

Use of classification of ICT-enabled services: Experiences from a survey

DR. AMITAVA SAHA, INDIA
E-mail: sahamitava@gmail.com

Plan of the Presentation

1. Background

2. Classification of ICT-enabled services

3. Survey Format & Methodology

4. Observations

Background

- ▶ In 2015, UNCTAD developed a definition of ICT-enabled Services/potential ICT-enabled services along with a detailed classification for the same.
- ▶ Services trade India is compiled mainly from the International Transaction Reporting System (ITRS) implemented under the Foreign Exchange Management Act (FEMA) and few other surveys (annual) conducted by the Reserve Bank of India.
- ▶ RBI does not compile and publish disaggregate level services trade statistics - by partner country and mode of delivery.

Background

- ▶ Services exports has a significant contribution in Indian economy and there is a need to generate disaggregate level services trade data.
- ▶ *'Potential ICT-enabled'* services consists of about 70% of India's total exports of services.
- ▶ To meet the requirement of disaggregate level data on services trade, it was decided in 2017 to conduct a pan-India survey for compilation of services export statistics utilizing the UNCTAD classification of *'potential ICT-enabled'* services.
- ▶ According to the definition followed, services delivered through Mode 1 are essentially *'ICT-enabled'* services while those delivered through Mode1, Mode 2 & 4 are *'potential ICT-enabled'* services.

Background

- ▶ The classification as suggested by UNCTAD was modified to meet local requirements.
- ▶ Report of the first survey was published in June 2018.
- ▶ Thereafter, one more survey on the subject has been completed and report has also been published.

