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Detailed Table 9.1
Breakdown of ICT industry net operating revenue by major segment – Brazil except São Paulo State, 2005

Major segment	% NOR
Hardware	7.6
Telecom equipment	24.0
Telecom services	53.5
Software & IT services	14.9

Source: IBGE, PAS 2005; PIA 2005.

Detailed Table 9.2
Breakdown of ICT industry net operating revenue by major segment – São Paulo State, 2005

Major segment	% NOR
Hardware	12.0
Telecom equipment	22.0
Telecom services	44.4
Software & IT services	21.6

Source: IBGE, PAS 2005; PIA 2005.

Detailed Table 9.3
ICT exports by segment – São Paulo State, 2000-2006

Segment	ICT exports (in US\$ FOB)						
	2000	2001	2002	2003	2004	2005	2006
Total	2,073,799,385	1,976,121,733	1,468,252,416	1,232,862,037	1,332,915,930	1,977,990,669	2,915,659,270
Telephone equipment	1,107,566,744	1,176,795,952	846,146,607	642,708,112	630,810,407	1,192,314,890	1,999,983,192
Office equipment	12,450,317	5,208,620	5,209,228	4,154,117	7,301,930	29,585,469	31,399,699
Data processing equipment	265,732,566	145,571,212	55,523,310	51,118,380	113,829,440	165,354,044	175,936,263
Wires, cables	69,222,277	68,874,642	56,094,911	104,243,906	131,480,864	177,607,539	262,687,344
Instruments for measuring, testing and control	134,661,307	146,497,527	136,754,622	122,109,140	,51,611,763	180,419,469	210,207,555
Machinery & equipment for industrial automation	7,395,417	12,616,736	10,121,604	7,818,599	7,953,287	9,617,256	18,301,792
Basic electronics material	140,688,369	123,740,054	135,977,432	115,311,378	120,943,664	100,264,524	99,855,702
Other telecom equipment	336,082,388	296,816,990	222,424,702	185,398,405	168,984,575	122,827,478	117,287,723

Source: MDIC, Secex.

Detailed Table 9.4
ICT imports by segment – São Paulo State, 2000-2006

Segments	ICT imports (in US\$ CIF)						
	2000	2001	2002	2003	2004	2005	2006
Total	5,786,949,341	5,172,961,906	3,211,701,507	3,350,455,201	4,836,472,543	6,089,721,329	8,052,173,202
Telephone equipment	1,376,365,371	1,280,512,121	442,529,817	486,470,921	895,248,466	1,359,330,723	1,871,339,031
Office equipment	28,800,793	24,773,781	28,851,476	29,700,536	24,506,630	40,849,858	55,410,303
Data processing equipment	1,205,683,453	1,047,200,029	704,145,748	696,904,055	721,920,246	814,516,304	1,112,949,393
Wires, cables	181,052,114	253,666,304	69,402,154	75,103,275	117,039,436	125,913,371	166,199,692
Instruments for measuring, testing and control	694,958,669	792,472,924	599,387,406	589,639,794	806,258,651	876,261,789	1,014,846,506
Machinery & equipment for industrial automation	56,344,172	73,724,856	70,575,493	103,226,534	144,219,863	125,084,395	136,005,564
Basic electronics material	1,642,252,952	1,296,602,631	967,386,273	971,687,054	1,398,212,718	1,656,329,763	2,055,623,575
Other telecom equipment	601,491,817	404,009,260	329,423,140	397,723,032	729,066,533	1,091,435,126	1,639,799,138

Source: MDIC, Secex.

Detailed Table 9.5
ICT exports and imports as indices – São Paulo State, 2000-2006

Index	ICT exports & imports as indices (basis: 2000 = 100)						
	2000	2001	2002	2003	2004	2005	2006
Exports	100.0	95.3	70.8	59.4	64.3	95.4	140.6
Imports	100.0	89.4	55.5	57.9	83.6	105.2	139.1

Source: MDIC, Secex.

