

## ICT AND ECONOMIC GROWTH- AN INDIAN PERSPECTIVE

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### ABSTRACT

*ICT deals with finding out various mechanisms through which digital information passes between the devices. The most common example that can be cited is the Internet, a worldwide network of computers linked together by guided or unguided media. There are however, other examples, like mobile phones, interactive televisions and personal organizers. The European Commission has recognized that ICT has the potential to have a major impact on the prosperity. When ICT is applied to business, it can lower costs, raise productivity and improve customer and supplier relationship. Among public services, it engages people with services more effectively and in communities links people to economic opportunity and brings together those with common agenda. This paper discusses how ICT can boost economic growth.*

**Keywords:** Economic Growth, GDP, ICT, MOIT.

### INTRODUCTION

ICT stands for Information and Communications Technology. There is no universally accepted definition of ICT because the concepts, methodologies and applications involved are constantly evolving at a rapid pace so much so that it is difficult to keep up with these changes. ICT covers products that store, retrieve, and manipulate information electronically in a digital form which includes products like personal computers, digital television, mobile phones, PDAs and robots. More importantly, it is also concerned with the way these different uses work together. Therefore, ICT has revolutionized the way we live, think, and perform, and even help in realizing the vision of good governance.[1]

Generally ICT for business is categorized into two types [2]:

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1) **Traditional computer assisted technologies** that include, but are not restricted to Standard Office Applications like MSWord; Spreadsheets like MSExcel; Database software like Oracle, MS SQLServer, Access etc; Presentation software like MS PowerPoint; Desktop publishing products like Adobe In design, Quark Express, Microsoft Publisher; and Graphics software like Adobe PhotoShop and Illustrator, Macromedia Freehand and Fireworks.

2) **The more recent and rapidly growing ICTs**, which allow people and organizations to communicate and share information digitally include Specialist Applications viz. Accounting package like Sage, Oracle; Specialized CAD (Computer Aided Design) programs exist for many types of design like architectural, engineering, electronics etc ; CRM (Customer Relationship Management) software that allow businesses to better understand their customers, by collecting and analyzing data about their customers.

### **ICT- A Broader View**

ICT certainly covers all the products discussed briefly in the introductory section but will also consider the following important topics that deal with the way ICT is used and managed in an organization [2]:

- **The nature of information:** covers topics such as the meaning and value of information, the way information is controlled, limitations of ICT, legal considerations of ICT;
- **Management of information:** covers the way data is captured, verified and stored for future use, the manipulation, processing and distribution of information, securing it, designing ways to share it; and
- **Information systems strategy:** considers how ICT can be used within a business for achieving goals and objectives.

Thus, ICT is a vast and fast-changing subject.

### **Role of ICT in Economic Growth**

ICT is playing a vital role in shaping Indian economy towards better growth. According to Ministry of Statistics and Programme Implementation data[3], the IT industry's contribution to the Indian GDP has increased from approximately 3 per cent in 2000-2001 to more than 6 percent in 2007-08 and is estimated to grow further to 8 per cent, highlighting its increasing importance to the Indian economy. Contrast this share of ICT around 6 per cent of GDP with the combined share of all registered manufacturing in various industry segments ranging from food processing, beverages, textiles, leather, basic chemicals, petrochemicals, iron and steel, basic metals such as aluminum, copper, rubber and petroleum, machinery- both electrical and mechanical which is just around 19 per cent of GDP. Obviously the importance of this sector needs no further emphasis. Apart from the indirect contribution that IT makes to the Indian Economy through e-governance etc., the direct contribution of IT exports is becoming increasingly important (Table 1).

Table 1: Growth of exports in Electronics &amp; IT sector (Rs. Crores)

Item	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13*
Consumer Electronics	648	700	750	825	1150	2000	1500	1600	2600	3000	1400	1227	..
Industrial Electronics	500	950	1400	1515	1500	2300	3000	3885	4200	3500	4500	5600	..
Computer Hardware	1250	1800	550	1440	1200	1025	1500	990	1650	1900	1300	2100	..
Comm. & Broadcast Equipments	550	150	500	165	350	500	650	625	12280	7800	14800	18200	..
Electronics Components	1840	2200	2400	3755	3800	3800	5850	6100	10500	9700	18400	15500	..
<b>Sub-Total</b>	<b>4788</b>	<b>5800</b>	<b>5600</b>	<b>7700</b>	<b>8000</b>	<b>9625</b>	<b>12500</b>	<b>13200</b>	<b>31230</b>	<b>25900</b>	<b>40400</b>	<b>42627</b>	<b>45000</b>
Computer Software	28350	36500	46100	58240	80180	104100	141000	164400	216190	237000	268610	332769	410836
<b>Total</b>	<b>33138</b>	<b>42300</b>	<b>51700</b>	<b>65940</b>	<b>88180</b>	<b>113725</b>	<b>153500</b>	<b>177600</b>	<b>247420</b>	<b>262900</b>	<b>309010</b>	<b>375396</b>	<b>455836</b>

(Source: Ministry of Communication and Information Technology)[4]

The sectors that exhibit strong backward-linkages with other sectors of the economy are presumed to have a higher output multiplier. The ICT sector which reveals an output multiplier that is higher than the average, contrary to the popular perception that this sector may not have strong backward linkages can be an eye-opener for the Indian policy planners. The ICT sector, in context of the output multiplier, has a rank of 30 out of a total 115 sectors and the Software Sector corresponds to a rank of 80 out of 115 sectors [5]. The increase in ICT output does have a significant output multiplier effect and should thus be encouraged.

## CONCLUSION

It is important to look at the economic implications of the above observations. The significance and potential of any industry can be observed by looking at three important indicators, i.e. the output multiplier, the employment multiplier and the degree of forward linkage. For the ICT sector (software and hardware), output in 2004-05 was at Rs. 88,180 crores and Rs. 266,330 crores in 2009-10. Within this short gap of five years, the output of the software sector has increased by 178,150 crores [4]. The total number of IT and ITeS-BPO professionals employed in India has grown from 0.52 million in 2001-02 to 2.20 million in 2008-09[4]. Though the ICT industry in India is mainly export-oriented, domestic consumption does show a forward linkage that is not high as on date but is expected to increase in the coming years as the economy and the domestic sectors mature making greater use of ICT in business, governance and society.

## REFERENCES

1. Nair, Pradeep, "*E-governance: A step Towards Digital Democracy*", Computer Society of India. Available at [https://www.academia.edu/8070365/E-Governance\\_A\\_Step\\_Towards\\_Digital\\_Democracy](https://www.academia.edu/8070365/E-Governance_A_Step_Towards_Digital_Democracy)
2. Jim Riley, "*ICT-What is it?*" Available at [http://www.tutor2u.net/business/ict/intro\\_what\\_is\\_ict.htm](http://www.tutor2u.net/business/ict/intro_what_is_ict.htm)
3. Government of India(2011). Ministry of Statistics & Program Implementation. "*Value addition and employment generation in the ICT sector in India, 2011*". < <http://www.mospi.nic.in>>
4. Government of India(2010). Ministry of communication and Information Technology. "*Information Technology Annual Report 2009-10*". Department of Information Technology < <http://www.mit.gov.in>>
5. NASSCOM- Mckinsey. "*NASSCOM- Mckinsey Report 2005: Extending India's Leadership of the Global IT and BPO Industry*".