Plan of the Presentation

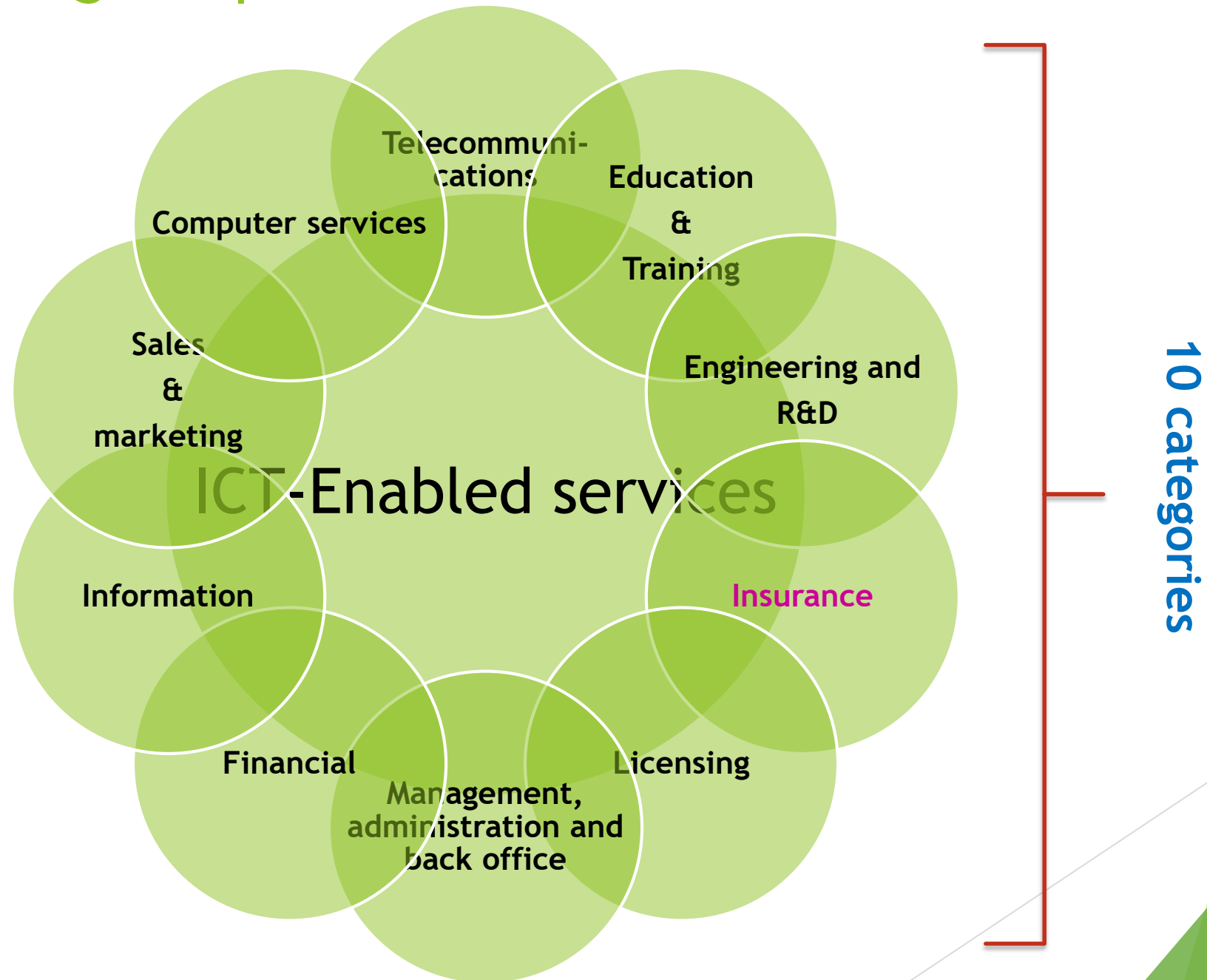
1. Background

2. Classification of ICT-enabled services

3. Survey Format & Methodology

4. Observations

Coverage of potential ICT-enabled services



Coverage of potential ICT-enabled services

- ▶ In view of the complexity involved in collection of information for insurance sector and also because of the fact that the usual concept of mode of supply does not appropriately apply to this sector, it has been decided to develop a separate questionnaire to collect information for insurance services.
- ▶ A separate small scale survey was done to collect information on insurance services.

Coverage of potential ICT-enabled services

Category of service	Services included (CPC Ver. 2.1)
Telecommunications	<ul style="list-style-type: none">(i) Telephony and other telecommunications services(ii) Internet telecommunications services(iii) Broadcasting services
Computer Services (including Computer Software) (11 services)	<ul style="list-style-type: none">(i) Licensing services for the right to use computer software(ii) Software downloads, software original(iii) On-line games, On-line software(iv) IT consulting and support services(v) Hosting and information technology (IT) infrastructure provisioning services(vi) IT infrastructure and network management services(vii) Maintenance and repair services of computers and peripheral equipment(viii) IT design and development services for applications(ix) Specially tailored computer training services provided to an individual or a group

Coverage of potential ICT-enabled services

Category of service	Services included (CPC Ver. 2.1)
Sales and marketing services, not including trade and leasing services	<ul style="list-style-type: none">(i) Advertising services and provision of advertising space or time(ii) Market research and public opinion polling services(iii) Advertising and related photography services(iv) Convention and trade show assistance and organisation services
Information Services (20 services)	<ul style="list-style-type: none">(i) Audiovisual and related services(ii) On-line audio & video content(iii) Radio and television broadcast originals, channel programmes(iv) Home programme distribution services, basic/discretionary programming package/ pay per view(v) On-line books , on-line gambling services(vi) Human health services(vii) News agency, Library and archive services(viii) Original compilations of facts/information(ix) On-line newspapers and originals, directories and mailing lists(x) Compilation services of facts and information (i.e. databases), other than mailing lists

Coverage of potential ICT-enabled services

Category of service	Services included (CPC Ver. 2.1)
Financial services (11 services)	<ul style="list-style-type: none">(i) Investment banking services(ii) Central Banking services(iii) Deposit services(iv) Credit-granting services(v) Financial leasing services(vi) Pension fund management services(vii) Services auxiliary to financial services other than to insurance and pensions etc.
Licensing services	<p>Licensing services for the right to use</p> <ul style="list-style-type: none">(i) trademarks and franchises,(ii) R&D products,(iii) entertainment, literary or artistic originals,(iv) mineral exploration and evaluation,(v) databases(vi) other intellectual property products

Coverage of potential ICT-enabled services

Category of service	Services included
Management, administration and back office services (16 services)	<ul style="list-style-type: none">(i) Legal services(ii) Accounting, auditing and bookkeeping services(iii) Tax consultancy and preparation services(iv) Management consulting and management services(v) Insolvency and receivership services(vi) Business consulting services(vii) Other management services, except construction project management services(viii) Employment services(ix) Investigation and security services(x) Travel arrangements, tour operator and related services(xi) Credit reporting services(xii) Collection agency services(xiii) Telephone-based support services(xiv) Combined office administrative services(xv) Specialized office support services(xvi) Other information and support services n.e.c.

