other services. Similarly for online survey respondents paying through internet the most preferred method is through Internet Banking. On the other hand, for online survey respondents, credit card payment is preferred by 51% whereas payment through Internet Banking is preferred by 86%.

![Field Survey Diagram](image)

![Online Survey Diagram](image)

Figure 64: Internet Payment Methods Used by Individuals (Field & Online Surveys, Multiple Choice)
2.13.3 Individuals Buying Products Online

"Do you buy products over the internet?"

1.3% of field respondents and 35% of online respondents indicated that they buy products over the internet.

Figure 66: Individuals Buying Products over the Internet (Field & Online Surveys)
2.13.4 Types of Products Paid for Using ICT-Based Payment Methods

“Through the Internet, which of the following products and services do you buy?” (Multiple Choice)

Electronic equipment, online content and mobile content were the main products paid for over the internet by the field respondents.

Electronic equipment, software and financial stocks, were the main products paid for over internet by online respondents.
“Through the Internet, how much did you spend for buying products during the last 12 months (in SR)?”

With only 1.3% and 35% of field and online survey respondent purchasing products over the internet the interpretations from below figure will become more robust, however for the purposes of illustration 8.1% of online respondents are spending more than 1,001-3,000 SAR per year.

![Figure 68: Annual expenditure for products over the internet (Field and Online Survey)]

### 2.13.5 Local & international websites that individuals seek to buy products over the internet

“From which websites do you buy over the Internet?” (Single Choice)

The survey investigated the Local & international websites that individuals seek to purchase products and services over the internet. 44% of online respondents who are typically more mature ICT users chose only to buy products from websites of international companies.

![Figure 69: Purchased over Local v.s International Website (Field and Online Survey)]
2.13.6 Developments needs of local e-commerce websites used by individuals

“Do you think that local e-commerce websites should be improved?” (One Choice)

The survey investigated the development needs of local e-commerce websites used by individuals. Nearly the entire online respondent indicated the need for improvement of local e-commerce websites. For field respondents who have an opinion on whether local e-commerce website need improvement a significant majority indicated that they don’t know (see the figure). For online survey respondent at 93% majority believe local e-commerce ‘need to be improved’.

Figure 70: Improvement of Local e-Commerce Websites (Field and Online Survey)
2.14  Electronic Banking

2.14.1  Individual ownership of a bank account

“Do you have a bank account?”

For the purpose of investigating related ICT-based banking services, the survey investigated individual’s ownership of a bank account. 48% of field survey respondents do not have a bank account.

![Figure 71: Bank account ownership (Field and Online Survey)](image)

2.14.2  Online Banking Services

“What do you use online banking for?”

Surveys indicated that 17% of field respondents and 82% of online respondents who own bank accounts use their online banking service. Account and balance inquiries, paying and managing bills and transferring money between local bank accounts are the most popular online banking services.
2.14.3 Rating E-Banking Services’ Quality

“How do you rate the quality of e-banking services?”

For the field survey average quality rating of 4.2 (very good to excellent), while for the online survey average was slightly lower at 3.9 (good to very good).

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13 Poor, Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
2.15 Pay Television Services

2.15.1 Individuals Watching Satellite TV Channels

“Do you watch Satellite TV channels?”

96% of field and online respondents watched satellite TV channels.

Figure 74: Individuals Watching Satellite TV Channels

2.15.2 Individuals Watching Satellite Pay TV Channels

“Do you watch Satellite Pay TV channels?”

48% of field and 47% of online respondents watch Pay TV channels.

Figure 75: Individuals Watching Satellite TV Channels
2.15.3 Individuals Subscribed to Pay TV services

“How do you watch Satellite pay-TV?”
24.6% of field survey respondents are subscribed to pay-TV channels and 24.3% for online survey respondents.

![ individuals subscribed to pay tv services multiple choice ]

2.15.4 Video on Demand (VoD) Usage by Individuals Who are Subscribed to Pay-TV Services

“Through subscription to pay TV, do you use the Video on Demand service?”
Only 15% of field survey respondents who are subscribed to pay-TV services use Video on Demand services (3.7% of individuals) while the percentage reached 24% for online survey respondents.

![ video on demand usage by individuals who are subscribed to pay tv services field survey ]

![ video on demand usage by online respondents who are subscribed to pay tv services online survey ]
2.15.5 Program/Movies Orders Per Month by VoD Users

“If answer is ‘Yes’, how many programs/movies do you and your family order per month?”

Significant percentage of the field survey respondents are watching between 5 to 20 VOD per month whereas majority of the online survey respondents (63.6%) are watching less than 5 VOD programs a month.
2.16 Future Services

2.16.1 Future Services Awareness and interest levels

2.16.2 “Do you know the following services and if so, would you consider subscribing to them once available?” (Multiple Choice, consolidated figures)

For below mentioned future services, field survey respondents indicated high level of unawareness. Very low % of interviewed respondents had interest in subscribing to such services. However, this may be due to the fact that individuals are not aware of these services or have little understanding of the corresponding benefits. Similarly online survey respondents have high levels of unawareness of various future services.

![Future services awareness and interest levels](image)

Figure 79: Future services awareness and interest levels (Field Survey, Multiple Choice)
2.17 Complaints Handling

2.17.1 Types of Complaints Against Service Providers

“Have you ever faced any of the following with your service providers?”

‘Customer care not answering complaints efficiently’ was ranked the highest across both field and online survey respondents.

Figure 80: Future services awareness and interest levels (Online Survey, Multiple Choice)

Figure 81: Types of Complaints against Service Providers (Field and Online Survey Multiple Choice)
2.17.2 To whom were complaints about Service Providers reported

“To whom did you report your complaints?” (Multiple Choice)
Findings reveal that customer care is the most popular party that receives customers’ complaints. Only 2% of field respondents and 11% of online respondents who faced issues with the service provider complained to CITC.

![% of Complaints Reported to Various Destinations]

Figure 82: To Who Complaints against Service Providers were reported (Multiple Choice)

2.17.3 How Complaints Against Service Providers were Handled

“How was your complaint handled?”
8% of field respondents’ and 6% of online respondents’ officially reported complaints were addressed and corrected. ‘Not addressing the complaint’, ‘customer never receiving a promised call’, and ‘loop between technical support and customer care referrals’ were the major issues respondents express regarding complaints’ handling.
2.17.4 Awareness of CITC customer complaints regulations

“Are you aware of that you can complain to the Communications & Information Technology Commission if your complaint was not resolved with your operator 15 days after officially filing the complaint with the operator?”

