



INTRODUCTION

This document includes the findings from the 2015 Business Technology Assessment, a joint effort between Connect Puerto Rico and the Puerto Rico Institute of Statistics. The purpose of this survey is to measure technology adoption and usage among businesses in Puerto Rico; determine barriers to broadband adoption among businesses in Puerto Rico; and allow for trending of these figures between 2015 and 2013. This information is important to help Puerto Rico track broadband, a valuable tool in economic development and vital to business growth, as well as to help determine where Puerto Rico stands both in terms of its internal goals as well as how it fares with other nations in the world.

To collect this information, Connect Puerto Rico and the Puerto Rico Institute of Statistics developed a telephone survey instrument, and data were collected from 810 businesses across Puerto Rico. A business establishment is defined as “a single physical location at which business is conducted or services or industrial operations are performed.” Rural businesses are defined as those that are not located in a Metropolitan Statistical Area (MSA). Surveys were conducted via telephone by Estudios Tecnicos of San Juan, Puerto Rico. Sample quotas were established by company size (5 brackets) and industry sector (8 sectors). Within these 40 cells, a randomly drawn sample of businesses from the Puerto Rico Corporate Registry was interviewed. Connect Puerto Rico weighted the results to coincide with the most recent data available from the United States Census Bureau’s County Business Patterns report.

ITEMS INCLUDED

- Unique case ID
- Weight for proportion correction (scaled to thousands)
- Urban/rural classification of the business establishment
- Municipio where business is located
- Industry sector of each business
- Number of reported employees
- Computer usage
- Barriers to computer use
- Types of computers used
- Use of cell phones for business dealings
- Internet usage
- Barriers to Internet use
- Mobile Internet usage
- Internet platforms used by businesses
- How well current Internet service meets business needs
- Voice over Internet Protocol (VoIP) use
- Barriers to broadband use
- Website presence
- Activities conducted via the Internet and mobile Internet



- Estimated revenues generated by online sales
- Estimated number and value of online orders placed with businesses in Puerto Rico, the United States, and the rest of the world
- Telework practices
- The importance of technology skills for new employees, and difficulty in finding employees with those skills
- Racial and ethnic make-up of business owners
- Gender make-up of business owners
- Estimated average annual revenues
- For-profit or non-profit status of corporations
- Home-based business status of businesses
- Date of interview
- Time of interview
- Length of interview

Not every respondent was asked every question. Empty (null) cells indicate that the respondent was not asked a particular question. There will be responses coded for every piece of data provided by the respondents. When respondents were asked to provide a numeric answer, a negative number typically represents a response of “I don’t know.”



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
Introductory Variables				
ID	1		#	Unique case ID
YEAR	2		2015	Year
WEIGHTK	3		#	Weight for proportional correction (scaled to thousands)
URBAN	4	Municipio Classification	1 3 9	Urban Rural Refused to indicate municipio
QS1.1	5	Our records indicate that this business is in <INSERT MUNICIPIO NAME> municipio. Is this	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Adjuntas Aguada Aguadilla Aguas Buenas Aibonito Añasco Arecibo Arroyo Barceloneta Barranquitas Bayamón Cabo Rojo Caguas Camuy Canóvanas Carolina Cataño Cayey Ceiba Ciales Cidra Coamo Comerío Corozal Culebra Dorado Fajardo Florida Guánica Guayama Guayanilla Guaynabo Gurabo Hatillo Hormigueros Humacao



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
			37	Isabela
			38	Jayuya
			39	Juana Díaz
			40	Juncos
			41	Lajas
			42	Lares
			43	Las Marías
			44	Las Piedras
			45	Loiza
			46	Luquillo
			47	Manatí
			48	Maricao
			49	Maunabo
			50	Mayagüez
			51	Moca
			52	Morovis
			53	Naguabo
			54	Naranjito
			55	Orocovis
			56	Patillas
			57	Peñuelas
			58	Ponce
			59	Quebradillas
			60	Rincón
			61	Río Grande
			62	Sabana Grande
			63	Salinas
			64	San Germán
			65	San Juan
			66	San Lorenzo
			67	San Sebastián
			68	Santa Isabel
			69	Toa Alta
			70	Toa Baja
			71	Trujillo Alto
			72	Utua
			73	Vega Alta
			74	Vega Baja
			75	Vieques
			76	Villalba
			77	Yabucoa
			78	Yauco
			79	No indica
QS1.2		6 Similarly, our records indicate that this business we are talking to you about is primarily involved	1	Yes
			2	No