Coverage of potential ICT-enabled services

Category of service	Services included (CPC Ver. 2.1)
Engineering, related technical services and R&D (20 services)	<ul style="list-style-type: none">(i) Research and experimental development services in<ul style="list-style-type: none">(a) natural sciences and engineering(b) social sciences and humanities(ii) Interdisciplinary research and experimental development services(iii) Industrial design services(iv) Research and development originals(v) Technical testing and analysis services(vi) Architectural services, urban and land planning and landscape architectural services(vii) Engineering services(viii) Surface surveying and map-making services(ix) Weather forecasting and meteorological services(x) Publishing, printing and reproduction services(xi) Translation and interpretation services(xii) Interior design services(xiii) Drafting services

Coverage of potential ICT-enabled services

Category of service	Services included (CPC Ver. 2.1)
Education and training services (9 services)	<ul style="list-style-type: none">(i) Pre-primary education services(ii) Primary education services(iii) Secondary education services(iv) Post-secondary non-tertiary education services(v) Tertiary education services(vi) Educational support services(vii) Cultural education services(viii) Sports and recreation education services(ix) Other education and training services, n.e.c.
Insurance services (5 services)	<ul style="list-style-type: none">(i) Reinsurance services(ii) Insurance brokerage and agency services(iii) Insurance claims adjustment services(iv) Actuarial services(v) Other services auxiliary to insurance and pensions

Plan of the Presentation

1. Background

2. Classification of ICT-enabled services

3. Survey Format & Methodology

4. Observations

Reference Period

- ▶ Information in the latest survey was collected for the financial year 2017-18, i.e., from April 2017 to March 2018.

Legal Framework

- ▶ The survey has been conducted under the legal framework of Collection of Statistics Act 2008 that makes statutorily obligatory on part of the respondents to furnish the information called for within the prescribed time.
- ▶ The Collection of Statistics Act, 2008 also guarantees the confidentiality of the information provided.

Sampling Scheme

- ▶ Simple Random Sampling without Replacement (SRSWOR) has been followed for selection of samples.