Detailed Table 9.6
Exchange rate – Brazil, 2003-2006

Year	Exchange rate (R\$/US\$)
2003	2.89
2004	2.65
2005	2.34
2006	2.14

Source: Central Bank of Brazil..

Note: End-of-period exchange rate calculated by Central Bank (PTAX).

Detailed Table 9.7
Participation of São Paulo State in Brazil's ICT trade deficit, exports and imports – 2000-2006

Item	Participation of São Paulo State in Brazil's ICT trade deficit (%)						
	2000	2001	2002	2003	2004	2005	2006
Exports	73.2	66.5	53.7	47.1	49.0	43.7	58.2
Imports	57.8	53.6	47.8	47.1	48.5	49.1	52.3
Trade balance	51.7	47.9	43.8	47.2	48.2	52.2	49.4

Source: MDIC, Secex.

Detailed Table 9.8
ICT industry trade balance by segment – São Paulo State, 2000-2006

Segment	ICT trade balance (in US\$)						
	2000	2001	2002	2003	2004	2005	2006
Total	-3,713,149,956	-3,196,840,173	-1,743,449,091	-2,117,593,164	-3,503,556,613	-4,111,730,660	-5,136,513,932
Telephone equipment	-268,798,627	-103,716,169	403,616,790	156,237,191	-264,438,059	-167,015,833	128,644,161
Office equipment	-16,350,476	-19,565,161	-23,642,248	-25,546,419	-17,204,700	-11,264,389	-24,010,604
Data processing equipment	-939,950,887	-901,628,817	-648,622,438	-645,785,675	-608,090,806	-649,162,260	-937,013,130
Wires, cables	-111,829,837	-184,791,662	-13,307,243	29,140,631	14,441,428	51,694,168	96,487,652
Instruments for measuring, testing and control	-560,297,362	-645,975,397	-462,632,784	-467,530,654	-654,646,888	-695,842,320	-804,638,951
Machinery & equipment for industrial automation	-48,948,755	-61,108,120	-60,453,889	-95,407,935	-136,266,576	-115,467,139	-117,703,772
Basic electronics material	-1,501,564,583	-1,172,862,577	-831,408,841	-856,375,676	-1,277,269,054	-1,556,065,239	-1,955,767,873
Other telecom equipment	-265,409,429	-107,192,270	-106,998,438	-212,324,627	-560,081,958	-968,607,648	-1,522,511,415

Source: MDIC, Secex.

Detailed Table 9.9
ICT exports by destination – São Paulo State, 2006

Destination	ICT exports (%)
Total	100.0
Mercosur	49.0
ALADI (except Mercosur & Mexico)	15.4
NAFTA	21.3
European Union (27)	3.7
Asia (excluding Middle East)	3.3
Rest of world	7.3

Source: MDIC, Secex.

Detailed Table 9.10
ICT imports by origin – São Paulo State, 2006

Origin	ICT imports (%)
Total	100.0
Mercosur	0.5
ALADI (except Mercosur & Mexico)	11.5
NAFTA	8.8
European Union (27)	11.2
Asia (excluding Middle East)	66.1
Rest of world	1.8

Source: MDIC, Secex.

Detailed Table 9.11

Employees in software and related services industry (primary dimension) in proportion to total for Brazilian software and related services industry (BRSS) and selected occupations by selected occupational family – Brazil, 2005

Selected occupational families	Employees in software & related services industry		
	Total (Abs. nos.)	% total BRSS	% selected occupations
Total software industry	219,321	100.0	
Total occupational families	90,640	41.3	100.0
Software industry workers (SW1)			
1236 - Directors of IT services	160	0.1	0.2
1425 - IT managers	1,730	0.8	1.9
2122 - Computer engineers	622	0.3	0.7
2124 - Computer systems analysts	37,435	17.1	41.3
3171 - Systems & applications development technicians	11,616	5.3	12.8
Software & related services workers (SW2)			
2123 - Network, systems & database administrators	2,073	0.9	2.3
3172 - Computer operating & monitoring technicians	12,285	5.6	13.6
3722 - Network operators, related equipment operators	357	0.2	0.4
4121 - Data entry & transmission equipment operators	10,134	4.6	11.2
Workers indirectly linked to the software industry (SW3)			
3133 - Telecom technicians	4,051	1.8	4.5
4223 - Telemarketing operators	10,177	4.6	11.2

Source: MTE, RAIS (2005).

