Are You Ready for the 21st Century? Why Resilience Matters to Your Business Module 1

This is the first in a set of three short courses on Putting the How-to in Resilience.

Running a small business is hard enough without a bunch of folks coming around and telling you to put another set of tasks on a to-do list that's already way too long. We get it, but we're going to tell you anyway for two reasons.

The first reason is something we call **Certain Uncertainty**. The one thing we know for sure about the future is that it will be volatile and unpredictable. The ability to manage unexpected disruptions isn't a nice to-have for 21st century businesses – not matter how big or small. It's a must-have.

Second, we'd like an opportunity to show you that the ability to weather any storm is not just about disaster preparedness. It's really about positioning yourself to grow and thrive, because the same qualities and processes that will make your business resilient to disruption will also boost your competitiveness. So, let's get right into it.

Are You Ready for the 21th Century? Why Resilience Matters to Your Business SBDC STATE OF ACT OF A

2 Interactive Poll

Do you think the world has become riskier for your business?

Let's get started by talking about risk. Do you think the world has been a riskier place for your business than it was 10 or 20 years ago? We'll do this by a show of hands. Or do you think the world is a safer place for your business?

Of course, your answer depends in part on your business itself. But overall, while certainly some areas of our lives have become safer, experts agree that business owners face more risk today than they have in the past. When Travelers Insurance surveyed a large sample of business owners and executives, only 14% thought the world was less risky today than in years past.

And in some ways, as you'll see, small businesses face greater risk than larger businesses.



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In the 20th century, risk management was based on the concept that the future could be modelled based on the past and that it would be relatively predictable. Throw that thought out the window. The hallmark of the 21st century is volatility and unpredictability. That's what we mean by Certain Uncertainty.



4	Risks have become like falling coconuts: You KNOW they're going to drop. You just don't know exactly where or when.	EWARE OF FALING COCONUTS
5	The future will be characterized by the "UN" events? Unpredictable, unanticipated, unstoppable. What are they? Well, how about a hurricane that put more than 171,000 New Jersey companies in financial turmoil. Or who ever imagined that there would be an Ebola scare in New Jersey. But, how do you get ready for specific disasters when you don't know what they are or when they will occur? It can make the world seem like a pretty scary place for your business.	UNpredictable UNanticipated UNstoppable (Animation)
6	But, here's the most important question. Do these kinds of unexpected disruptions necessarily and inevitably become disasters for your business, your employees and your family. Not if you develop the processes and tools to deal with disruption – even the unexpected kind. That's what we call resilience Resilience gives businesses a capability to respond to whatever disruption comes their way – irrespective of the trigger.	Do the "UNs" have to spell DISASTER For your business? Not if you build in RESILIENCE. (Animation.)
7	We're going to start by looking today at the 3 major trends that will most likely present challenges for your business in the coming years. Think of these as WHY resilience matters. The disruptors we see coming are: Extreme Weather Rapid Technology Change Cybersecurity. We're hoping that you'll be interested enough – maybe even worried enough – to want to know more about putting the How-to in resilience.	3 CHALLENGES: • Extreme Weather • Rapid Technology Change • Cybersecurity
8	Extreme Weather The facts are clear: Extreme weather events are becoming more frequent, more intense and more costly. There's no debate about those facts.	EXTREME WEATHER more frequent more intense more costly

