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01

Introduction

The first questions ask for basic information about the nature of your business.

O1. What is your role with the organization? (Check all that apply)
Owner
■ Manager
Assistant manager
Senior employee with 5+ years at the business
☐ Employee

I do not have a formal role
Other [please specify]:
Q2-Q3
O2. Which sector best describes your business? What is/was your primary line of business?
Construction
Retail trade
Accommodation and Food Services
○ Wholesale trade
O Services / Information
Transportation and Warehousing
O3a. Was this business establishment operating when Hurricane Maria occurred? Yes No
O3b. Is your business location today the same as it was at the time of Hurricane Maria?
○ Yes
O No (the business has moved to a new location after Hurricane Maria)
O4 - O12
O4. In what year was this business established at the current location?
O5. How many locations did your business have at the time of Hurricane Maria?

a. In PR?

b. In the USA, outside of PR?	# 0
c. Outside of the US?	# 0
Total	# 0
O6. Is this business establishment still in ope	eration?
Yes, it is still in operationNo, not in operation	
O6a. What is the reason why your business i one.)	s no longer in operation? (<i>Please select</i>
No longer in business mainly because of Hurri No longer in business mainly because of Hurri No longer in business mainly because of Hurri No longer in business mainly because of the e No longer in business mainly because of COV No longer in business because of other reason Q6b When did the business stop operation?	icane Maria icane Dorian earthquakes of January 2020 /ID-19 ns, explain:
Month	Year
O7. Are the other Puerto Rico business locat	ions still in operation?
 All other locations are in operation Some of the other locations are in operation None of the other locations is in operation 	
O8. Did this business own or rent the building	g at the time of Hurricane Maria?
Own Rent	

0	Other (please specify)
	00a Which describes your hysiness? Remember that the hysiness descrit have to be
	O9a. Which describes your business? Remember that the business doesn't have to be
	officially federally registered as such. (Select all that apply.)
	Woman-owned business
	Minority-owned
	Veteran-owned
	Family-owned
	Immigrant-owned
	Other (please specify)
	O9b. How would you describe your business' ownership structure? (Select ALL that
	apply.)
П	Single owner
\Box	Partnership
\Box	Corporation
	Franchise
	Cooperative
	Multi-location
	For-profit
	Non-profit
	Other (please specify)
ш	Carlor (please speeliy)
	O10. What is the approximate square footage of the main building? (SQ. FT.)
1	

O11. What is the type	of structure o	f the main b	uilding?					
Metal Building SystemSteel frameConcreteWoodOther, please describe								
A: Impacts from Ever	nts and Reco	overy						
Section A. Impacts fr We want to know about business' recovery. A1. Did this business of of the following events	ut the interrup	tion caused	by various di	perat				
	No impacts	Some Impacts	Significant impacts		N/A		Dor kno	
COVID-19 in 2020?	0	0	0		0		0)
Earthquakes of January 2020?	0	0	0		0		0)
Hurricane Dorian in 2019?	0	0	0		0		0)
Hurricane Maria in September 2017?	0	0	0		0		0)
Hurricane Irma, in September 2017?	0	0	0		0		0)
A1a. Rank the followin of your business after	_	•	ess their impo	ortand	ce to t	the fu	ll reco	overy
				1	2	3	4	5
Full repair of property	damages			0	0	0	0	0
Adequate number of e	mployees ach	ieved		\circ	\circ	\circ	\circ	\circ

	1	2	3	4	5
Full building functionality achieved	0	0	0	0	0
Expected gross sales revenues achieved	0	0	0	0	0
Other, explain:					
	0	0	0	0	0
A1b. Did this business establishment FULLY recover to the within a year (by September 2018)?	pre-H	urrica	ne Ma	aria le	evel
YesNoDon't know					
What number of months were required?					
A1c. Did this business establishment FULLY recover from In point in time between September 2018 (one year after Hurr 2020, just before the COVID-19 Pandemic was declared a	icane	Maria) and	Marc	•
YesNoDon't know					
What number of months were required?					
A1d. Once your business recovered, did you achieve <i>gross</i> Hurricane Maria level?	sales	revei	าue at	the p	re-
Yes, gross sales revenue increased GREATLY compared to p Yes, gross sales revenue increased SOMEWHAT compared levels					els
Yes, gross sales revenue was about EQUAL to pre-Hurricane	Maria	level	S		