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
		in <4 DIGIT NAICS NAME> Is this correct?		
QS1.2.OS	7	S1.2. Similarly, our records indicate that this business we are talking to you about is primarily involved in <4 DIGIT NAICS NAME> Is this correct?	1 2 3 4 5 6 7 8	Technology Intensive Industries Ag., mining, construction, utilities Non-Technology Manufacturing Wholesale Trade, transportation, warehousing Retail Trade, recreation, food and lodging Non-Technology Prof. & Financial Services Healthcare All Other services
SECTOR	8	Industry Sector for sample quotas and reporting	1 2 3 4 5 6 7 8	Technology Intensive Industries Ag., mining, construction, utilities Non-Technology Manufacturing Wholesale Trade, transportation, warehousing Retail Trade, recreation, food and lodging Non-Technology Prof. & Financial Services Healthcare All Other services
QS2	9	First, how many people are employed by your operation at this location?	#	Reported by respondents
QS3	10	First, how many people are employed by your operation at this location? Is it.....	1 2 3 4 5 6 7 8 9	Under 5 5 to 19 20 to 49 50 to 99 100 to 499 500 to 999 1,000 or more Refused Don't know/remember
SIZE	11	Number of Employees for quotas and reporting	1 2 3 4 5	1 to 4 5 to 19 20 to 49 50 to 99 100 or more
QS4	12	Which of the following best describes the	1 2 3	A publicly held corporation A privately owned business A church or religious institution



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
		organization I'm calling today?	4	A municipal or county government organization
			5	A public school system
			6	Refused
			7	Don't know/Remember

Main Survey Variables

Q1	13	Now, does your company use any type of computer technology to handle any of its business functions?	1 2 3 4 5	Yes No Company uses computers, don't know if used for business functions Refused Don't know/remember
----	----	---	-----------------------	--

Q1.1	14	Why doesn't your company use computer technology for its business functions?	String	Provided by respondents
------	----	--	--------	-------------------------

Q1.1CODE	15	Why doesn't your company use computer technology for its business functions?	1 2 3 4 5 6 91 99	Not required for this type of business Another business or office handles computer work Don't need/ not necessary Don't want it or like it Business does fine without it Business is too small to need it Other Don't know
		Coded responses		

Q1.2	16	How many employees at this location use a computer for their work?	#	Provided by respondents
------	----	--	---	-------------------------

Q1.3.1	17	What types of computers do employees in this business use?(Desktop)	1 2	Yes No
--------	----	---	--------	-----------

Q1.3.2	18	What types of computers do	1 2	Yes No
--------	----	----------------------------	--------	-----------