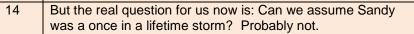
9	What's causing this increase? Does it even matter? The truth is that in terms of building resiliency into your business, it doesn't matter what the cause is. Your business doesn't care and neither do your customers. But what IS important for your business is that climate change is here. It's causing an increase in frequency in severe weather. And your business will be impacted.	Q. Do you believe human activities are causing climate change? A. Your business doesn't care. And neither do your customers. (animation on slide)
10	As the incidence of extreme weather increases, its economic loss increases as well. And nowhere in the world is that trend more pronounced than in North America.	Increase in economic loss due to extreme weather, past 30 years.
11	New Jersey is in the bulls-eye of these new weather patterns. Obviously, New Jersey is not the only state that's experienced extreme weather. However, there are a few factors that make the state more vulnerable to the effects of that weather — especially in coastal areas. In New Jersey, not only is the sea level rising along the shore just like it is everywhere, but the land is subsiding. Consequently — with the sea going up and the land going down the RELATIVE sea level rise on the New Jersey coast is about twice the rate of the worldwide average. That translates into more severe flooding in New Jersey than in other areas.	Materbury Baddeport Peterson Power Orik New York New York New York Reading Printed elphia Lineasing Printed elphia Lineasing Lineas
12	The other changes you're likely to see are rising temperatures and more intense precipitation. This graph shows the average annual temperature in New Jersey since records have been kept – since 1895. Temperatures have been rising gradually over the period but look at how the extreme heat days begin to bunch up. In fact, 9 of the 10 warmest calendar years on record in New Jersey have occurred since 1990. And heavy precipitation events have also shown a dramatic increase over the past two decades. In fact they have occurred more than twice as often in recent years during the last century.	New Jersey: The 10 warmest years on record since 1895.

Now let's talk about the elephant in the room – Hurricane Sandy in 2012.

This is a view of Sandy from space just as the storm was starting to make landfall in North Carolina as a Category 3 storm. You can see here how enormous this storm was just in physical size. In fact, it was the largest hurricane ever recorded in the Atlantic in terms of geographic area – over 1100 miles wide. And to make things worse, it hit the Northeast just at the time of high tide – a worst case scenario for flooding.

Before it was all over, Sandy killed over 200 people in 8 countries.

The storm caused over \$68 billion in damage, second only to Hurricane Katrina.



Although stories in the press called Sandy everything from a 1000-year "Frankenstorm" to a 100-year storm, chances are we'll be dealing with a storm like this again – and much sooner than we'd hoped.

We know that storms of a much higher intensity than Sandy have hit the northeast coast in the past. Remember, Sandy was "only" a Category 2 storm by the time it made it up into our area.

In 1821, the Norfolk and Long Island Hurricane completely swamped Cape May -- and the East River in NYC rose 13 feet in one hour. If a storm of that magnitude hit the area today – a Category 3 or 4 -- it would cause about 50% more damage than Sandy and potentially cause more than \$100 billion in property losses.

So the question is: How likely is that? And the answer: Very likely.

There's a complex but direct correlation between the air temperatures, the surface temperature of the ocean, and the intensity of the storms that form over it. The historical record shows that the last time the ocean surface temperatures were as warm as they are now, a Category 3 or 4 storm hit the northeast every 40 years or so.

Scientists tell us we need to start planning for a Category 3 storm to hit the northeast about every 10 years.





15	This map shows the costs we would expect in New Jersey if a Category 4 storm hit today. Some of the inland areas wouldn't expect much loss. But as you can see, some of the coastal areas could expect losses of \$500 million to \$2.5 billion. In terms of a hit to our economy, that absolutely dwarfs the damage we saw from Sandy.	What if a Cat 4 Storm Hit Today? (USD, Full Replacement) No Loss < 5 mm 5-5-90 mm 50-250 mm 250-500 mm 500 mm-2.5 bn
16	So in the new reality of the 21st century, we should expect another "Sandy" – or even a stronger "Sandy" – in about 7 years. That means some areas of the state will really just have fully recovered from Hurricane Sandy when the next massive storm hits.	Back so soon?
17	So what do we do with this information? How does all this affect YOU and your future? Well, about 40% of small businesses fail to reopen after a natural disaster.	About 40% of small businesses NEVER REOPEN after a disaster.
18	Extreme weather is especially bad for small businesses – as opposed to larger businesses – because 98% of the customers of small businesses live within a 2-mile radius of the business. That means if you're weathering a major storm and your business is on the verge of flooding, so are the homes of your customers. If you're dealing with power failures, chances are your customers are, too. And if the roads around your business are a mess, your customers can't get to you. Larger businesses that might have multiple locations or rely more heavily on online commerce are proportionately less affected by major weather events.	About 98% of your customers live within 2 miles of your business.
19	So you see another Sandy coming right down the road at you. But chances are you have at least a few years to prepare. What should you do? Do you know how to make your business ready? We're going to help you with that.	ARE YOU READY?
	Rate of Technological Change	