 No, gross sales revenue DECREASED SOMEWHAT compared to pre-levels 	Hurricane M	aria
No, gross sales revenue DECREASED GREATLY compared to pre-Hur levels	rricane Maria	a
A1e. After Hurricane Maria, was the gross sales revenue of your busing Hurricane Dorian in 2019?	iness impad	cted by
Yes, greatly in a negative directionYes, somewhat in a negative directionNo		
Yes, somewhat in a positive direction Yes, greatly in a positive direction		
A1f. After Hurricane Maria, was the gross sales revenue of your busin Earthquakes of January 2020?	ness impac	ted by
Yes, greatly in a negative directionYes, somewhat in a negative directionNo		
Yes, somewhat in a positive direction Yes, greatly in a positive direction		
A1g. After Hurricane Maria, was the gross sales revenue of your busi	iness impad	cted by
Yes, greatly in a negative directionYes, somewhat in a negative directionNo		
Yes, somewhat in a positive direction Yes, greatly in a positive direction		
A3-A9		
A3. Did any of the following factors affect the <i>gross sales revenue</i> of establishment during the following periods?	this busines	ss
	Yes	No
a. Supply chain issues (e.g., could not obtain products or lack of inventory)		

One year before Hurricane Maria?		
	0	0
One year after Hurricane Maria?	0	0
b. Economic Recession		
One year before Hurricane Maria?	0	0
One year after Hurricane Maria?	0	0
c. Another factor other than loss of customers (please describe below)		
One year before Hurricane Maria?	0	0
One year after Hurricane Maria?	0	0
Other factor besides loss of customers:		
service, please select N/A: if you don't know please select "Don't know	ν"7	
Service, please select N/A; if you don't know, please select "Don't know Utilities - (Questions A4-A7 repeat for each of the following utilities)	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities)	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) O electric power	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities)	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) O electric power O water/sewer	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) O electric power O water/sewer O land-line telephone O Internet/IT O natural gas	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) O electric power O water/sewer O land-line telephone O Internet/IT	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) O electric power O water/sewer O land-line telephone O Internet/IT O natural gas	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) O electric power O water/sewer O land-line telephone O Internet/IT O natural gas O Cell phone service	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) Output electric power water/sewer land-line telephone Internet/IT natural gas Cell phone service Section A: Utilities	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) olimited electric power olimited water/sewer olimited land-line telephone olimited land	v"]	
Utilities - (Questions A4-A7 repeat for each of the following utilities) olimits	v"]	

A5.\${lm://Field/2}. About how many days until <u>\${lm://Field/1}</u> was fully repaired? (days)
A6.\${lm://Field/2}. Did your business have backup systems or emergency reserves for \$\{\left[lm://Field/1\right]?}\)?
YesNoDon't knowNot applicable
A7.\${lm://Field/2}. Did your business use backup systems or emergency reserves for \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
 Yes No Don't know Back-up system damaged by Hurricane Maria Not applicable
B: Property Damage
Section B. Property Damage: This section asks about the property damage to this establishment as a result ONLY of Hurricane Maria.
Property damage refers to BOTH structural damage and non-structural damage.
Structural damage examples include damage to roofs and walls; examples of non- structural damage include broken windows, fixtures, damage to equipment, furnishings, inventory/stock.
B1. Did your business suffer any physical damage due to Hurricane Maria?
✓ Yes✓ No✓ Don't know

B2. Was any part of the roof gone?
○ Yes○ No○ Unsure
B2a. Was there any area where you could see the sky? Yes No Unsure
B2b. Did the roof need to be patched or replaced? Yes, roof needed to be completely replaced Yes, roof needed to be patched No Unsure
B3. During and immediately after was water coming through the roof? Yes, all areas or rooms Yes, in some areas or rooms No Unsure
B4. How many of the windows and doors in the building do you think were damaged by Hurricane Maria? None A few Several Most All of them Don't know Not applicable
B5a. How many exterior walls of the building were damaged by Hurricane Maria? None A few