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
		employees in this business use?(Laptop)			
Q1.3.3	19	What types of computers do employees in this business use?(Tablet)	1	Yes	
			2	No	
Q1.3.88	20	What types of computers do employees in this business use?(Refused)	1	Yes	
			2	No	
Q1.3.99	21	What types of computers do employees in this business use?(Don't know or remember)	1	Yes	
			2	No	
Q1.4	22	Does anyone at your company use a cell phone to handle any of your business functions?	1	Yes	
			2	No	
			3	Refused	
			4	Don't know/Remember	
Q1.5.1	23	Who provides these cell phones? Would you say... (The business provides or reimburses for the cell phones)	1	Yes	
			2	No	
Q1.5.2	24	Who provides these cell phones? Would you say... (The employees provide their own cell phones)	1	Yes	
			2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
Q1.5.3	25	Who provides these cell phones? Would you say... (Some employees use their own cell phones, while others are provided or reimbursed by the business)	1	Yes	
			2	No	
Q1.5.88	26	Who provides these cell phones? Would you say... (Refused)	1	Yes	
			2	No	
Q1.5.99	27	Who provides these cell phones? Would you say... (Don't know /Remember)	1	Yes	
			2	No	
Q2	28	Does your company use the Internet to handle any of your business functions?	1	Yes	
			2	No	
			3	Refused	
			4	Don't know/Remember	
Q2.1.1	29	Why doesn't your organization use the Internet?	1	Yes	
		The monthly cost of Internet service is too expensive	2	No	
Q2.1.2	30	Why doesn't your organization use the Internet?	1	Yes	
		The installation cost of Internet service is too expensive	2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
Q2.1.3	31	Why doesn't your organization use the Internet?	1	Yes	
		Your business can do everything you need without the Internet	2	No	
Q2.1.4	32	Why doesn't your organization use the Internet?	1	Yes	
		Internet service is too complicated	2	No	
Q2.1.5	33	Why doesn't your organization use the Internet?	1	Yes	
		Internet service poses a security risk	2	No	
Q2.1.6	34	Why doesn't your organization use the Internet?	1	Yes	
		Broadband service is not available in your area and you don't want dial-up	2	No	
Q2.1.7	35	Why doesn't your organization use the Internet?	1	Yes	
		Your business does not use computers	2	No	
Q2.1.8	36	Why doesn't your organization use the Internet?	1	Yes	
		It would take too long to train your employees on how to use the Internet	2	No	
Q2.1.9	37	Why doesn't your organization use the Internet?	1	Yes	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
		The Internet would be too much of a distraction for your employees	2	No
Q2.1.91	38	Why doesn't your organization use the Internet?	1	Yes
		Anything else?	2	No
Q2.1.98	39	Why doesn't your organization use the Internet?	1	Yes
		Refused	2	No
Q2.1.99	40	Why doesn't your organization use the Internet?	1	Yes
		Don't know/remember	2	No
Q2.1.05	41	Why doesn't your organization use the Internet?	String	Provided by respondents
		Other specified		
Q2.2	42	Which one of these is the main reason that your organization does not use the Internet?	1	The monthly cost of Internet service is too expensive
			2	The installation cost of Internet service is too expensive
			3	Your business can do everything you need without the Internet
			4	Internet service is too complicated
			5	Internet service poses a security risk
			6	Broadband service is not available in your area and you don't want dial-up
			7	Your business does not use computers
			8	It would take too long to train your employees on how to use the Internet
			9	The Internet would be too much of a distraction for your employees
			10	Anything else?
			11	Refused
			12	Don't know/remember
Q2.3	43	Do employees at your business use mobile Internet service on a cell phone or mobile	1	Yes
			2	No



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
		device to handle any of their business functions?	3	Refused	
			4	Don't know/Remember	
Q3A.1	44	Which of the following describe the type of Internet access your company has?	1	Yes	
		Dial-up	2	No	
Q3A.2	45	Which of the following describe the type of Internet access your company has?	1	Yes	
		DSL	2	No	
Q3A.3	46	Which of the following describe the type of Internet access your company has?	1	Yes	
		Cable modem	2	No	
Q3A.4	47	Which of the following describe the type of Internet access your company has?	1	Yes	
		Fiber optic service	2	No	
Q3A.5	48	Which of the following describe the type of Internet access your company has?	1	Yes	
		Dedicated services such as T1 or T3	2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
Q3A.6	49	Which of the following describe the type of Internet access your company has?	1	Yes	
		Fixed wireless broadband, through an outdoor antenna	2	No	
Q3A.7	50	Which of the following describe the type of Internet access your company has?	1	Yes	
		Satellite broadband	2	No	
Q3A.8	51	Which of the following describe the type of Internet access your company has?	1	Yes	
		3G or 4G wireless service through a cellular phone network	2	No	
Q3A.91	52	Which of the following describe the type of Internet access your company has?	1	Yes	
		Anything else?	2	No	
Q3A.98	53	Which of the following describe the type of Internet access your company has?	1	Yes	
		Refused	2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
Q3A.99	54	Which of the following describe the type of Internet access your company has?	1	Yes
		Don't know/Remember	2	No
Q3A.OS	55	Which of the following describe the type of Internet access your company has? Other specified	String	Provided by respondents
Q3.1	56	How many employees at this business location use the Internet for their work?	#	Reported by respondents
			-9	Don't know
Q3.2	57	And how many of your employees use mobile Internet service on a cell phone or mobile device for their work?	#	Reported by respondents
			-9	Don't know
Q4	58	How well does your current Internet bandwidth or speed meet the needs of the business? Would you say. . .	1	You have more bandwidth than you need already
			2	Your current bandwidth is about right for your current needs
			3	You could use more bandwidth
			4	Refused
			5	Don't know/Remember
Q4.1	59	Which of the following apply to your company's need for additional bandwidth?	1	You cannot obtain additional bandwidth in your area
			2	You can obtain additional bandwidth, but have decided not to invest in it
			3	You haven't determined if more bandwidth is available
			4	Other (Specify)
			5	Refused
			6	Don't know/Remember