Survey questionnaire

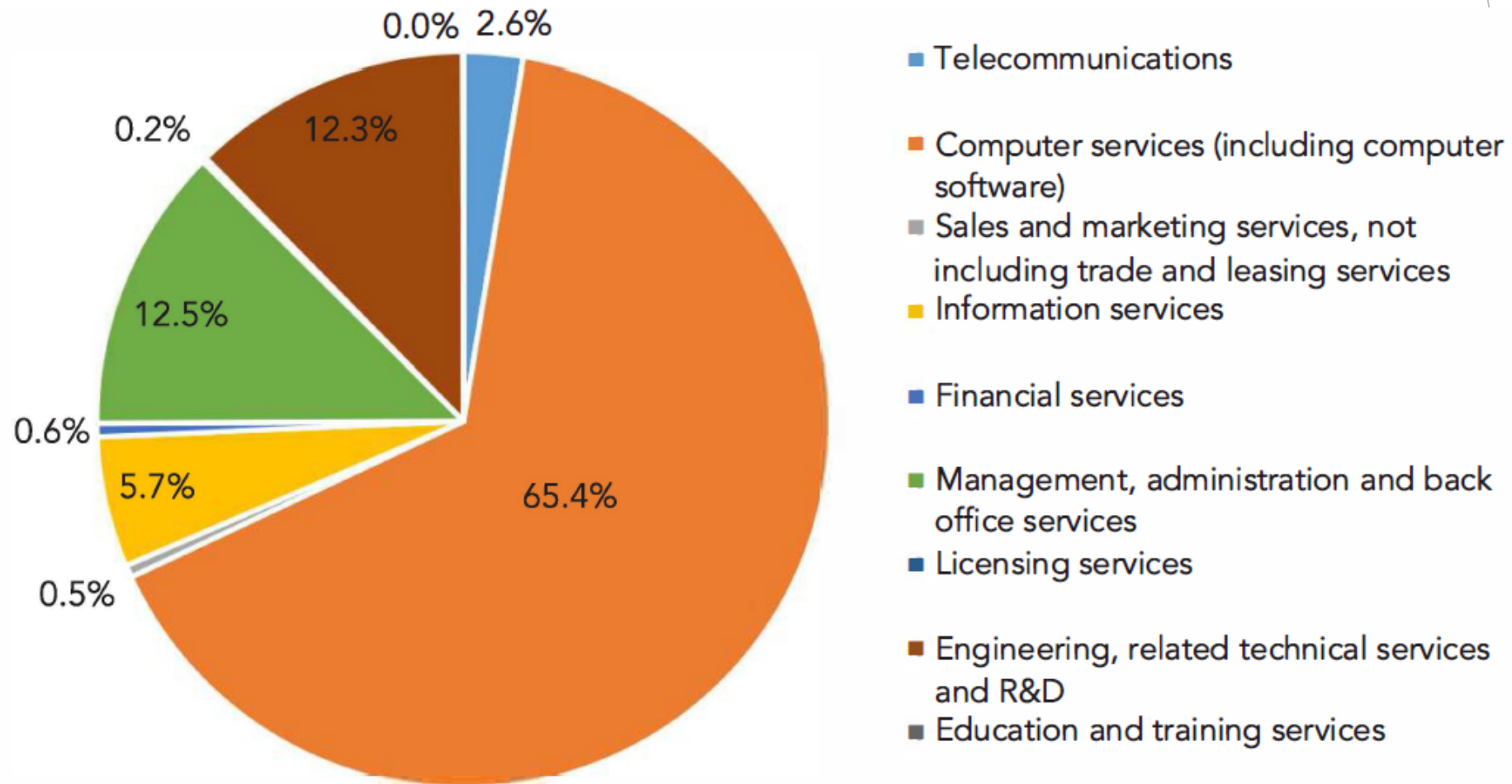
- ▶ The questionnaire, prepared by UNCTAD on the basis of model questionnaire (questionnaire 12) as suggested in the BPM6 compilers' guide, was modified to make provision for collection of information on :
 - ▶ Exports of services for a group of pre-defined trading partners that are important for India
 - ▶ Exports of services by Mode 2, Mode 3 and Mode 4 in addition to Mode 1
- ▶ The survey was conducted online.
- ▶ An excel format of the questionnaire was designed and the selected enterprises were requested to fill the format and submit the same through e-mail.

Exports of potential ICT-enabled services in 2017-18 vis-à-vis 2016-17 (excluding Mode 3)