Current CITC customer complaint regulations allow customers of service operators to complain to the Communications & Information Technology Commission if their complaint was not resolved with their operator 15 days after officially filing the complaint with the operator. Only 30% of field respondents and 28% of online respondents were aware of CITC customer complaint regulation.
3. Survey Findings - Establishments

Section 3 summarizes the establishments’ findings and presents various observations relevant to SMEs, large & very large establishments in addition to governmental agencies.

![ICT Value Chain-Consumer-Business & Government Surveys](image)

3.1 Establishment Profile and Demographics

3.1.1 Establishments Sample Structure

### SME: SOHO, Small & Medium Enterprise
- SOHO: 0-4
- Small: 5-19
- Medium: 20-59

### L&VL: Large & Very Large Enterprises
- Large: 60-499
- Very Large: 500+

### Gov: Governmental Establishments
- Education/Research: 25%
- Civil Services: 60%
- Health: 15%

![Establishments Sample Structure](image)
3.1.2 Establishments’ Profile:

<table>
<thead>
<tr>
<th>Sample Size</th>
<th>SME</th>
<th>L&amp;VL</th>
<th>Governmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line of Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and Hunting</td>
<td>7.1%</td>
<td>9.20%</td>
<td></td>
</tr>
<tr>
<td>Petroleum &amp; Minerals</td>
<td>0.3%</td>
<td>1.30%</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10.4%</td>
<td>15.80%</td>
<td></td>
</tr>
<tr>
<td>Electricity, Gas &amp; Water</td>
<td>0.6%</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>5.6%</td>
<td>11.80%</td>
<td></td>
</tr>
<tr>
<td>Whole &amp; Retail Trade</td>
<td>45.9%</td>
<td>32.60%</td>
<td></td>
</tr>
<tr>
<td>Restaurants &amp; Hotels</td>
<td>6.9%</td>
<td>7.90%</td>
<td></td>
</tr>
<tr>
<td>Transportation, Storage &amp; Communication</td>
<td>2.7%</td>
<td>6.60%</td>
<td></td>
</tr>
<tr>
<td>Banking &amp; Insurance</td>
<td>0.0%</td>
<td>3.90%</td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>5.3%</td>
<td>1.30%</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.3%</td>
<td>2.60%</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Social services</td>
<td>1.9%</td>
<td>6.60%</td>
<td></td>
</tr>
<tr>
<td>Personal &amp; Community services, International Organizations</td>
<td>13.3%</td>
<td>6.60%</td>
<td></td>
</tr>
</tbody>
</table>

Geographic Distribution
- Riyadh: 35.8% 44.7% 87.5%
- Jeddah: 21.6% 30.2% 37.5%
- Eastern Province: 18% 10.5% 15%
- Others: 24.6% 14.5% 24.6%

Average number of branches
- SME: 3.5
- L&VL: 17.2
- Governmental: 20.4

Figure 69: Establishments Sample Structure

3.2 Public Awareness of CITC & Its Role (Est.)

3.2.1 Establishments' Awareness of CITC and its Role

“Have you heard of the Communications and Information Technology Commission (CITC)?”

In general, CITC has less awareness amongst small to medium enterprises (SME) when compared with large/very large (L&VL) and governmental establishments regarding awareness of CITC and its roles and responsibilities.

---

14 Classification and representative sampling of establishment aligned with figures from Ministry of Economy and Planning and Central Department of Statistics. Small to Medium Enterprises (SME) is a superset of Small Office/Home Office (SOHO), Small and Medium Enterprises.
“Do you know what the role of the CITC is?”

![Figure 87: Awareness of CITC and its Role](image)

![Figure 88: Awareness of CITC roles](image)

### 3.3 Mobile Services

#### 3.3.1 Mobile Allowances Offered by Establishments to employees

“What is the percentage of employees that receive mobile allowance from the establishment? (i.e. paid by the establishment)”

As per findings of establishment survey on average 64% of establishment do not provide any of their employees with a mobile allowance. For the establishments that do provide such allowance it is typically assigned to small percentage of the employees. L&VL establishments are the most inclined to offer such allowances to their employees. Given the competitive global market place this is no surprise.
3.3.2 Consideration of Changing Mobile Service Provider and Reasons

"Does the establishment consider changing its main mobile operator?"

81% of establishments indicated they would not change mobile operator for mobile allowances provided to their employees. For the establishments that would change, the main reason was the ‘need for better rates and packages’ and ‘better quality of customer care’.

"Why does the establishment consider changing its mobile operator?"
Figure 90: Consideration of Changing Mobile Service Provider and Reasons (Multiple Choice)
3.3.3 Reasons that keep establishment with its current mobile operator

“In general, what are the reasons that keep the establishment with its current mobile operator?” (Multiple Choice)

For those establishments who provide for mobile service allowances to their employees and do not consider changing their mobile service provider, see below figure for reasons establishments stayed with current mobile operator.

![Figure 91: Establishment Reasons to stay with current mobile operator (Multiple Choice)](image)

3.3.4 Rating Mobile Services’ Quality (across all service providers)

“How do you rate the quality of service provider Mobile services?”

The overall satisfaction of mobile services was rated between good and very good (rate 3.82). In general, government establishments gave higher quality ratings than L&VL and SMEs.

---

15 Poor, Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
3.3.5 Rating Mobile Services prices (Consolidated)

“How do you rate the prices of service provider Mobile services?” (Consolidated figures)

Across all establishment types prices for the different services where mainly rated as moderate to expensive.
3.3.6 Usage, Quality & Prices of PMR, GMPCS and GPS Services

“Does the establishment have a Private Mobile Radio (PMR) network?” (Consolidated figures)
On average 4.8% across all establishment types have PMR network.

“How do you rate the quality of the following mobile telecom services?”
On average quality was rated as good to very good across the PMR, GMPCS and GPS services.

“How do you rate the prices of the following mobile telecom services?”
The surveys investigated the establishments’ usage of Private Mobile Radio (PMR), Global Mobile Personal Communications by Satellite (GMPCS) and Global Positioning Service (GPS). Surveys indicated that PMR, GMPCS & GPS services have a low penetration at establishments with government establishments being the main users. In general, Establishments considered PMR, GMPCS and GPS services’ quality as good to very good and rated the GPS services and GMPCS services as moderate to expensive.

![Penetration of PMR, GMPCS & GPS Services at establishments]

![Rating the Quality of Mobile Telecom services]

![Rating the Prices of Mobile Telecom services]

Figure 94: Investigating penetration, quality and prices of PMR, GMPCS and GPS Services Used by Establishments

---

16 Poor, Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. 'I don’t know' response was available option.
3.3.7 Establishments’ Annual Expenditure on Fixed & Mobile Services

“How much did the establishment spend over all mobile telecom services over the past 12 months?” (i.e. GSM/3G, Private Mobile Radio, GMPCS and GPS)

The below figure represents the distribution of SME, V&L and Gov establishments expenditure for mobile telecom services across various spending ranges per year.