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
Q4.10S	60	Which of the following apply to your company's need for additional bandwidth? Other specified	String	Provided by respondents
Q5	61	Do you subscribe to Voice over Internet Protocol, commonly known as VoIP?	1 2 3 4	Yes No Refused Don't know/Remember
Q6A.1	62	Why doesn't your organization subscribe to broadband service? The monthly cost of broadband service is too expensive	1 2	Yes No
Q6A.2	63	Why doesn't your organization subscribe to broadband service? The installation cost of broadband service is too expensive	1 2	Yes No
Q6A.3	64	Why doesn't your organization subscribe to broadband service? Dial-up service is sufficient for your current needs	1 2	Yes No
Q6A.4	65	Why doesn't your organization subscribe to broadband service? Broadband service is too complicated	1 2	Yes No



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
Q6A.5	66	Why doesn't your organization subscribe to broadband service?	1	Yes	
		Broadband service poses a security risk	2	No	
Q6A.6	67	Why doesn't your organization subscribe to broadband service?	1	Yes	
		Broadband service is not available in your area	2	No	
Q6A.8	68	Why doesn't your organization subscribe to broadband service?	1	Yes	
		It would take too long to train your employees on how to use broadband	2	No	
Q6A.9	69	Why doesn't your organization subscribe to broadband service?	1	Yes	
		Broadband would be too much of a distraction for your employees	2	No	
Q6A.91	70	Why doesn't your organization subscribe to broadband service?	1	Yes	
		Any other reason?	2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
Q6A.98	71	Why doesn't your organization subscribe to broadband service?	1	Yes
		Refused	2	No
Q6A.99	72	Why doesn't your organization subscribe to broadband service?	1	Yes
		Don't know	2	No
Q6A.OS	73	Why doesn't your organization subscribe to broadband service?	String	Provided by respondents
		Other specified		
Q6B	74	And which of these is the main reason why your organization doesn't subscribe to broadband service?	1	The monthly cost of broadband service is too expensive
			2	The installation cost of broadband service is too expensive
			3	Dial-up service is sufficient for your current needs
			4	Broadband service is too complicated
			5	Broadband service poses a security risk
			6	Broadband service is not available in your area
			7	{INTENTIONALLY LEFT BLANK}
			8	It would take too long to train your employees on how to use broadband
			9	Broadband would be too much of a distraction for your employees
			91	Any other reason? (specified in Q6)
			98	Refused
			99	Don't know/remember
Q7	75	Does your company have a website?	1	Yes
			2	No
			3	Refused
			4	Don't know/Remember
Q8A	76	Which of the following activities does your business currently conduct using the Internet?	1	Yes