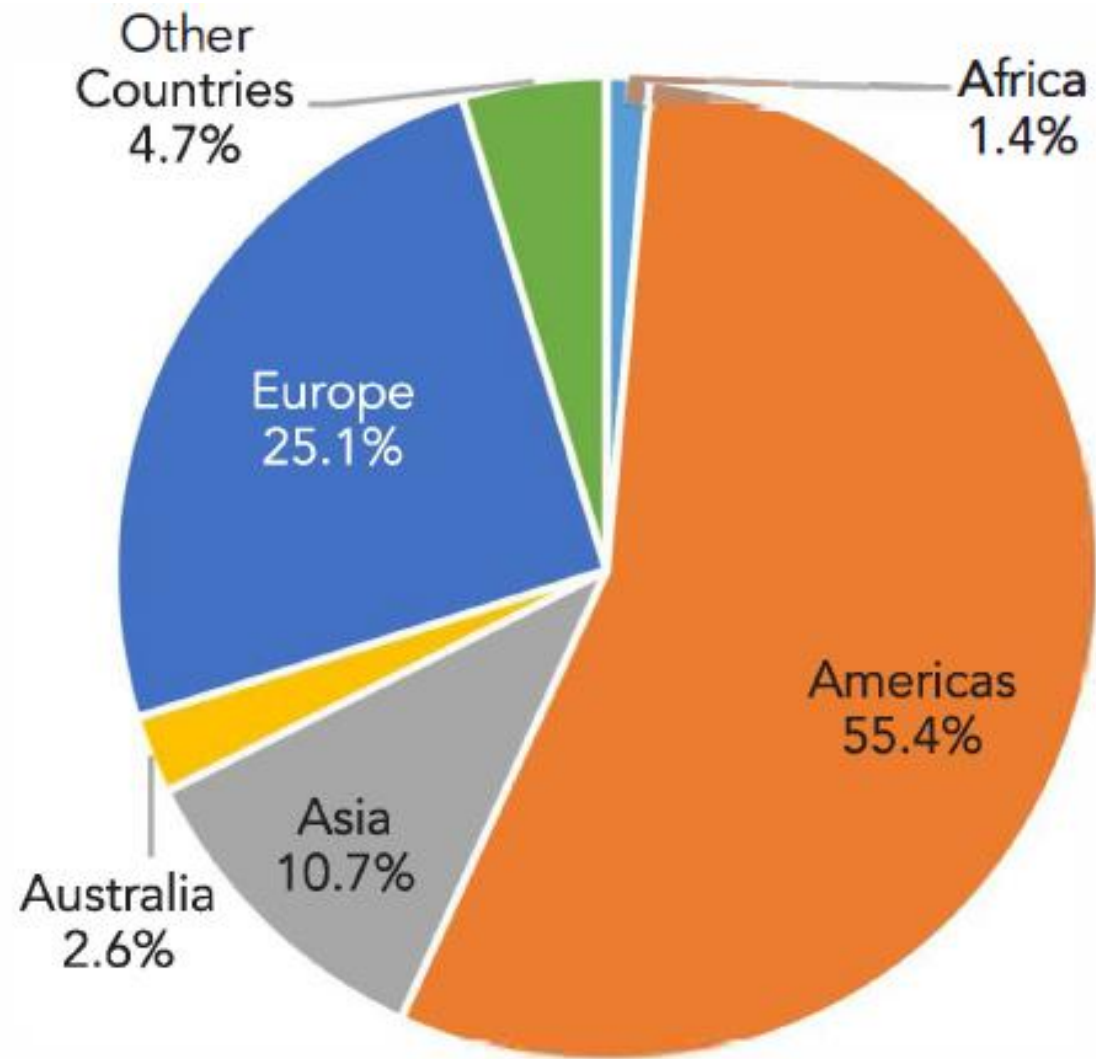
Category of Service	Value of exports (in million USD) in		Growth(%)
	2016-17	2017-18	
Telecommunications	2,783	3,116	12.0
Computer services (including computer software)	65,117	78,146	20.0
Sales and Marketing Services (not including trade and leasing services)	670	641	-4.3
Information Services	6,564	6,863	4.6
Management, Administration and Back Office Services	13,941	14,977	7.4
Licensing Services	344	248	-27.9
Engineering, related Technical Services and R&D	11,737	14,704	25.3
Others (including Financial, Education and Training Services)*	1,908	759	-60.22*
Total	103,063	119,454	15.9

*: Due different sampling frame coverage for Financial, Education and Training Services in 2017-18 w.r.t. that of 2016-17, the figures of 2017-18 and 2016-17 are strictly not comparable.

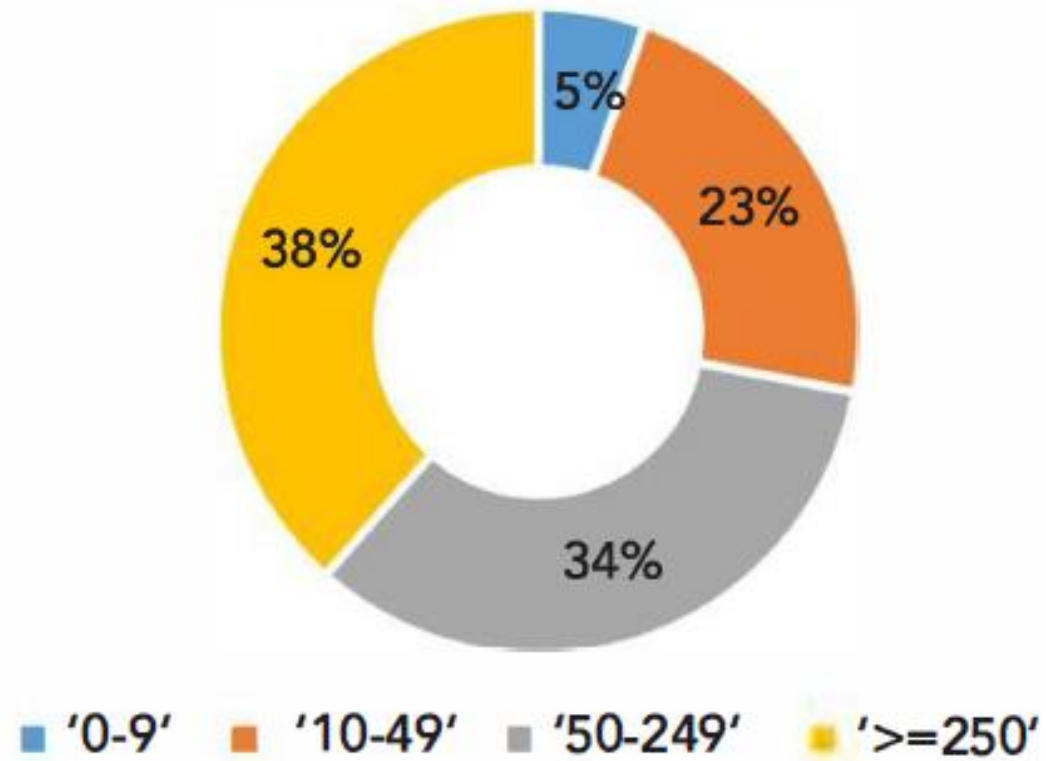
Exports of potential ICT-enabled services in 2017-18