Detailed Table 9.12
Employees in occupations linked to software activities throughout São Paulo's economy except software industry (secondary dimension) by selected occupational family – Brazil, 2005

Selected occupational families	Employees in occupations linked to software activities	
	Total (Abs. nos.)	%
Total	554,931	100.0
Software industry workers (SW1)		
1236 - Directors of IT services	1,141	0.2
1425 - IT managers	10,118	1.8
2122 - Computer engineers	1,103	0.2
2124 - Computer systems analysts	81,867	14.8
3171 - Systems & applications development technicians	64,917	11.7
Software & related services workers (SW2)		
2123 - Network, systems & database administrators	6,017	1.1
3172 - Computer operating & monitoring technicians	44,621	8.0
3722 - Network operators, related equipment operators	5,417	1.0
4121 - Data entry & transmission equipment operators	72,329	13.0
Workers indirectly linked to the software industry (SW3)		
3133 - Telecom technicians	35,777	6.4
4223 - Telemarketing operators	231,624	41.7

Source: MTE, RAIS (2005).

Detailed Table 9.13
Inhabitants aged 10 or more who used internet in three-month reference period by per capita household income and place of access – São Paulo State, 2005

Per capita household monthly income	Inhabitants aged 10 or more who used internet in three-month reference period by place of access (%)						
	Total	Home	Work	School	Free public telecenter	Paid public telecenter	Other
No income to 1 minimum wage	100.0	14.1	10.3	24.1	11.4	18.2	21.9
1-2 minimum wages	100.0	29.3	19.7	13.4	6.1	13.9	17.6
2-3 minimum wages	100.0	36.2	21.1	11.7	5.0	10.8	15.3
3-5 minimum wages	100.0	38.6	25.1	11.1	3.6	7.7	13.9
More than 5 minimum wages	100.0	40.6	28.9	9.6	3.1	5.5	12.3

Source: IBGE, PNAD 2005.

Detailed Table 9.14
Inhabitants aged 10 or more who used internet in three-month reference period by reason for use – São Paulo State, 2005

Reason for use	Inhabitants aged 10 or more who used internet in three-month reference period (%)
Education, learning	21.3
Communicating with others	21.8
Leisure	16.2
Reading newspapers & magazines	13.4
Searching for information, services	7.7
Interacting with government/public authorities	8.3
Shopping	4.4
Banking	6.9

Source: IBGE, PNAD 2005.

Detailed Table 9.15
Inhabitants aged 10 or more who used internet in three-month reference period by frequency of use – São Paulo State, 2005

Frequency of use	Inhabitants aged 10 or more who used internet in three-month reference period (%)
At least once a day	40.9
At least once a week but not every day	46.6
At least once a month but not every week	10.2
At least once a month	2.4

Source: IBGE, PNAD 2005.

Detailed Table 9.16
Inhabitants aged 10 or more who used internet at home in three-month reference period by type of connection – São Paulo State, 2005

Type of connection	Inhabitants aged 10 or more who used internet at home in three-month reference period (%)
Dial-up & broadband	8.6
Broadband only	38.6
Dial-up only	52.8

Source: IBGE, PNAD 2005.

Detailed Table 9.17
Inhabitants aged 10 or more who used internet at home in three-month reference period by monthly income and type of connection – São Paulo State, 2005

Type of connection	Inhabitants aged 10 or more who used internet at home in three-month reference period by monthly income (%)				
	No income to 1 minimum wage	1-2 minimum wages	2-3 minimum wages	3-5 minimum wages	More than 5 minimum wages
Total	100.0	100.0	100.0	100.0	100.0
Dial-up & broadband	78.5	71.7	59.8	47.7	31.9
Broadband only	18.0	22.4	32.0	40.7	58.5
Dial-up only	3.5	5.9	8.2	11.7	9.5

Source: IBGE, PNAD 2005.