Figure 95: Establishments’ Annual Expenditure Mobile Telecom Services
3.4 Wireless Technologies Usage

“Please specify all wireless technologies used by the establishment” (Multiple Choice)

![Wireless Technologies Usage distribution per Establishment type]

3.5 Fixed Telephone Services

3.5.1 Number of Fixed Lines Used Per Establishment Segment

“How many fixed lines does your Establishment have? (For HQ & all local branches)"

The average number of fixed lines used by SMEs, L&VL, and governmental establishments are 5.2 lines, 52.1 lines and 127 lines per establishment respectively.
3.5.2  Rating Quality and Prices of Fixed Line Services

“How do you rate the Quality of Fixed Telephony services provided to the Establishment?”

All establishments rated the fixed services’ quality just below very good (rate of 3.94), and rated the prices close to moderate (rate of 3.28)

“How do you rate the prices of the fixed line services provided to the Establishment?”

International calls were rated more expensive compared to other call types and services. In general, government establishments gave a higher price rating than L&VL establishments and SMEs.
“How much did the establishment spend over fixed telephone line services over the past 12 months?”

The below figure represents the distribution of SME, V&L and Gov establishments expenditure for fixed lines services across various spending ranges per year.

Figure 99: Establishments Rating Fixed Services’ Prices

Figure 100: Establishments annual expenditure for Fixed Services
3.5.3 PBX Usage and Type of Used PBX

“Does the establishment have a Private Branch Exchange (PBX)?”

“What is the type of your establishment’s Private Branch Exchange?”

28% of establishments reported using a PBX, with only 2.4% indicated using IP PBX. SMEs mainly use Analogue PBX, L&VL establishments use analogue & Digital PBX similarly, while Governmental establishments mainly depend upon Advanced Digital & IP PBX systems.

*Why does your organization use the IP PBX?”*

Key reasons for using IP PBX include, to:

- Connect establishments internal phones
- Connect the telephones for local branches together using the internet
- Connect the telephones of local and international branches of the establishment using the internet
- Make international calls using the internet

![Image of PBX Penetration and Type of PBX used at Establishments]

![Image of PBX Penetration Per Establishment Type]

*Figure 101: PBX Usage and Type of Used PBX*
3.5.4 Establishments’ Call Center Experience

"Does the establishment have a call center to manage calls from customers and clients?"
Only 3.6% of SMEs, 27.6% of L&VL and 57.5% of Government establishments indicated having a call center. For those having a call center, only 50% of SMEs, 71.4% of L&VL and 91.3% of Government establishments were aware that call center services can be outsourced.

“Are you aware that you can outsource your call center?”
Government establishments demonstrated the greatest awareness of Call Centre Outsourcing.

“Who is the provider of the call center service?”
Call centers are predominantly managed internally by the government and private sector establishments.

Figure 102: Call Center Penetration, Awareness and Management
3.6 Computers, Servers and Software

3.6.1 Establishments’ Computer Penetration & Types of Servers Used

“Does the establishment use computers?”

Computer penetration for business establishments reached 74% for SMEs, and 100% for L&VL Government establishments.

![Establishments' Computer Penetration](image)

The response from establishments to “Please indicate the type of dedicated servers that the establishment has” resulted with 16% of establishments not having any servers.

![Deployment of Server Types by Establishments](image)

File & DNS servers are the most widely used types followed by Mail, Web and Special application servers.
3.6.2 Types of Software Used

“What are the languages used for your software?”

KSA establishments demonstrate significant adoption levels of standard office applications and software (Office Solutions, Security & Accountancy). Sales & CRM solutions have reasonable penetrations within KSA establishments.
3.7 Establishment Networks

3.7.1 Utilization of LAN and WAN Technologies

“How many of your establishments’ branches have Local Area Networks (LAN)?”

The establishment survey indicated that SME and L&VL show low levels of LAN utilization (17% and 57% respectively) when compared with Government establishments of 82%.

Leased Lines & IPVPN Technologies were found to be the most eminent technologies connecting branches.

![Figure 108: Percentage of Establishments with LAN](image)

![Figure 109: Connection Technology Used Across Establishments’ Branches](image)
3.7.2 VPN Services and Remote Access

“What are the technologies used to connect the branches?” (Multiple Choice)

While Most SMEs and L&VL establishments utilized their own technicians to establish their VPN connections, governmental establishments mainly relied upon leasing the service from a service provider.

![Connection Technology used Across Establishments' Branches](chart)

Figure 110: % of VPN Connections leased from a Service provider to all VPN Connections

“Who establishes and provides the VPN connections for the establishment?” (Multiple Choice)

Majority of establishments either do not use and or do not know about VPN technology.

![Party establishing and providing VPN Connections to the Establishment](chart)

Figure 111: Party establishing and providing VPN Connections to the Establishment
“Does the establishment’s network provide remote access to its employees and clients?”
Remote access to employees and clients by governmental and L&VL establishments is significantly higher when compared with SMEs. With the low levels of mobile + internet allowances and similarly little provision of remote access facilities fewer incentives exist for employees to work remotely.

![Figure 112: % of Establishments Providing Remote Access to Employees & Clients](image)

### 3.7.3 Establishments providing Wi-Fi service for the public

“Does the establishment provide Wi-Fi service for the public?” (Multiple Choice)
On average 83% of establishments are not providing some form of Wi-Fi access to the employees and clients.

![Figure 113: Status of Wifi to public from establishment](image)
3.8 Internet and e-Services

3.8.1 Internet & Broadband Penetration

“Is Internet used at your establishment?”

60.4% of SME are not using internet, whereas 90.8% L&VL and 92.5% governmental establishments are using the internet.

Does the establishment have a broadband Internet subscription (any internet speed above 256 Kbps)?

Figure 114: Establishments Internet Usage

Figure 115: Status of Establishments Broadband Internet Subscription
3.8.2 Reasons for not having internet broadband

“If the establishment does not have a broadband Internet subscription, what are the reasons?”

For those establishments who do not have internet broadband, the survey investigated the reasons for not having the service. 33.3% of SME believe the establishment/operations does not depend on the internet and hence the reason for no usage.

Figure 116: Establishment reasons for not having internet
3.8.3 Public and Private Establishments first contact with the Internet

“When did your establishment first subscribe to broadband Internet?”

Government establishments in general have been subscribed to broadband internet for longer period than private sector. In the last few years SME establishments have actively started adopting broadband internet.