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
		Purchasing or placing orders for products or services	2	No	
Q8B	77	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Bidding on contracts	2	No	
Q8C	78	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Selling, or accepting orders for products or services	2	No	
Q8D	79	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Accepting real time payments such as credit card and debit payments	2	No	
Q8E	80	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Billing or bill payment	2	No	
Q8F	81	Which of the following activities does your business currently conduct using the Internet?	1	Yes	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
		Marketing and advertising products and services	2	No	
Q8G	82	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Providing customer support for your products or services	2	No	
Q8H	83	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Accepting job applications	2	No	
Q8I	84	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Advertising current job openings	2	No	
Q8J	85	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Communicating with your current customers	2	No	
Q8K	86	Which of the following activities does your business currently conduct using the Internet?	1	Yes	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
		Conducting business with local, state, or federal government offices	2	No	
Q8L	87	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Researching ways to make your business more efficient	2	No	
Q8M	88	Which of the following activities does your business currently conduct using the Internet?	1	Yes	
		Conferencing or other online meeting applications	2	No	
Q8.1	89	In addition to accepting job applications online, do you also accept applications through other means, such as in-person or in writing?	1	Yes	
			2	No	
			3	Refused	
			4	Don't know/Remember	
Q8.2	90	Does your business have an account on a social networking site like Facebook or Twitter?	1	Yes	
			2	No	
			3	Refused	
			4	Don't know/Remember	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
Q8.3A	91	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes	
		Purchasing or placing orders for products or services	2	No	
Q8.3B	92	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes	
		Selling, or accepting orders for products or services	2	No	
Q8.3C	93	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes	
		Accepting real time payments such as credit card and debit payments	2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
Q8.3D	94	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes	
		Marketing and advertising products and services	2	No	
Q8.3E	95	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes	
		Providing customer support for your products or services	2	No	
Q8.3F	96	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes	
		Travel and expense tracking applications	2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
Q8.3G	97	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes
		Communicating with your current customers	2	No
Q8.3H	98	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes
		Conducting business with local, state, or federal government offices	2	No
Q8.3I	99	Which of the following activities does your business currently conduct using mobile Internet service on a cell phone or similar mobile device?	1	Yes
		Conferencing or other online meeting applications	2	No
Q8.4	100	What percentage of your company's total sales revenue takes place online?	#	Reported by respondents
			999	Don't know



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
Q8.5	101	Is it...	0 1 2 3 4 5 6 7 8 9	Don't know 0% 1-15% 16-30% 31-45% 46-60% 61-75% 76-90% 91-100% Refused
Q8.6	102	In the past 12 months, did your business use the Internet to order goods or services from vendors located in Puerto Rico?	1 2 3 4	Yes No Refused Don't know/Remember
Q8.7	103	How many online orders would you estimate your business placed with vendors in Puerto Rico in the last 12 months?	# -9	Reported by respondents Don't know
Q8.7B	104	Would you estimate that your business placed. . .	1 2 3 4 5 6 7 8 9	1 or 2 orders 3 to 10 orders 11 to 25 orders 26 to 50 orders 51 to 100 orders 101 to 500 orders More than 500 orders Refused Don't know
Q8.8	105	Over the past 12 months, would you estimate the total cost of goods and services you ordered from vendors in Puerto Rico to be. . .?	1 2 3 4 5 6 7 8 9 10	Less than \$100 Between \$100 and \$999 Between \$1,000 and \$2,499 Between \$2,500 and \$4,999 Between \$5,000 and \$9,999 Between \$10,000 and \$24,999 Between \$25,000 and \$49,999 Between \$50,000 and \$74,999 Between \$75,000 and \$99,999 \$100,000 or more



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
			11	Refused
			12	Don't know
Q8.9	106	In the past 12 months, did your business use the Internet to order goods or services from vendors in the United States?	1	Yes
			2	No
			3	Refused
			4	Don't know/Remember
Q8.10	107	How many online orders would you estimate your business placed with United States vendors outside of Puerto Rico in the last 12 months?	#	Reported by respondents
			-9	Don't know
Q8.10B	108	Would you estimate that your business placed. . .	1	1 or 2 orders
			2	3 to 10 orders
			3	11 to 25 orders
			4	26 to 50 orders
			5	51 to 100 orders
			6	101 to 500 orders
			7	More than 500 orders
			8	Refused
			9	Don't know
Q8.11	109	Over the past 12 months, would you estimate the total cost of goods and services you ordered from those vendors to be. . . ?	1	Less than \$100
			2	Between \$100 and \$999
			3	Between \$1,000 and \$2,499
			4	Between \$2,500 and \$4,999
			5	Between \$5,000 and \$9,999
			6	Between \$10,000 and \$24,999
			7	Between \$25,000 and \$49,999
			8	Between \$50,000 and \$74,999
			9	Between \$75,000 and \$99,999
			10	\$100,000 or more
			11	Refused
			12	Don't know
Q8.12	110	In the past 12 months, did your business use the Internet to order goods or services from vendors outside of the United	1	Yes
			2	No
			3	Refused