Detailed Table 9.18
Innovation process in ICT industry: number of firms, innovation rates and investment in innovation by activity and workforce – Brazil & São Paulo State, 2003-2005

Activities & workforce	Innovation process in ICT industry			
	Firms (Abs. nos.)	Innovation rate (%)	% net sales invested in innovation	
			Total	In-house R&D
ICT firms – Brazil	5,598	57.7	4.2	1.0
ICT firms – São Paulo	(1)2,451	56.0	6.0	1.6
Manufacturing of office machinery & IT equipment	120	74.5	3.0	1.6
10-29	57	94.0	34.8	2.8
30-49	29	24.4	1.2	0.7
50-99	20	94.5	7.1	5.5
100-249	10	73.3	3.6	1.4
250-499	3	38.3	0.0	0.0
500 +	2	100.0	-	-
Manufacturing of communications equipment	182	56.4	9.4	1.6
10-29	95	52.0	93.4	0.4
30-49	17	73.5	7.0	2.2
50-99	33	39.7	2.0	-
100-249	21	63.5	7.1	4.1
250-499	11	82.2	7.1	4.9
500 +	6	100.0	3.5	0.9
Telecommunications	73	45.2	5.4	1.2
10-29	29	17.8	0.1	0.1
30-49	13	36.2	1.7	-
50-99	5	70.6	0.6	0.0
100-249	14	78.6	7.6	0.6
250-499	2	50.0	-	-
500 +	11	72.7	5.4	1.2
IT activities & related services (1)	1,529	54.6	6.1	2.4
10-29	1,048	52.5	12.2	5.7
30-49	242	60.7	4.8	2.0
50-99	139	55.1	21.5	9.7
100-249	54	53.9	4.5	1.3
250-499	24	55.6	0.6	0.2
500 +	24	81.2	3.8	1.1
Software consulting	473	85.9	5.9	3.0
10-29	251	93.1	16.7	7.2
30-49	107	80.2	8.2	3.6

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Detailed Table 9.18
Innovation process in ICT industry: number of firms, innovation rates and investment in innovation by activity and workforce – Brazil & São Paulo State, 2003-2005

Activities & workforce	Innovation process in ICT industry			
	Firms (Abs. nos.)	Innovation rate (%)	% net sales invested in innovation	
			Total	In-house R&D
50-99	60	88.1	18.2	14.1
100-249	27	52.2	2.9	0.8
250-499	13	55.6	0.7	0.2
500 +	15	83.3	3.5	1.4
Other IT activities & related services	1,056	40.6	6.5	1.2
10-29	797	39.8	6.2	3.7
30-49	134	45.1	1.8	0.5
50-99	79	29.9	27.2	2.1
100-249	27	55.6	7.3	2.2
250-499	11	55.6	0.5	0.1
500 +	9	77.8	4.2	0.6
Manufacturing of insulated wires, cables & electrical conductors (2)	160	37.2	2.0	0.5
Manufacturing of basic electronics material (2)	168	63.8	10.2	3.9
Manufacturing of apparatus and instruments for measuring, testing and control (2)	138	53.9	2.7	1.2
Manufacturing of machinery, apparatus and equipment for electronic systems dedicated to industrial automation and process control (2)	81	87.4	10.8	7.1

Source: IBGE, PINTEC 2005.

Note: The data refer to firms that introduced technological new or substantially improved products and/or processes, and firms with projects that had been abandoned or were incomplete at end-2005.

(1) Because software consulting and other IT activities & related services are subsegments of IT activities & related services, firms in these subsegments are already included under the heading of IT activities & related services.

(2) IBGE does not identify the origin of respondent firms in cases where the proportion between the number of domestic and foreign firms exceeds the limit established and thus does not publish a breakdown of firms by origin of capital for this segment.