Figure 117: Establishment reasons for not having internet
3.8.4 Establishments’ average current & planned Internet speeds

While the average internet speed of SMEs is 650 Kbps, L&VL establishments’ internet speed is estimated at 1.76 Mbps, and the Governmental establishments’ internet speed is estimated at 7.54 Mbps. For the coming 12 months period, on average upgrades to establishment internet speeds is expected for establishments as follows, SMEs to reach 1.6 Mbps with year-on-year (YoY) growth of 149%, L&VL to reach 2.94 Mbps with YoY growth of 67% and Government to reach 12.41 Mbps with YoY growth of 65%.

“What is the maximum broadband Internet speed used by the establishment?” and “What are the establishments plans to increase its Internet speed over the coming 12 months?” (Mbps)

Establishments are planning to increase current maximum internet speed between by more than 85% in the coming 12 months.

Figure 118: Maximum used and planned broadband speeds by establishments
3.8.5 Internet and e-Services

“What is the percentage of employees who have allowances to use Internet access outside the establishment? E.g. at home” (This question includes fixed Internet, push email service and any other internet-over-mobile services)

On average across both public and private sector establishment 85% employees do not receive an internet allowance from their employers.

![Figure 119: Employees Receiving Internet Allowances from their Establishments](image-url)
“What are the technologies used by the establishment for the broadband Internet?” (Multiple Choice)

Figure 120: Technologies used for broadband internet by Establishments

3.8.6 Rating Internet Services’ Prices

“How do you rate the price of the broadband services provided to the establishment?”

While SMEs and L&VL establishments rated the offered internet services as ‘moderate to expensive’, the Governmental establishments rated them as ‘expensive to very expensive’.

Figure 121: Establishments Rating of Internet Services’ Prices

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17 Very Cheap, Cheap, Moderate, Expensive, Very Expensive is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
3.8.7 Rating Internet Services’ Quality

“How do you rate the quality of Internet services provided for the establishment?”

Quality rating varied across the establishments with overall quality rating of 3.64 (Good to Very Good). While SMEs and L&VL establishments considered the quality as ‘Very Good’, governmental establishments indicated only a ‘Fair to Good’ quality levels.

Figure 122: Establishments Rating Quality of Internet Services

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18 Poor, Fair, Good, Very Good, Excellent is represented from 1 to 5 respectively. ‘I don’t know’ response was available option.
3.8.8 Establishments Annual Expenditure on Broadband Internet Services

“How much does the establishment spend YEARLY for broadband Internet?”

The below figure represents the distribution of SME, V&L and Gov establishments expenditure for Broadband Internet services across various spending ranges per year.

Figure 123: Establishments Annual Expenditure for Broadband Internet Services
3.9 SME, L&VL and Government Websites

3.9.1 Presence of Websites

"Does the establishment have a website?" (yes, no, no but planning to have one soon)
14% of SMEs, 70% of L&VL and 88% of governmental establishments have a website.

Percentages for establishments not having a website but planning to do so are as follows x% for SME, y% for L&VL and z% for Government establishments.

![Figure 124: Percentage of Establishments Owning a Website](image)

3.9.2 Establishments reasons for not owning website

“What are the reasons for not having a website?” (Multiple Choice)
Examining the figures below may suggest that limited understanding of benefits that internet can bring to public and private sector organizations and respective clients/consumers exist.

![Figure 125: Reasons for not owning a website (Multiple Choice)](image)
“What are the available languages of your establishment’s websites?”
Arabic followed by English are the dominant languages of establishments’ websites.

3.9.3 Establishments Websites Hosting Location

“Where is your website hosted?” (One choice)
48% of establishments hosted their website at local ISP servers.

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CITC - ICT Market Study (2009-2010)
3.9.4 Usage of Local & Generic Domains for Websites

"Please indicate your websites various domains" (Respondent could choose more than one if establishment have more than one website or domain)

While governmental establishments used only local domains, L&VL and SMEs evenly used local and generic domains for their websites. ‘.com.sa’ and ‘.com’ constitute almost half of the L&VL and SMEs websites’ domains.

![Figure 128: Establishments Websites various Domains](Image)

3.9.5 Establishments reasons for not owning website

"If your establishment does not own a local website domain (.sa), what are the reasons for that?" (Multiple Choice)

For this multiple choice question “Local domain names are difficult to register” is the key reason for SME establishment not owning a local website domain. For L&VL establishments it is spread across all reasons for not owning a local website domain.
“What does the establishment provide through its website?” (Multiple Choice)

According to the findings Government establishments are the most active in providing variety of services through their websites.
Figure 130: Services provided through establishments website
3.9.6  Advertising Methods Used by Establishments

“How does the establishment advertise their products or services?” (Multiple Choice)
Around 15% of establishments indicated that they do not advertise. Those that advertise, mainly advertise through traditional methods. Non-traditional ICT related advertising methods are not yet well utilized by KSA establishments.

![Advertising Methods Used by Establishments](image)

3.10  e-Banking

3.10.1  ICT Payment Methods Used by Establishments

“Does the establishment use any of the listed payment methods?” (Multiple Choice)
ICT based payment methods such as Online, ATM and IVR are not well utilized by KSA establishments, though around 22% of establishments indicated using ATM on average. Large & Very Large establishments are most inclined to use ICT services for payments compared with SMEs and government establishments.
3.10.2 Establishments use of internet payment methods

“Which of the below Internet payment methods does the establishment use? (Multiple choice)

Based on the below figure there remains significant opportunities for efficiency in payment methods through the Internet. More than 50% of SME do not pay over the Internet. At 33% L&VL establishments are the most active with using Internet Banking for payments.
“Does the establishment provide e-payment facilities for its clients over the Internet or through Internet banking?”

Only 11% of all establishments provide or 89% do not provide for e-payment facilities to their clients. L&VL establishments are the most active in providing their clients/customers with such facilities.

<table>
<thead>
<tr>
<th>Establishments Providing E-payment Facilities to their Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
</tr>
<tr>
<td>Gov</td>
</tr>
<tr>
<td>L&amp;VL</td>
</tr>
<tr>
<td>SME</td>
</tr>
</tbody>
</table>

Figure 134: Establishment providing e-Payment facilities
“Why doesn’t your establishment provide e-payment facilities for its clients over the Internet?” (Multiple Choice)

As highlighted in the previous figure on average 89% of establishments do not provide e-payment facilities for its clients over the Internet or through Internet banking, because 37% believe there is no need for such payment mechanism as the establishment is satisfied with their current manner of payments.

Figure 135: Reasons for Establishments not offering E-Payment Facilities for its Clients

“What are the various products or services that your establishment offers for sales through online payments over its website?” (Multiple Choice)

The below percentages represent the percentage breakdown for products and service establishments offer online payment facilities for their clients. Although respective sample size (illustrative) it is important to note the types of services you should consider or other establishments are considering to offer through their websites. Online payment facility for services or bills such as sales of general merchandize, sales of information, advertisements and membership fees ranked highest in terms of online payments offered over establishment websites.