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
		States and Puerto Rico?	4	Don't know/Remember
Q8.13	111	How many online orders would you estimate your business placed with these vendors in the last 12 months?	#	Reported by respondents
			-9	Don't know
Q8.13B	112	Would you estimate that your business placed. . .	1 2 3 4 5 6 7 8 9	1 or 2 orders 3 to 10 orders 11 to 25 orders 26 to 50 orders 51 to 100 orders 101 to 500 orders More than 500 orders Refused Don't know
Q8.14	113	Over the past 12 months, would you estimate the total cost of goods and services you ordered from these vendors to be. . . ?	1 2 3 4 5 6 7 8 9 10 11 12	Less than \$100 Between \$100 and \$999 Between \$1,000 and \$2,499 Between \$2,500 and \$4,999 Between \$5,000 and \$9,999 Between \$10,000 and \$24,999 Between \$25,000 and \$49,999 Between \$50,000 and \$74,999 Between \$75,000 and \$99,999 \$100,000 or more Refused Don't know
Q9	114	Do any employees within your organization work from home during normal business hours using an Internet connection?	1 2 88 99	Yes No Refused Don't know/Remember
Q9.1	115	And do any employees use the Internet to conduct work outside of normal business hours?	1 2 88 99	Yes No Refused Don't know/Remember



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
Q9.2.1	116	How are your employees able to conduct work when they are not at your business establishment? Your business provides them with a desktop computer they can use at home	1	Yes	
			2	No	
Q9.2.2	117	How are your employees able to conduct work when they are not at your business establishment? Your business provides them with a laptop computer they can take with them	1	Yes	
			2	No	
Q9.2.3	118	How are your employees able to conduct work when they are not at your business establishment? Your business provides them with a tablet computer they can take with them	1	Yes	
			2	No	
Q9.2.4	119	How are your employees able to conduct work when they are not at your business establishment? They can send or receive e-mail from a computer at home or some other place	1	Yes	
			2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
Q9.2.5	120	How are your employees able to conduct work when they are not at your business establishment? Your business provides them with a cell phone or mobile device they can use for work purposes	1	Yes	
			2	No	
Q9.2.6	121	How are your employees able to conduct work when they are not at your business establishment? Your business supports a virtual private network (or VPN) that they can access remotely	1	Yes	
			2	No	
Q9.2.7	122	How are your employees able to conduct work when they are not at your business establishment? Are there any other ways?	1	Yes	
			2	No	
Q9.2.11	123	How are your employees able to conduct work when they are not at your business establishment? Personal cell phones	1	Yes	
			2	No	
Q9.2.12	124	How are your employees able to conduct work when they are not at your business establishment?	1	Yes	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
		Personal computers/ equipment	2	No
Q9.2.88	125	How are your employees able to conduct work when they are not at your business establishment? Refused	1 2	Yes No
Q9.2.99	126	How are your employees able to conduct work when they are not at your business establishment? Don't know	1 2	Yes No
Q9.2.05	127	How are your employees able to conduct work when they are not at your business establishment? Other specified	String	Provided by respondents
Q10.1	128	When your company hires a new employee, how important are the following skills for most job openings? Send and receive e-mails	1 2 3 4 5 6	Not at all important Of little importance Important Very important Refused Don't know
Q10.2	129	When your company hires a new employee, how important are the following skills for most job openings? Fill out a form or application online	1 2 3 4 5 6	Not at all important Of little importance Important Very important Refused Don't know



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
Q10.3	130	When your company hires a new employee, how important are the following skills for most job openings? Use word processing software like Microsoft Word	1 2 3 4 5 6	Not at all important Of little importance Important Very important Refused Don't know
Q10.4	131	When your company hires a new employee, how important are the following skills for most job openings? Create or edit a spreadsheet	1 2 3 4 5 6	Not at all important Of little importance Important Very important Refused Don't know
Q10.5	132	When your company hires a new employee, how important are the following skills for most job openings? Use a search engine	1 2 3 4 5 6	Not at all important Of little importance Important Very important Refused Don't know
Q10.6	133	When your company hires a new employee, how important are the following skills for most job openings? Use the Internet on a mobile device	1 2 3 4 5 6	Not at all important Of little importance Important Very important Refused Don't know
Q10.7	134	When your company hires a new employee, how important are the following skills for	1 2 3	Not at all important Of little importance Important