Detailed Table 9.19
Investment by innovating ICT firms in innovation by activity and origin of capital – Brazil & São Paulo State, 2003-2005

Activities & origin of capital	Investment by innovating ICT firms in innovation (%)			
	Total		In-house R&D	
	% innovating firms	% net operating revenue	% innovating firms	% net operating revenue
ICT firms – Brazil	57.7	4.2	26.5	1.0
ICT firms – São Paulo	56.0	6.0	29.3	1.6
Manufacturing of office machinery & IT equipment	58.1	4.2	18.9	2.3
Domestic	56.3	3.7	15.6	0.8
Foreign	84.8	4.3	69.6	2.9
Manufacturing of communications equipment	45.6	9.4	32.6	1.6
Domestic	47.9	56.9	33.5	1.8
Foreign	35.4	4.1	28.9	1.6
Telecommunications	34.3	5.4	20.1	1.2
Domestic	23.4	1.5	18.0	0.4
Foreign	65.0	6.2	26.0	1.3
IT activities & related services (1)	47.1	6.1	30.1	2.4
Domestic	46.2	7.5	30.3	4.3
Foreign	57.3	5.0	28.0	1.0
Software consulting	79.0	5.9	54.3	3.0
Domestic	79.6	9.9	56.5	5.7
Foreign	74.9	3.1	37.6	1.2
Other IT activities & related services	32.8	6.5	19.3	1.2
Domestic	32.1	3.6	19.2	2.0
Foreign	43.5	8.8	20.5	0.6
Manufacturing of insulated wires, cables & electrical conductors (2)	35.2	2.0	27.3	0.5
Manufacturing of basic electronics material (2)	54.0	10.2	28.3	3.9
Manufacturing of apparatus and instruments for measuring, testing and control (2)	40.5	2.7	29.1	1.2
Manufacturing of machinery, apparatus and equipment for electronic systems dedicated to industrial automation and process control (2)	77.3	10.8	34.9	7.1

Source: IBGE, PINTEC 2005.

Note: The data refer to firms that introduced technological new or substantially improved products and/or processes, and firms with projects that had been abandoned or were incomplete at end-2005.

(1) Because software consulting and other IT activities & related services are subsegments of IT activities & related services, firms in these subsegments are already included under the heading of IT activities & related services.

(2) IBGE does not identify the origin of respondent firms in cases where the proportion between the number of domestic and foreign firms exceeds the limit established and thus does not publish a breakdown of firms by origin of capital for this segment.

Detailed Table 9.20
Investment by innovating ICT firms in continuing or sporadic in-house R&D by activity and origin of capital –
Brazil & São Paulo State, 2003-2005

Activities & origin of capital	Investment by innovating ICT firms in in-house R&D					
	Total		Continuing or sporadic?			
			Continuing		Sporadic	
	Firms (Abs. nos.)	Amount (R\$ 000)	Firms (Abs. nos.)	Amount (R\$ 000)	Firms (Abs. nos.)	Amount (R\$ 000)
ICT firms – Brazil	1,481	1,763,043	1,109	1,649,378	372	113,665
ICT firms – São Paulo	(1) 717	1,117,292	466	624,004	237	61,941
Manufacturing of office equipment	23	65,400	21	-	2	-
Domestic	17	6,451	15	-	2	-
Foreign	5	58,949	5	58,949		
Manufacturing of communications equipment	60	231,101	50	230,569	10	532
Domestic	50	25,327	40	24,795	10	532
Foreign	10	205,774	10	205,774		
Telecommunications	15	365,947	11	364,301	4	1,646
Domestic	10	21,507	6	19,861	4	1,646
Foreign	5	344,440	5	344,440		
IT activities & related services (1)	461	350,728	307	309,065	154	41,664
Domestic	426	265,676	275	227,154	151	38,523
Foreign	35	85,052	32	81,911	3	3,141
Software consulting	257	289,019	203	267,836	53	21,183
Domestic	236	220,554	185	202,512	51	18,042
Foreign	21	68,465	18	65,324	3	3,141
Other IT activities & related services	204	61,709	104	41,229	100	20,480
Domestic	190	45,122	89	24,642	100	20,480
Foreign	14	16,587	14	16,587		
Manufacturing of insulated wires, cables & electrical conductors (2)	44	22,663	13	20,948	31	1,715
Manufacturing of basic electronics material (2)	47	23,106	30	18,051	17	5,055
Manufacturing of apparatus and instruments for measuring, testing and control (2)	40	27,325	35	25,556	6	1,769
Manufacturing of machinery, apparatus and equipment for electronic systems dedicated to industrial automation and process control (2)	28	31,021	11	19,814	17	11,207