Figure 136: Products and Service available for online payments
“*How much is your estimate of ANNUAL revenue generated by services the establishment offers online?*”

For the small percentage of establishments offering online payment facilities to clients, the below figure shows percentage of revenues from online is the greatest for L&VL establishments across the three consolidated revenue ranges.

![Figure 137: Annual Revenue for service offered online](image)

- **up to 1 million SAR**: SME: 64%, L&VL: 67%, Gov: 20%
- **between 1 million and 100 million SAR**: SME: 20%, L&VL: 18%, Gov: 20%
- **more than 100 million SAR**: SME: 58%, L&VL: 58%, Gov: 0%
- **not answered**: SME: 8%, L&VL: 18%, Gov: 80%
3.10.3 Establishments’ Usage of Online Banking

“Does the establishment use your bank’s online banking services?”

On average 67% of establishments do not use online banking service. At 8% SME establishments are the least active with using online banking services.

![Figure 138: % of Establishments that Use Online Banking](image)

“What does the establishment use online banking for?” (Multiple Choice)

For 33% establishments who use online banking, 89% of usage is for account and balance inquiries, while 51% of them transfer money between local bank accounts and 45% for paying and managing bills.

![Figure 139: Online Banking Services used by Establishments](image)
3.11 ICT Expenditure

3.11.1 Establishments' Annual ICT Expenditure For Investigated ICT Services & Products

“For the following Telecom & IT Services what is the Establishment average YEARLY expenditure in SR?”

The figure below illustrates all establishments' annual ICT expenditure for investigated ICT services & products.

SME Expenditure across various ICT Product and Services

<table>
<thead>
<tr>
<th>SME% Training for software and networking</th>
<th>SME% Annual Licensing for Software</th>
<th>SME% Computer Equipment &amp; Software</th>
<th>SME% Data Services such as VPN, Managed Services, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Answered</td>
<td>More than 20 Million</td>
<td>6 to 20 Million</td>
<td>1 to 6 Million</td>
</tr>
<tr>
<td>77.22%</td>
<td>100,000 - 1 Million</td>
<td>100,000-001-10</td>
<td>10,000-1,000</td>
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<tr>
<td>18.64%</td>
<td>1,000 - 10,000</td>
<td>Less than 1000</td>
<td></td>
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<tr>
<td>72.19%</td>
<td>2,07%</td>
<td>21.89%</td>
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<tr>
<td>65.98%</td>
<td>3.85%</td>
<td>28.11%</td>
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<tr>
<td>71.89%</td>
<td>0.30%</td>
<td>23.67%</td>
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</tbody>
</table>
Figure 140: Establishments’ Annual ICT Expenditure for Investigated ICT Services & Products
3.12 Bundled Services

3.12.1 Satisfaction levels, reasons and aspired service bundles

“What is the level of the establishment satisfaction with the bundled services offers?” (One choice)

On average 18% of establishments do not know what bundled services and 28% are not subscribed to bundles services. For the 65% who are subscribed majority are satisfied establishment with the current bundled services.

“If the establishment is not satisfied, what are the reasons?” (Multiple Choice)

Upon investigation of previous figure it becomes apparent that a very small percentage of establishments were not satisfied with bundles services. However the key reasons for non satisfaction are:

- Not good value for money
- Bad customer service understanding and support of bundles services
- Weak Technical Support
- Offers are difficult to understand
“What are the services that the establishment wishes to be bundled together?” (Multiple Choice)

Key services SME, L&VL and Government establishments wish to bundle are:
- ALL Establishments – Fixed Telephony, Internet Services and Mobile Telephony.
- SME – Fixed Telephony, Internet Services, Mobile Telephony and Electricity
- L&VL - Fixed Telephony, Mobile Telephony, Internet Services and Electricity
- Government – Internet Service, Fixed Telephony and Mobile Telephony

![Figure 142: Aspired services for bundling](chart.png)
3.13 Special Services

3.13.1 Penetration of Special Services at Establishments

“Does the establishment use any of these services?” Respondents additionally asked about usage for each service (Use the service, Don’t Use the service, Don’t know the service)

In general, special services have high usage levels in L&VL and Governmental establishments compared with SMEs.

![Penetration of Special Services at Establishments](image)

Figure 143: Usage of Special Services by Establishments
3.14 Issues and Complaint Handling

3.14.1 Issues with Service Providers and Destination of Complaints

"Has your establishment ever faced any of the following with your service providers?" (Multiple Choice)
17% of establishments envisaged the illustrated complaints against their service providers. Discrepancy between contract/advertised quality terms and offered services, in addition to inefficiency of customer care were the major complaints.

"To whom did you report your complaints?" (Multiple Choice)
Customer care is the most common destination to place a complaint against service providers. 23% of establishments faced issues with their service providers but did not complain.
3.14.2 How Complaints Against Service Providers were Handled

“How was your complaint handled?”

For complaints against service providers, “the customer support kept on referring us back to technical support and vice versa without resolving the issue” and “We were promised to be called back soon on, but never received a call” were the most eminent results for a complaint.

![Figure 146: Status of Complaints by Establishments](image)
3.15 Investment

“Do you have plans for more organizational growth or expansion that need further investment expenditure?”

Across all establishment type more than 55% of L&VL and Government establishment have plans for organizational growth or expansion requiring further investment.

![Figure 147: Status of Organizational Growth/Expansion needing investment](image)

“What are the financial sources of planned establishment growth or expansion?” (Multiple Choice)

Majority of private sector establishments prefer self financing for planned growth or expansion activities.

![Figure 148: Financial Sources for Planned Growth/Expansion](image)
“In your opinion, how easy it is to find investors or bank loans to finance your planned growth or expansion?”

Figure 149: Easiness of Finding Investors or Bank Loans for Planned Growth

### 3.16 Research and Development Expenditure

#### 3.16.1 Spending on Research and Development (R&D)

“Does your establishment have a dedicated budget for Research & Development (R&D)?”

36% of establishments claimed that they have an R&D dedicated budget. Status of private establishments R&D expenditure in KSA is compared to government establishment and establishments from other economies is low. 82% of SME, 64% of L&VL and 38% of Governmental establishments do not have a dedicated budget for Research and Development..
“Q119. What best describes your R&D activities?” (Multiple Choice)

Generally speaking R&D activities are low across all establishments, with only 1% of establishments allocating more than 6% of total revenue to R&D. R&D activities across SME establishments is almost non existent when compared with L&VL and Government establishments.
“How many ICT related employee training courses did your establishment conduct or participated within the past 12 months?” (One Choice)

Overall Government sector establishments are the most active in providing ICT training to their employees. However on average 57% of establishment provide no training what so ever.