O Several						
Most						
All of them						
O Don't know						
Not applicable						
B5b. How would you o	describe th	ne damage	e to the exter	ior walls c	aused by Hu	rricane
 Very little or no visible Minor damages like note Partial failure of one wall Failure of one wall Failure of more than of the point of the poi	narks or de wall one wall				repair	
How would you descr	ibe the dar	mage trom	n Hurricane IV	laria to:		
	None	Minor	Moderate	Severe	Complete	Don't Know
B6. Interior finishes (e.g., floors, wall, and ceiling surfaces)	0	0	0	0	0	0
B7. Contents (furniture and appliances)	0	0	0	0	0	0
B8. Inventory (raw material, work in process, finished good)	0	0	0	0	0	0
B9. Machinery and equipment	0	0	0	0	0	0

B10. How would you describe the extent to which water entered the building during Hurricane Maria (for example, wind-driven rain), in terms of building area, with 0% meaning no water intrusion and 100% meaning complete water intrusion inside the whole building? Slide to select %.

Don't			ı	usion	r instr	wate	ent of	Perce			
know											
	100	90	80	70	60	50	40	30	20	10	0

B11. This question asks about flooding from rising water

a. Did flooding from rising water occur at the building site? For example, within a parking lot or a pathway leading to the facility.
○ Yes
○ No
O Don't know
O Boil Cities
b. Did any floodwater enter the building?
○ Yes
○ No
O Don't know
O Zentikien
c. About what was the maximum water height inside the building? Please answer in feet.
☐ Don't know
DOIT KNOW
B12. Was roof-mounted equipment damaged or dislodged by Hurricane Maria?
○ Yes
○ No
O Don't know
B13. Did the damage directly affect the establishment's ability to provide goods or services following the hazard event? Damage refers to BOTH structural damage and non-structural damage.
○ Yes
○ No
O Don't know

B14. When thinking about y business to close complete		ent, did the damage cause your
✓ Yes✓ No✓ Don't know		
B14a. How long did it take f	for your business to reope	en at any level of service? (days)
C: Essential Products and	d Services	
ESSENTIAL to deliver the r	stions, think about Resour main good or service supp pose of answering these qu	uestions, please EXCLUDE labor
C1. How many suppliers did prior to Hurricane Maria?	d you count on to provide	these essential resources just
1 supplier2 suppliers3-5 suppliers6-10 suppliersMore than 10 suppliers		
C1a. Did your business rely Rico?	on Essential Resource(s) from suppliers located in Puerto
	Yes	No
One year before Hurricane Maria?	0	0
One year after Hurricane Maria?	0	0

C1b. Did your business rely Continental US?	/ on Essential Resource(s	s) from suppliers located in the
	Yes	No
One year before Hurricane Maria?	0	0
One year after Hurricane Maria?	0	0
C1c. Did your business reli	ed on Essential Resource	e(s) from non-US suppliers?
	Yes	No
One year before Hurricane Maria?	0	0
One year after Hurricane Maria?	0	0
There were MINOR issuesThere were MAJOR issuesThere were MAJOR issues	in the supply that created a in the supply that created a in the supply that created a in the supply that created a	ntial resources a MINOR disruption in service a MAJOR disruption in service a MINOR disruption in service a MAJOR disruption in service a MAJOR disruption in service
Increased greatlyIncreased someStayed the sameDecreased someDecreased greatly		
C5. Did your business have	on-site warehousing/sto	rage before Hurricane Maria?
Yes, for resources and prodYes, just for resourcesYes, just for final productsNo	lucts	

occurrence of Hurricane Mar	ia??		
	Yes	No	
a. Transport issues	0	0	
b. Accessibility to site issues	0	0	
C7. Did you have issue with Hurricane Maria?	delivering your products	s/services in the year following	
	Yes	No	
a. Transport issues	0	0	
b. Accessibility to site issues	0	0	
D: Employees			
Section D. Employees			
		D <u>part-time</u> individuals (including n during the following time perio	
a. 1 month Before Hurricane	Maria	0	
b. Immediately after Hurrican	ie Maria	0	
c. 1 year after Hurricane Mar	ia	0	
d. After Hurricane Dorian (Au	ıgust 2019)	0	
e. Before COVID-19 was ded	clared a national emerger	ncy in March 2020 0	
Total		0	
		_	

C6. Did you have any issues delivering your products/service in the year prior to the

For the purpose of this question consider the recovery period extending after

D2. Did your business experience any issues with employees during recovery?