Source: IBGE, PINTEC 2005.

Note: The data refer to firms that introduced technological new or substantially improved products and/or processes, and firms with projects that had been abandoned or were incomplete at end-2005.

(1) Because software consulting and other IT activities & related services are subsegments of IT activities & related services, firms in these subsegments are already included under the heading of IT activities & related services.

(2) IBGE does not identify the origin of respondent firms in cases where the proportion between the number of domestic and foreign firms exceeds the limit established and thus does not publish a breakdown of firms by origin of capital for this segment.

Detailed Table 9.21
Sources of funding for R&D and other innovation-related activities by activity and origin of capital – São Paulo State, 2003-2005

Activities & origin of capital	Sources of funding for innovation-related activities (%)							
	R&D				Other innovation activities			
	Internal funding	Third-party funding			Internal funding	Third-party funding		
Total		Private	Public	Total		Private	Public	
Manufacturing of office machinery & IT equipment	99.8	0.2	0.0	0.2	99.9	0.1	0.0	0.1
Domestic	98.5	1.5	0.0	1.5	99.8	0.2	0.0	0.2
Foreign	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Manufacturing of communications equipment	99.4	0.6	0.0	0.6	99.9	0.1	0.0	0.1
Domestic	92.9	7.1	0.4	6.7	99.9	0.1	0.0	0.1
Foreign	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Telecommunications	100.0	0.0	0.0	0.0	60.9	39.1	39.1	0.0
Domestic	100.0	0.0	0.0	0.0	97.9	2.1	2.1	0.0
Foreign	100.0	0.0	0.0	0.0	59.3	40.7	40.7	0.0
IT activities & related services (1)	94.6	5.4	4.6	0.8	96.0	4.0	3.4	0.6
Domestic	94.7	5.3	5.3	0.0	93.5	6.5	5.0	1.6
Foreign	94.4	5.6	2.4	3.2	97.5	2.5	2.5	0.0
Software consulting	97.4	2.6	1.6	1.0	94.9	5.1	4.2	0.9
Domestic	98.1	1.9	1.9	0.0	96.4	3.6	2.1	1.4
Foreign	95.2	4.8	0.5	4.3	92.6	7.4	7.4	0.0
Other IT activities & related services	83.3	16.7	16.7	0.0	97.1	2.9	2.7	0.3
Domestic	79.2	20.8	20.8	0.0	79.9	20.1	18.0	2.1
Foreign	92.0	8.0	8.0	0.0	99.7	0.3	0.3	0.0
Manufacturing of insulated wires, cables & electrical conductors (2)	99.2	0.8	0.0	0.8	95.2	4.8	2.5	2.3
Manufacturing of basic electronics material (2)	94.8	5.2	5.2	0.0	92.8	7.2	3.2	4.0
Manufacturing of apparatus and instruments for measuring, testing and control (2)	100.0	0.0	0.0	0.0	97.3	2.7	2.0	0.7
Manufacturing of machinery, apparatus and equipment for electronic systems dedicated to industrial automation and process control (2)	99.5	0.5	0.0	0.5	100.0	0.0	0.0	0.0

Source: IBGE, PINTEC 2005.

Note: The data refer to firms that introduced technological new or substantially improved products and/or processes, and firms with projects that had been abandoned or were incomplete at end-2005.

(1) Because software consulting and other IT activities & related services are subsegments of IT activities & related services, firms in these subsegments are already included under the heading of IT activities & related services.