![Figure 152: ICT related training participation Establishments employees]

“How do you generally describe your ICT Training Policies” (Multiple Choice)

Upon investigation of the various ICT Training Policies use by establishment on average 53% “Train only new employees on the usage of the various software and hardware in the establishment and only 22% usually recruit experienced personnel and do not train them. Government establishments are mostly active across all ICT Training Policies.

![Figure 153: Description of ICT Training Policies]
3.17 Research Collaboration with Universities

“Does your establishment engage in research collaborations with universities and other academic institutions?”

At 53% Government establishments are the most active in research collaborations with academia. SME and L&VL establishments have very little research collaborations with academia.

Figure 154: Status of research collaboration with Academia

“Q121. What sort of collaboration does your establishment have with universities or academic institutions?” (Multiple Choice)

For the establishments that do have research collaborations with universities and academic institutions on average the main form of collaboration is in the form of providing work experience programs for undergraduate students (internships). Once again Government establishments are the most active across a number of collaboration forms; especially with seeking consultancy services on various topics.
3.18 ICT Promotion

3.18.1 ICT Promotion Initiatives Provided by Establishments

“What are the various initiatives that the establishment does to promote ICT?” (Multiple Choice)

On average 47% of establishments have no initiatives for ICT. Sponsoring basic computer and internet training for employees is the most common initiative for all establishments with Government establishments the most active. Once again Government establishments are the most active across all initiatives to promote ICT.
4. Survey Findings - ICT Services and Technology Suppliers

ICT Services and Technology Suppliers are companies who are supplying the technologies and services to Telecom Service Providers. Such technologies and systems include telecommunications infrastructure hardware and software, solutions and services such as system integration, acceptance, maintenance, etc... These national and international companies play a significant role in supplying end users (consumers) with the latest computer devices (PC’s, Laptops, PDA, Mobile Handsets, CPE, etc.) to benefit from the various services offered by Telecommunication Service Providers. Locally such companies are classified as “Technology Vendors/Supplier”, hence the use of Technology Vendor/Supplier is synonymous with ICT Services and Technology Suppliers.

Figure 126, shows the key enabling role ICT services and technology suppliers play amongst various stakeholders within the ICT Value Chain.

![ICT Value Chain-ICT Technology & Services Suppliers](image_url)
4.1 ICT Services and Technology Supplier Profile & Activities

4.1.1 ICT Services And Technology Supplier Profiles

“Where is the Location of the Establishment’s Headquarter?”

“How many branches does your business have including the headquarter(s)?”

“How many international branches and offices do you have outside the Kingdom of Saudi Arabia? (Including the Headquarter)”

Of the 13 companies representing the sample of ICT Services and Technology Suppliers; 12 have headquarters located in Riyadh. On average ICT services and technology suppliers have 5 or less branches including headquarter. 92% have international presence and more than half of them have international presence in more than 15 countries.

![Pie charts showing location and number of employees of ICT Technology & Services Suppliers]

**Figure 158: Location & No. Employees of ICT Technology & Services Suppliers**

“How many Employees (including Headquarter and branches)?” (exact and ranged response)

39% of interviewed ICT services and technology Suppliers have between 60-499 staff working in KSA, while 54% have more than 500 staff.

62% of technology provider establishments are 100% owned by foreigners, 23% are 100% owned by Saudi Nationals while 16% are joint ventures between Saudi and Non-Saudi owners. The result concludes that 77% of interviewed technology suppliers are mainly directly controlled or managed by international companies.
The interviewed ICT Services and Technology Suppliers have been present in KSA for 14 years on average reflecting serious interest in the Saudi ICT Market

4.1.2 ICT Services and Technology Suppliers Lines of Activity

“What are the establishment’s lines of activity?”

More than 62% of the interviewed ICT Services and Technology Suppliers provide ‘Software integration/Business solutions’, ‘Consultancy services’, ‘Maintenance & asset management services’ and ‘Telecom core integration/solutions’. 46% offers technical audits and 46% offer ‘Networking equipment retail’ market is still reasonable

“Which of the following general classifications best describes your company?”

For the available options a) ICT Technology Supplier (Products), b) ICT Services Supplier, c) ICT Solutions Supplier (Both a) and b)) 85% of ICT Services and Technology Suppliers chose ICT Solutions Supplier.

“What are the technologies and or ICT services provided by your company for each of the following segments” (Technologies & ICT Services)”
4.1.3 Company Registration Procedure Efficiency

“How many years have you been in the market?”

“How much time did it take to register the company from the date of application to final approval?”

“How do you rate the procedures to register the establishment?”

Inquiry about the procedures and time needed to register the technology provider company did not yield any conclusive results as most of the technology suppliers interviewed are more than 5 years old and did not recall details of such activities.

4.2 Awareness of CITC and its Role

“How do you know what the role of the CITC is?” (Multiple Choice)

Awareness levels of CITC and its different roles are high among ICT Services and Technology Suppliers. However, 15% of the interviewed were not aware of CITC’s role in regulating the IT market and 46% of ICT Services and Technology Suppliers falsely believed that CITC’s role includes regulating the broadcasting market. Some CITC roles; such as ‘increasing market competition’, ‘consumer protection’ and ‘monitoring quality provided services’, are not well known by ICT Services and Technology Suppliers.

Figure 160: ITC Technology & Services Suppliers Awareness of CITC Role
ICT Services and Technology Suppliers have low awareness about the business registration requirements. Only 31% of respondents are aware of CITC’s registration permits which deem any consequent rating to permits efficiency as in-conclusive.

4.3 Marketing, Sales & Growth Activities

Figure 168 represents ICT Services and Technology Suppliers activities to promote their services to their BTC customers. E-mails and company websites are the primary means of providing information and communicating with their BTC customers.

4.3.1 ICT Services and Technology Suppliers products and services promotion activities

“(B2B) How does the establishment promote its products and services? For the following promotions means please rate the degree of utilization, 1=not utilized, 5=highly utilized “

“(B2C) How does the establishment promote its products and services? For the following promotions means please rate the degree of utilization, 1=not utilized, 5=highly utilized)"

The Figure below represents ICT Services and Technology Suppliers promotion activities to their B2B customers. Predominantly use of ‘Periodic technical/sales visits to customers’ and ‘organizing local workshops or specialized training courses and inviting potential customers to promote their services’. Other promotion means such as ‘Participation in local and regional specialized events’ and ‘Organizing local events for service and products launch’ are moderately utilized.