Hurricane Maria and up until one year after Maria in September 2018.

	Yes	No		know
a. Employee(s) could not report to work due to transportation problems	0	0		0
b. Employee(s) could not report to work due to the need to fix house	0	0		0
c. Employee(s) could not report to work because their children not yet back to school	0	0		0
d. Employee(s) could not report to work because their children not yet back to daycare	0	0		0
e. Employee(s) could not report to work because of disaster- related physical health issues	0	0		0
f. Employee(s) could not report to work because of disaster- related mental health issues	0	0		0
E: Resilience Tactics for Hurricane Maria				
resilience.				rove
resilience. E1. Please tell me which approaches your business RECOVERY following Hurricane Maria.	employed a	at any po	oint to h	
E1. Please tell me which approaches your business	employed a	at any po Yes	oint to h	
E1. Please tell me which approaches your business	employed a			nelp w
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria.	employed a			nelp w
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location	employed a			nelp v
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location Reduced salaries	employed a			nelp v
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location Reduced salaries Obtained resources and/or goods from new supplier(s)	employed a			nelp v
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location Reduced salaries Obtained resources and/or goods from new supplier(s) Brought on-line physical assets not previously in use	employed a			nelp v
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location Reduced salaries Obtained resources and/or goods from new supplier(s) Brought on-line physical assets not previously in use Teleworked	employed a			nelp v
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location Reduced salaries Obtained resources and/or goods from new supplier(s) Brought on-line physical assets not previously in use Teleworked Exchanged or resource shared with other businesses (locally)	employed a		Nº 0 0 0 0 0 0	nelp v
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location Reduced salaries Obtained resources and/or goods from new supplier(s) Brought on-line physical assets not previously in use Teleworked Exchanged or resource shared with other businesses (locally) Reduced level of goods/services delivered to customers	employed a		Nº 0 0 0 0 0 0	nelp v
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location Reduced salaries Obtained resources and/or goods from new supplier(s) Brought on-line physical assets not previously in use Teleworked Exchanged or resource shared with other businesses (locally) Reduced level of goods/services delivered to customers Employed inventories or emergency stockpiles	employed a		Nº 0 0 0 0 0 0	nelp v
E1. Please tell me which approaches your business RECOVERY following Hurricane Maria. Moved to temporary or permanent new location Reduced salaries Obtained resources and/or goods from new supplier(s) Brought on-line physical assets not previously in use Teleworked Exchanged or resource shared with other businesses (locally) Reduced level of goods/services delivered to customers Employed inventories or emergency stockpiles Renegotiated the price and or delivery of products/services	employed a		Nº 0 0 0 0 0 0	nelp \

		Yes	No	N/A
Improvised production and/or serv	rice delivery process	0	0	0
Replaced resource(s) used in the with a substitute	production and delivery of goods/services	0	0	0
Other:				
•	was available to your business imn o cope with any shortage of essent	•		g
) Yes) No) Don't know				
E3. Which of the following of inventory available? (Selection	options influenced your decision to tet Yes or No for each item.)	not use/h	ave gre	eater
	Yes	N	0	
The Inventory Tax (Municipal Property Tax Act of 1991) limits cost- effectiveness of holding inventory	0	C)	
My historical data or models did not forecast correctly to increase the level of inventories	0			
Supply chain issues	0			
Financial Constraints	0			
Other, please describe:				

F: Mitigation

Section F. Mitigation:

The following questions ask about insurance coverage and other actions your business did before Maria hit.

F1. Did you have insurance before Hurricane Maria	a hit?	
Yes No Don't know		
F2. Did you adopt any of the following insurance be	efore Hurricane Mar	ia hit?
	Adop	oted?
	Yes	No
Business liability insurance	0	0
Business property insurance on contents	0	0
Flood insurance on contents	0	0
Business income interruption insurance	0	0
Other insurance (specify):		
F3. Did you file a claim on the following insurances	following Hurricane	e Maria?
	Filed o	laim?
	Yes	No
Business property insurance on contents	0	0
Flood insurance on contents	0	0
Business income interruption insurance	0	0
Business liability insurance	0	0
Other insurance: \${q://QID261/ChoiceTextEntryValue}	0	0

F4. Did you receive the money by September 2020?