(2) IBGE does not identify the origin of respondent firms in cases where the proportion between the number of domestic and foreign firms exceeds the limit established and thus does not publish a breakdown of firms by origin of capital for this segment.

Detailed Table 9.22
Share of technologically new or substantially improved products in domestic sales according to innovative firms by activity and origin of capital – Brazil & São Paulo State, 2003-2005

Activities & origin of capital	Share of technologically new or substantially improved products in domestic sales according to innovative firms (%)			
	Total	Less than 10% of domestic sales	10%-40% of domestic sales	More than 40% of domestic sales
ICT firms – Brazil	100.0	20.9	43.4	35.7
ICT firms – São Paulo	100.0	20.4	42.2	37.3
Manufacturing of office machinery & IT equipment	100.0	5.0	68.3	26.7
Domestic	100.0	2.7	70.7	26.6
Foreign	100.0	28.5	43.7	27.8
Manufacturing of communications equipment	100.0	23.8	47.4	28.8
Domestic	100.0	21.6	50.0	28.4
Foreign	100.0	38.3	30.8	30.8
Telecommunications	100.0	28.9	38.4	32.7
Domestic	100.0	19.1	36.2	44.7
Foreign	100.0	36.3	40.1	23.6
IT activities & related services (1)	100.0	19.2	37.9	42.9
Domestic	100.0	19.2	36.5	44.3
Foreign	100.0	19.1	52.6	28.3
Software consulting	100.0	21.2	54.4	24.4
Domestic	100.0	20.7	53.8	25.4
Foreign	100.0	25.8	60.0	14.2
Other IT activities & related services	100.0	16.9	18.1	65.1
Domestic	100.0	17.4	15.7	66.8
Foreign	100.0	10.6	43.3	46.1
Manufacturing of insulated wires, cables & electrical conductors (2)	100.0	21.7	73.7	4.6
Manufacturing of basic electronics material (2)	100.0	23.5	32.7	43.8
Manufacturing of apparatus and instruments for measuring, testing and control (2)	100.0	38.8	51.3	10.0
Manufacturing of machinery, apparatus and equipment for electronic systems dedicated to industrial automation and process control (2)	100.0	29.7	9.8	60.5

Source: IBGE, PINTEC 2005.

Note: The data refer to firms that introduced technological new or substantially improved products and/or processes, and firms with projects that had been abandoned or were incomplete at end-2005.

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Detailed Table 9.23
Highly important activities for innovation according to innovative firms by activity and origin of capital – Brazil & São Paulo State, 2003-2005