Figure 161: Media Channels Utilization by ICT Services and Technology Suppliers to Promote Products & Services (BTC)
Figure 162: Promotion Means used by ICT Technology and Services Suppliers
4.3.2 Market Penetration and Growth Strategies

“Using the scale of 1-5 where 1 is strongly disagree and 5 is strongly agree for each of the following market penetration and growth strategies, please tell me how much you agree with each strategy for KSA Market.”

ICT Services and Technology Suppliers consider several efficient market penetration strategies. ‘Providing trade-in facilities to purchase old systems/products’ has low utilization with only 39% of the interviewed seeing value in such approach. ‘Efficient response to RFIs (Request for Information)’ and ‘efficient promotion’ are the most widely utilized market penetration and growth strategies.

![ICTST Suppliers Utilization of Market Penetration Techniques](image-url)

Figure 163: ICT Technology & Services Suppliers Utilization of Market Penetration Techniques
4.3.3 Marketing budgets

“Approximately, what is your marketing budget as a percentage of total revenue? (Last Year, This Year, Next Year)”

“What percentage of your marketing budget is assigned to educating your various customer segments about the benefits of your products and services?”

The average marketing budget as percentage of total revenue, for the interviewed ICT Services and Technology Suppliers has remained stable in 2009. The marketing budget is expected to reach 3.2% in 2010. On average only 26.9% of marketing budget is assigned for educating customers about the benefits of the companies’ products and services.

<table>
<thead>
<tr>
<th>Marketing budget as a percentage of total revenue</th>
<th>ICTST Supplier 1</th>
<th>ICTST Supplier 2</th>
<th>ICTST Supplier 3</th>
<th>ICTST Supplier 4</th>
<th>ICTST Supplier 5</th>
<th>ICTST Supplier 6</th>
<th>ICTST Supplier 7</th>
<th>ICTST Supplier 8</th>
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<th>ICTST Supplier10</th>
<th>ICTST Supplier11</th>
<th>ICTST Supplier12</th>
<th>ICTST Supplier13</th>
<th>Average</th>
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<tbody>
<tr>
<td>Last Year</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>1.50%</td>
<td>-</td>
<td>1%</td>
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<td>3%</td>
<td>10%</td>
<td>10%</td>
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<td>2.8%</td>
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<tr>
<td>This Year</td>
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<td>3%</td>
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<td>5%</td>
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<td>3%</td>
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<td>12%</td>
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<td>3.1%</td>
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<td>Next Year</td>
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<td>12%</td>
<td>-</td>
<td>3.2%</td>
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</table>

<table>
<thead>
<tr>
<th>Percentage of Marketing budget assigned to educating various customer segments about the benefits of Technology suppliers products and services</th>
<th>ICTST Supplier 1</th>
<th>ICTST Supplier 2</th>
<th>ICTST Supplier 3</th>
<th>ICTST Supplier 4</th>
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<th>ICTST Supplier13</th>
<th>Average</th>
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<tbody>
<tr>
<td>- 1% 60% 60% 20% - - 50% 75% 50% 33% - -</td>
<td>26.9%</td>
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Figure 164: Marketing and Customer Education Budgets
4.4 Consumer Needs and Demand Analysis

4.4.1 ICT products and services needs & demand analysis

“How do you assess the market need for the following services & products? 1=not needed, 5=highly needed”

“How do you assess the market demand for the following services & products? 1=not demanded, 5=highly demanded”

According to the ICT Services and Technology Suppliers assessment of the KSA market, the expected growth forecast is 20% as average growth for the all ICT services and products. Services and solutions segments have the highest rank in terms of needs and demand (rated above 4), compared to the equipment and software development and retail segments. Services and solutions segments are forecasted to grow by 23% on average, while equipment, software development and retail segments is forecasted to grow by 18%. The highest expected growth is given to Maintenance & asset management services’ and ‘Telecom core integration/solutions’. ICT Services and Technology Suppliers estimated that ‘Software development’ and ‘Technical audits’ would grow by 25% and 12% respectively. Except for ‘technical audit services’ all investigated ICT services were given high competition levels. Nevertheless, the services and solutions segments were given the lowest average competition level (3.4) compared to the equipment and software development and retail segments (4.26), while the overall competition level was rated at 3.85 over a scale of 5.
Figure 165: Current Need & Demand Levels for ICT Products & Services (ICT Services and Technology Suppliers Assessment)
4.4.2 Products & Services Growth/Decrease Expectations

“What percentage growth or decrease do you estimate for the following products and services?”

ICT Services and Technology Suppliers provided growth/decrease forecasts for several of their lines of business. Software development, maintenance & asset management services, telecom core integration/solutions, consultancy services and software integration/business solutions are forecasted to increase by more than 20% in 2011.

![Figure 166: ICT Products and Services Growth/Decrease (ICT Services and Technology Suppliers Assessment)](image)

4.5 Initiatives to Increase Adoption & Usage

4.5.1 ICT Products and Services Initiatives

“What initiatives does your company utilize to increase usage of ICT products and services across its various customer segments (B2B, B2C, B2G) (Open ended).”

Most of the interviewed ICT Services and Technology Suppliers have listed initiatives to increase ICT products and services utilization across their various customers segments (B2C, B2B & B2G). However, few presented relevant initiatives that will increase the ICT usage. The most relevant of such initiatives are e.g. cooperating with universities, training university graduates (20 to 25 students per year), regularly promoting consumer
products, funding R&D in universities, and creating partnerships for Technology Access. The Figure below details the list of initiatives and their target audience.

| Provide training for university graduates | Students |
| Teaching students one year courses | |
| Hire talented students | |
| Providing scholarship to students | |
| Providing Funds for ICT students | |
| Cooperation with universities to share vision | Universities |
| Fund for R&D for universities | |
| Sponsoring Industry forums | |
| Regular promotions on consumer products | |
| Engage at large projects in the country | |
| Initiative that brings affordable and relevant micro/small business owners that couldn’t otherwise afford to own | Industry |
| Run regular seminars and events | |
| Increase of employment of Saudi nationals thereby ensuring seamless delivery of projects | |
| Continuous dialogue with customers in the form of customer engagement programs | |
| Introduce relevant services in the market place. | |
| Provide free services to raise awareness of users | |
| Initiative that brings affordable and relevant technology to citizens that couldn’t otherwise afford to own | Consumer |

Figure 167: Initiatives to ICT products and services usage (Indicated by ICT Services and Technology Suppliers)

The ICT Services and Technology Suppliers mentioned ‘providing training for university graduates’ as the most popular initiative to increasing ICT usage of services and products. The students training capacity appears to be low, as ICT Services and Technology Suppliers placed an average of 9 vocational or university students in job training. However, the number of students placed in job training is expected to double in 2012 as per technology suppliers’ survey findings.