20	Technology is also a major disruptor, creating both new opportunities and new risks. On the opportunity side, it can make you faster, better, cheaper than your competition (or vice versa if they're the ones that adopt it first). It improves your market visibility, your productivity and your ability to serve your customers and clients. On other hand, technology creates new vulnerabilities for your business, your customers and employees, if not managed well. So, let's get a sense of how many of you are exploring the technology frontier and preparing to manage both opportunity and risk.	Market Visibility Customer Satisfaction Reduction in Costs Reduction in Costs
21	Interactive Poll 3 You might not see your business as one that's heavily invested in technology. But let's see what you do have. Let's see by a show of hands how many of you use these in your business: • Computer/laptop • Smart phone • Tablet • Mobile Point of Sale	Are You Keeping Up?
22	Interactive Poll 4 What about cloud computing services? And if you're not sure exactly what that is, we're going to be talking about it more in a bit.	Do You Use Cloud Computing Services?
23	Interactive Poll 5 Do you have an online presence? Traditional website Do you have a mobile-friendly version of your website An App	Do You Maintain an Online Presence?
24	Interactive Poll 6 How many of you sell products or services online?	Do You Sell Products or Services Online?
25	Interactive Poll 7 What about a social-media presence? How many of you have a Facebook account for your business that you use for marketing?	Do You Use Social Media?

26 The truth is that no matter how much technology you do or do not use today, you'll be using more in the future. Rate of Technology Penetration Into The FACEBOOK: Take a look at this chart. After the radio was invented, it took INTERNET: 4 38 years for that technology to reach 50 million users. But it RADIO: 38 ye took Facebook only ONE year to reach that many people. 50 Million Users ← That means the next big technology change will penetrate into the marketplace even faster – in a matter of months, not years. We don't know what technology is coming next, but it's going to hit fast and hard – and you have to get on the bandwagon really quickly these days, or be left behind. We do live in an era of constant change. THAT is our business environment. 27 **Cloud Computing:** When you have to buy and maintain your own software and hardware, everyone has to be computer savvy – and well, let's face it . . . most of us aren't. Welcome to The benefit of cloud computing is that it transfers the responsibility to someone else. With cloud computing, you don't have to worry about installing software, maintaining, downloading updates or keeping it secure. 28 Work from anywhere: **Need your** When software was installed on an office computer, it only ran files at the on that computer. But with the cloud, you can access your airport? company's files when you stop for coffee or on your way to No visit a customer. problem. 29 Collaborate from anywhere: Is your team on marketing visits? When the files were on one computer, you had to send files around by email, hoping that two people weren't working on the same file at the same time. Cloud computing allows your employees, clients, and suppliers to share access to workspaces, enabling real-time collaboration. 30 Crisis management and disaster recovery. 66#\$%*!!!⁹⁹ This is what none of us ever want to see – our office under water. Physically under water. Cloud vendors provide backups for all your data – whether your office floods or you leave your computer on the train. Whatever happens to your computer, your software and your

	data files are safe.	
31	Cost Savings . Your business doesn't have to purchase individual software licenses. Cloud computing gives you increased storage that you don't have to keep adding on to your physical computer.	Your Costs for Storage and Software Licensing
32	An even more recent "next new thing" is the Internet of Things: Most of us are probably just wondering what the heck is the Internet of Things. Up until recently, the Internet connected people. We were the nodes on the Internet network, so to speak. We had our customers and suppliers, our social network, our business network, our families — every "thing" that interacted with every other "thing" was a person. That's about to change. In the Internet of Things, we will still be connected to people, but we will also be connected to things — and those things will be connected to each other. So in a simple description, the Internet of Things is a network in which physical objects — embedded with sensors — are connected to each other and are able to communicate with each other and with people, all via wireless technology. Lots of people are calling the Internet of Things the next revolution of digital technology.	The WHAT of WHAT?
33	So why should you care about the Internet of Things? One thing it gives you is an opportunity to compete like a billion-dollar company – to give your customers a personalized experience and drive productivity. For example, you can program coupons to appear on your customers smart phones when they are in your neighborhood. One business in the Netherlands did this and saw a 700 percent increase in offer redemptions – and customers coming into their store spent 47% more.	In the neighborhood? TODAY ONLY LOU'S
34	As another example, with the Internet of Things, you can know where your customers are in your store and meet them in the aisle to complete their purchase on the spot on a mobile point-of-sale device.	Meet the customer. Make the sale.