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
		following skills for most job openings?	4	Very important
			5	Refused
		Join and participate in a webinar or teleconference	6	Don't know
Q10.8	135	When your company hires a new employee, how important are the following skills for most job openings?	1	Not at all important
			2	Of little importance
			3	Important
			4	Very important
			5	Refused
		Post information on a social networking site like Facebook or Twitter	6	Don't know
Q11	136	And in general, how difficult is it to find employees who have the sufficient skills to meet your needs?	1	Very difficult
			2	Difficult
			3	Easy
			4	Very easy
			99	Don't know/refused
Q12	137	Is the owner, or are any of the owners of this business establishment, a woman?	1	Yes
			2	No
			88	Refused
			99	Don't know/Remember
Q13	138	Are any the owners of this business establishment of Puerto Rican origin or descent?	1	Yes
			2	No
			88	Refused
			99	Don't know/Remember
Q14	139	Are the owners of this business establishment of some other Hispanic origin or descent, that is, Dominican, Mexican Cuban	1	Yes
			2	No



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>		<u>Code Description</u>
		Mexican, Cuban, Central American, South American, or some other Spanish background?	88	Refused	
			99	Don't know/Remember	
Q15.1	140	And what race or races are the owner(s) of this business establishment?	1	Yes	
		White	2	No	
Q15.2	141	And what race or races are the owner(s) of this business establishment?	1	Yes	
		Black or African American	2	No	
Q15.3	142	And what race or races are the owner(s) of this business establishment?	1	Yes	
		Asian or Pacific Islander	2	No	
Q15.4	143	And what race or races are the owner(s) of this business establishment?	1	Yes	
		American Indian, Eskimo, or Alaska native	2	No	
Q15.91	144	And what race or races are the owner(s) of this business establishment?	1	Yes	
		Any other race	2	No	



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
Q15.OSCODE	145	And what race or races are the owner(s) of this business establishment? Other specified (coded)	1 2 3 4 5 6 7 91	American Hispanic Latino Mestizo Mulatto Puerto Rican Tigueno Other single mentions
Q15.88	146	And what race or races are the owner(s) of this business establishment? No answer/ refused	1 2	Yes No
Q15.99	147	And what race or races are the owner(s) of this business establishment? Don't know	1 2	Yes No
Q15.OS	148	And what race or races are the owner(s) of this business establishment? Other specified	String	Provided by respondents
Q16	149	What is your firm's approximate average annual revenue?	1 2 3 4 5 6 7 8 9 10 11	Less than \$50,000 \$50,000 to less than \$100,000 \$100,000 to less than \$250,000 \$250,000 to less than \$500,000 \$500,000 to less than \$1 million \$1 million to less than \$2.5 million \$2.5 million to less than \$5 million \$5 million to less than \$10 million \$10 million or more Refused Don't know/Remember
Q17	150	Is your corporation for-profit or non-profit?	1 2 3	For-profit Non-profit Refused



<u>Variable Name in Database</u>	<u>Variable Position in Database</u>	<u>Survey Question</u>	<u>Response Code</u>	<u>Code Description</u>
			4	Don't know/Remember
Q18	151	Does this business operate primarily from somebody's home?	1 2 3 4	Yes No Refused Don't know/Remember
Date	152	Date of interview	String	
Time	153	Time of interview	String	
Duration	154	Duration of interview (in minutes)	#	
Industry.Sector	155	Business sector	1 2 3 4 5 6 7 8	Technology Intensive Industries Ag., mining, construction, utilities Non-Technology Manufacturing Wholesale Trade, transportation, warehousing Retail Trade, recreation, food and lodging Non-Technology Prof. & Financial Services Healthcare All other services
NAICQS4	156	4 digit NAICS code appropriate for the business	#	