Activities & origin of capital	Highly important activities for innovation according to innovative firms (%)														
	Improvement in product quality	Expansion of product offerings	Maintenance of market share	Growth of market share	Penetration of new markets	Increase in production capacity	Increase in production flexibility	Reduction in production costs	Reduction in labor costs	Reduction in consumption of raw materials	Reduction in energy consumption	Reduction in water consumption	Reduction in impact on environment, health & safety	Compliance with domestic market regulation	Compliance with foreign market regulation
ICT firms – Brazil	56.1	36.9	49.7	33.4	26.7	35.7	27.5	19.5	16.9	3.7	2.0	0.3	6.8	14.3	4.6
IICT firms – São Paulo	51.1	39.1	52.2	37.4	30.3	31.2	24.1	20.6	18.9	5.5	2.5	0.1	6.5	19.3	5.8
Manufacturing of office machinery & IT equipment	18.4	64.5	64.6	12.1	14.8	55.8	7.5	5.1	5.0	1.1	2.4	-	3.8	7.4	4.7
Domestic	12.1	63.6	65.2	5.2	9.4	57.0	5.4	4.2	5.4	1.2	1.2	-	-	2.7	1.2
Foreign	86.7	73.4	58.2	86.7	73.4	43.0	29.6	15.2	-	-	15.2	-	44.9	58.2	43.0
Manufacturing of communications equipment	38.1	37.5	55.5	38.4	26.8	23.7	16.5	11.3	9.2	1.9	2.9	-	10.1	20.1	9.1
Domestic	37.5	38.3	55.4	39.4	27.0	22.5	14.2	11.8	8.1	2.2	2.2	-	6.9	17.1	5.7
Foreign	42.2	31.9	56.3	32.1	25.7	32.1	32.1	7.7	16.8	-	7.7	-	31.9	41.0	31.9
Telecommunications	50.1	62.6	56.2	51.8	36.5	63.6	48.5	19.6	9.1	13.6	-	-	-	40.0	9.0
Domestic	30.6	55.0	46.6	55.0	9.0	57.6	39.6	15.1	6.1	15.1	-	-	-	21.9	-
Foreign	69.7	70.4	66.0	48.5	64.3	69.7	57.6	24.2	12.1	12.1	-	-	-	58.2	18.2
IT activities & related services (1)	57.9	37.7	49.2	37.4	33.9	28.6	23.7	25.1	21.6	3.1	2.5	-	3.2	16.1	4.3
Domestic	55.9	34.3	48.3	33.2	31.1	27.1	22.5	23.5	20.2	3.3	2.7	-	3.5	14.7	4.2
Foreign	78.5	73.6	59.2	81.6	63.0	44.5	36.8	42.1	35.9	-	-	-	-	31.2	5.7
Software consulting	66.0	51.0	54.0	36.6	44.6	22.6	15.9	17.8	15.9	0.3	-	-	1.2	20.8	8.7
Domestic	66.1	49.7	51.9	32.1	43.2	21.2	15.2	16.0	14.3	0.3	-	-	1.3	20.6	8.5
Foreign	65.5	61.8	72.0	75.6	56.6	34.9	21.5	33.1	30.3	-	-	-	-	22.3	9.7

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Detailed Table 9.23 (continued)
Highly important activities for innovation according to innovative firms by activity and origin of capital – Brazil & São Paulo State, 2003-2005

Activities & origin of capital	Highly important activities for innovation according to innovative firms (%)														
	Improvement in product quality	Expansion of product offering	Maintenance of market share	Growth of market share	Penetration of new markets	Increase in production capacity	Increase in production flexibility	Reduction in production costs	Reduction in labor costs	Reduction in consumption of raw materials	Reduction in energy consumption	Reduction in water consumption	Reduction in impact on environment, health & safety	Compliance with domestic market regulation	Compliance with foreign market regulation
Other IT activities & related services	50.1	25.1	44.7	38.2	23.6	34.2	31.1	32.1	27.0	5.7	4.8	-	5.1	11.7	0.2
Domestic	46.6	20.2	44.9	34.3	20.0	32.4	29.1	30.4	25.7	6.1	5.2	-	5.5	9.3	0.3
Foreign	96.7	90.1	41.4	90.1	71.9	58.0	58.0	54.7	43.8	-	-	-	-	43.8	-
Manufacturing of insulated wires, cables & electrical conductors (2)	34.9	68.5	31.6	20.8	19.6	11.6	66.6	13.9	29.8	8.0	3.7	1.7	13.4	53.9	22.8
Manufacturing of basic electronics material (2)	61.7	24.1	46.3	45.4	20.4	31.4	33.8	14.4	22.4	-	-	-	20.0	16.1	3.4
Manufacturing of apparatus and instruments for measuring, testing and control (2)	49.1	31.2	58.7	42.6	34.3	20.2	16.1	24.9	10.8	21.1	-	-	12.1	21.4	5.8
Manufacturing of machinery, apparatus and equipment for electronic systems dedicated to industrial automation and process control (2)	31.3	21.7	83.9	56.5	30.0	54.5	8.0	10.2	17.6	32.0	9.6	-	14.3	33.9	8.0

Source: IBGE, PINTEC 2005.

Note: The data refer to firms that introduced technological new or substantially improved products and/or processes, and firms with projects that had been abandoned or were incomplete at end-2005.

(1) Because software consulting and other IT activities & related services are subsegments of IT activities & related services, firms in these subsegments are already included under the heading of IT activities & related services.

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