	Received	money?
	Yes	No
Business property insurance on contents	0	0
Flood insurance on contents	0	0
Business income interruption insurance	0	0
Business liability insurance	0	0
Other insurance: \${q://QID261/ChoiceTextEntryValue}	0	0
F5. Did you apply for any recovery assistance after Hurr	icane Maria hit?	
○ Yes		
○ No		
On't know		
F6. Which recovery assistance did you apply or ask for a	after Hurricane M Yes	aria? No
Crowdsourcing or peer lending	0	0
Financial assistance from any faith-based or religious organization	0	0
Private/bank loans	0	0
Local government funds	0	0
SBA (Small Business Administration) loan	0	0
Non-Government Organizations (NGO)	0	0
FEMA financial assistance	0	0
Other federal or state funds (specify):		
Other assistance (specify):		

F7. Did you receive your funding from any of the following during your recovery period?

	Yes	No
FEMA financial assistance	0	0
SBA (Small Business Administration) loan	0	0
Local government funds	0	0
Financial assistance from any faith-based or religious organization	0	0
Non-Government Organizations (NGO)	0	0
Private/bank loans	0	0
Crowdsourcing or peer lending	0	0
Other federal or state funds: \${q://QID263/ChoiceTextEntryValue}	0	0
Other assistance (specify): \${q://QID265/ChoiceTextEntryValue}	0	0

F8. Did this business establishment adopt any of the following actions <u>Before Hurricane Maria</u>? Select one response per item.

	Yes	No	N/A
Assigned disaster responsibilities to specific employees	0	0	0
Having backup systems or emergency reserves for utility services (e.g., electric power, water, etc.)	0	0	0
Had building structurally assessed by engineer	0	0	0
Developed a written emergency action plan or checklist	0	\circ	0
Backed up all important documents	0	\circ	0
Increased inventory	0	\circ	0
Develop a disaster recovery plan, business continuity plan	0	\circ	0
Adopted strategies to stay informed of weather watches and warnings	0	0	0
Attended Meetings, trainings (in person/online)	0	\circ	0
Received disaster related information	0	\circ	0
Made plans for a temporary location	0	\circ	0
Boarded up windows, brace shelves	0	\circ	0
Performed emergency management drills regularly	0	0	0
Performed risk assessment to identify business vulnerability to disasters	0	0	0

	Yes	No	N/A
Lifted inventory and other supplies off the ground	0	\circ	0
Developed telework readiness plan	0	0	0
Another activity not included in this list. Please specify:			
F9. In your opinion, how prepared is your business to d Hurricane Maria <u>today</u> ?	eal with a h	nurricane l	ike
O Very well			
Well			
Somewhat well			
Poor			
Very poor			
O Don't know			
F10. You indicated that your business establishment is Please select all that apply.	not well pre	epared. W	hy is that?
☐ Lack of money/resources			
☐ Lack of time			
☐ Lack of workers			
Lack of information on how to mitigate and prepare for hu	ırricanes		
Other (SPECIFY):			
G: Owner/Manager Demographics			

Section G. Owner/Manager Demographics

G1. How many years have you worked as a business owner/manager? (years)

G2. Indicate type of diploma or degree:
 Some high school High School Associate degree / some college Bachelors Masters or higher degree
G3. Which category best describes your sex? You may skip this question if you prefer not to answer.
✓ Male✓ Female
G4. How many severe disruptive events like Hurricane Maria have you experienced in your life? (Please include at your place of business and at your residence) (Number)
G5. Regarding the <u>recovery of the entire Commonwealth of Puerto Rico</u> , since Hurricane Maria, would you say it is:
Fully recoveredPartially recoveredStill in survival/response modeWill never recover
G6. Regarding the <u>recovery of the municipios your business serves</u> , since Hurricane Maria would you say the municipios are:
Fully recoveredPartially recoveredStill in survival/response modeWill never recover

What is the ZIP code	of the main facility for your business?
lf you would like to be your email address:	contacted with outcomes from this research, please provide

If you encounter any issues in completing this survey, please feel free to contact the survey helpdesk at EstudioHMhelp@erg.com or 787-510-6478.

\${e://Field/Unique_ID} \${e://Field/MODE}

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