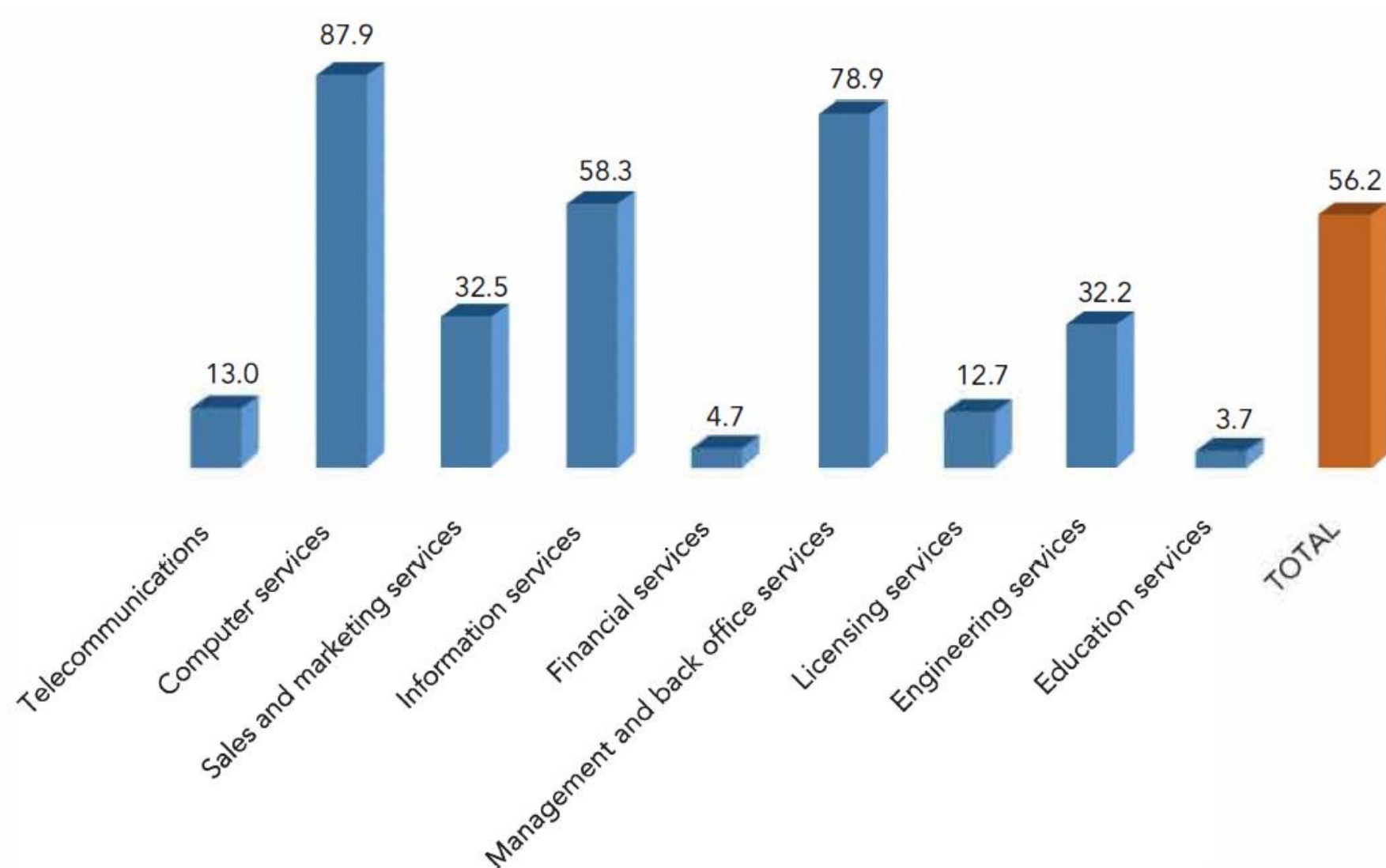
Exports of potential ICT-enabled services in 2017-18 by destination