Figure 168: Average Number of Students targeted for training by ICT Services and Technology Suppliers
4.5.2 Financial Facilities To Customers

“Does the establishment provide any of the following financial facilities to their customers? 1=Not provided, 5-highly provided and part of establishment policy (Multiple Choice)”

Even though 69% of ICT Services and Technology Suppliers provide their customers with flexible payment options, they indicated low inclination towards offering their customers with cash facilities.

![Figure 169: Offer of Financial Facilities by ICT Services and Technology Suppliers](attachment:figure169.png)
4.5.3 Consumer Training Strategies

“Looking at the following training methods please tell me which of the following is used by your company? (by segment, i.e. B2C, B2B and B2G) (Multiple Choice)”

77% of interviewed ICT Services and Technology Suppliers own local training centers for their products and services and provide frequent training workshops on their products and services, while 62% provide online training. These statistics reflect ICT Services and Technology Suppliers trend towards using updated training means.

![Training Strategies Adopted by ICTST Suppliers](image)

**Figure 170: Training Strategies Adopted by ICT Services and Technology Suppliers**

4.6 Effectiveness of the IP protection laws in KSA

“In general what is the effectiveness level of Intellectual Property Protection laws in KSA for ICT products?”

In general, ICT Services and Technology Suppliers gave the following rating for effectiveness of ‘IP protection laws’ in KSA.
4.6.1 Rating Regulatory Performance

“How do you rate the effectiveness of the telecom regulations in the following areas? “

In general, ICT Services and Technology Suppliers considered telecom regulation moderately effective in promoting market competitiveness (average rate 3 over a scale of 5). Regulation effectiveness is higher in areas such as Mobile Market and low in areas such as fixed market. The ‘Fixed Market Competitiveness’, the ‘ICT Consumer Rights Protection’ and the ‘Wholesale Market Competitiveness’ were given the lowest average rate 2.2, 2.5 and 2.9 respectively.
4.6.2 Implementation Channel for Solutions

“Which of the following delivery methods apply to your company when providing services to Telecom Service Providers and other ICT Service Providers?” (Multiple Choice)

A majority of 85% of ICT Services and Technology Suppliers implement their solutions directly through their employees; while 69% of them outsource the implementation work to local companies. On the other hand, 46% of interviewed ICT Services and Technology Suppliers exclusively outsource their implementation to regional and international companies.

Figure 173: ICT Services and Technology Suppliers Services Delivery
4.7 Products/Services Life Cycle Forecast

“Please tell me where you believe each of the following products and services are on their Product Lifecycle”

ICT Services and Technology Suppliers were asked to position various ICT services and products along the typical product life cycle chart. The figure reflects the ICT Services and Technology Suppliers view on the development needs to further increase levels of ICT services adoption and usage.

Figure 174: ICT Services and Technology Suppliers Segmenting ICT Services along the Product Life Cycle
4.8 Adoption forecast for the short term

“Can you please describe the future products & services of the establishment?” (Open Ended)

ICT Services and Technology Suppliers provided a list of their future services that will be supplied in KSA and their perceived effects on the market.

![Figure 175: Forecast on Technologies Adoption (ICT Services and Technology Supplier Assessment)]

4.9 Research and Development Activities

“What is the assigned budget to the research and development in your establishment for KSA market?”

Most of the ICT Services and Technology Suppliers in KSA have international presence and seem to not have interest or plans to customize R&D investments within KSA market.
4.10 Growth Forecasts

“Based on your companies experiences please tell me approximately by what percentage (up/down) you believe the following market segments ICT spend will increase/decrease for the years 2009, 2010, and 2011.”

ICT Services and Technology Suppliers estimate a high growth of ICT expenditure (7% in average) in KSA over 2009-2011 period span. The highest growth is forecasted for Businesses (9%), Government (8%), and (6%) for households. The lowest growth was forecasted for Individuals (4%). On a parallel course, ICT services providers’ expenditure growth is estimated at 6.7%. These figures indicate a sustained development of the ICT market.
5. Service Provider Interviews - Current and Future Services

The following sections focus on the analysis of current and future (new) ICT services expected to emerge in the Kingdom of Saudi Arabia. The new services listed in both sections are forecasts based on interviews with Telecoms Service Providers and ICT Services and Technology Suppliers. The forecasts include different types of value adding products, services and solutions that individuals, households, private and public establishments may expect to see, adopt and use in the near future.

Since both national and international ICT Services and Technology Suppliers play an important role with supply/demand side factors (Telecommunication service providers and various consumer segments; individual, household, private and public establishments) the CITC ICT Market Research has included this section to summarize all relevant plans and developments for our interested readers.

5.1 Current ICT Services

This section aggregates the key findings of interviews and secondary research of the key telecommunication services currently offered by Service Providers across Saudi Arabia.

### Figure 176: Current ICT Services

19 The supply of turnkey systems, solutions, integration and consultation services to operators, public and private establishments and supply of end user devices (handsets, laptops, CPE, etc.)
5.2 Future ICT Services

The section lists and briefly analyzes the futures services expected to emerge, be adopted and used by various consumer segments across Saudi Arabia. The list and related information below represents the consolidated insights of all Service Providers operating in Saudi Arabia.

5.2.1 List of Future ICT Services

![List of Future ICT Services](image)

*Figure 177: Future ICT Services*
6. Further Reading

To further broaden your understanding of the ICT Market in Saudi Arabia CITC welcomes all readers to review the following report readily available on the CITC website:

- CITC Internet Usage Study
- CITC Quarterly Indicators
- CITC Universal Service Fund Study

Reports planned for publishing in 2011:

- CITC Analysis of New Trends and Development in the ICT Market
7. Thank You Letter

To: All participants in the ICT Market Study (Service Providers, Public and Private Establishment, Individuals/Households, ICT Services and Technology Suppliers)
Re: Your participation in the CITC Information and Communication Technologies (ICT) Market Study

Dear Participant,

Thank you for taking part in shaping the future of Saudi Arabia’s ICT Industry by sharing your experiences and feedback through the most comprehensive ICT market study conducted to date.

Your feedback and views on the various dimensions of the ICT market value chain will assist the Communications and Information Technology Commission, a Saudi Arabian government agency committed to ensuring a fair competition in a transparent regulatory environment to best serve the needs of all ICT consumers.

The information and insights from this study are already being used by CITC to adapt ongoing efforts to meet the needs of individuals, private and public establishments using ICT services and technologies across Saudi Arabia.

CITC welcomes all comments or suggestions helpful in improving the usefulness of this and future reports to be sent to market_survey@citc.gov.sa. For information and updates about the activities of CITC please register at www.citc.gov.sa.

Thank you for your interest, time and involvement.

Yours sincerely,

Communications and Information Technology Commission