Distribution of potential ICT-enabled services exporting enterprises by employment size (2017-18)



Export Intensity by Category of Services (2017-18)



Exports of potential ICT-enabled services in 2017-18 by mode of delivery

Sl. No.	Category of Service	Value of Services (in USD million) delivered through				
		Mode 1	Mode 2	Mode 3	Mode 4	Total
1.	Telecommunication	2,974.5	0.9	220.8	140.2	3,336.5
2.	Computer Services (including computer software)	60,698.8	14.5	18,218.3	17,433.0	96,364.7
3.	Sales and marketing services	573.2	66.0	5.7	1.9	646.8
4.	Information services	5,399.7	6.7	1,862.8	1,456.3	8,725.6
5.	Financial services	670.0	35.4	27.6	4.7	737.7
6.	Management, administration and back office services	14,679.8	6.2	700.0	290.8	15,676.9
7.	Licensing services	248.0	0.0	19.2	0.0	267.2
8.	Engineering, related technical services and R&D	11,435.5	9.0	1,994.0	3,259.8	16,698.3
9.	Education services	47.2	1.5	8.6	0.0	57.2
	Total	96,726.8	140.3	23,057.0	22,586.7	1,42,510.9

Exports of potential ICT-enabled services in 2017-18 by mode of delivery

Sl. No.	Category of Service	Value of Services (in USD million) delivered through				
		Mode 1	Mode 2	Mode 3	Mode 4	Total
1.	Telecommunication	2,974.5	0.9	220.8	140.2	3,336.5
2.	Computer Services (including computer software)	60,698.8	14.5	18,218.3	17,433.0	96,364.7
3.	Sales and marketing services	573.2	66.0	5.7	1.9	646.8
4.	Information services	5,399.7	6.7	1,862.8	1,456.3	8,725.6
5.	Financial services	670.0	35.4	27.6	4.7	737.7
6.	Management, administration and back office services	14,679.8	6.2	700.0	290.8	15,676.9
7.	Licensing services	248.0	0.0	19.2	0.0	267.2
8.	Engineering, related technical services and R&D	11,435.5	9.0	1,994.0	3,259.8	16,698.3
9.	Education services	47.2	1.5	8.6	0.0	57.2
	Total	96,726.8	140.3	23,057.0	22,586.7	1,42,510.9

Plan of the Presentation

1. Background

2. Classification of ICT-enabled services

3. Survey Format & Methodology

4. Observations

Observations

- ▶ Enterprise-based approach has been adopted and information has been collected from the corporate headquarters of the establishments.
- ▶ Information in this survey has been collected through self-compilation only.
- ▶ The excel format of the questionnaire designed has been found to be simple and easy to use by the respondents.
- ▶ Majority of the units preferred electronic mode for submission of data.
- ▶ This has resulted to a large extent in speedy processing and compilation of collected information.
- ▶ In the absence of a Business Register (BR), although best effort has been made to prepare an exhaustive sampling frame (complete list of units) of enterprises for selection of samples, it has not been possible to ensure completeness of coverage for all categories of services.

Observations

- ▶ This may induce some non-sampling error in estimation.
- ▶ Non-availability of auxiliary information for the enterprises restrained us from adopting any sophisticated sampling procedure (other than SRSWOR) for enhancement of precision of the estimates.

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the image, creating a modern, layered effect. The rest of the background is a solid, very light gray.

Thank You