35	But the Internet of Things isn't just about direct interaction with your consumers. It's also about having more information and interaction with your business itself. For example, not only will you know how many products you've sold today, but your warehouse or storage room will be able to report inventory information directly to your smart phone. Or, if you prefer, you could set it up so the storage room reports directly to your supplier and orders what you need. Did you forget to lock your desk before leaving the office? Your desk will call you to remind you. Some of this functionality already exists and some of it won't exist for several more years. But this type of technology will continue to be a presence in your business environment. And	"Sir, it's your desk drawer calling again."
36	it will grow. Both cloud computing and the Internet of Things have tremendous potential for improving your business' efficiency, productivity, and bottom line. But along with those benefits come associated increased risks with respect to cybersecurity. And that's what we're going to look at now.	The Cloud + Internet of Things
	Cybersecurity	
37	Just from listening to the media, we all know one thing for sure about cybersecurity: The big guys are certainly not immune. Cyberattackers hit big last year including the four companies shown on this slide plus Sony, AT&T, Neiman Marcus, UPS, Google, and more. Experts have estimated that the cost to the attacked companies is \$195 per each breached file. But that doesn't begin to cover the cost of the many lawsuits that have already been filed, plus damage to the companies' reputations, and lost profits. And the big guys are not alone.	Number of Customers Whose Records were Compromised in 2014 by Attacks at: Ebay - 145 million JP Morgan Chase - 83 million Home Depot - 56 million Target - 40 million Total COST? UNKNOWN
38	In fact, statistics show that: 55 percent of small businesses have had at least one data breach 30 percent of all cyberattacks last year targeted small businesses. 98% of VISA's credit card breaches are on its smallest business customers.	" - 55 percent of small businesses have had at least one data breach " - 30 percent of all cyberattacks last year targeted small businesses " - 99% of Viras roots care breaches are on its smallest business customers.

39	By this point, you're probably thinking "I have 500 things to do to keep my business afloat every day – and now you want me to think about cyber security, too? If Sony and JP Morgan Chase couldn't prevent it, what am I supposed to do?" Or, maybe you're a 2- or 3-person shop and you still don't think this applies to you. After all, you don't use cloud computing and your desk won't be calling your storage cabinet any time soon.	Cybercrime? Why would they come after me?
40	The fact is that cybersecurity IS an issue for your business if you have any of the following: even one computer, a website, an email account, a mobile phone, or one employee. Chances are that means you.	Have one of these? That's all it takes for you to be a potential target.
41	It's even a greater issue for you if you: use email for business especially if you ever send or receive a business email on your mobile phone take credit cards as payment, allow customers to access any of their account information through your website. Chances are most of us can see ourselves somewhere on that list.	Have you ever used your mobile phone to send or receive a business email?
42	Once someone does have access to your company's data — whether hackers have worked to break through your security systems or someone's taking advantage of a smartphone they found lying on a bench — what are they looking for? The two types of data compromised more often than anything else are employee records and customer records. Why? Because cybercriminals are most often hunting for 3 specific pieces of information pertaining to any individuals: the real name the addresses the government issued ID numbers (social security, driver's license).	Full Name Street Address Gvt. Issued ID number
43	So if your small business has any records on any customers or if you have any records on any employees, your business is exactly what cybercriminals are looking for. They don't care if you're big or small – if you have the data they want, they'll go after you.	100 01 101001 0001 10011001 0111 IDENTITY 01101 00010001 0101 00010001

44 But, your business itself – not just the data your store -- may Think your business checking account is be at risk too. protected by your bank when it comes to hacking? You know that if someone breaks into your personal checking THINK account, it's insured and protected. But did you know that AGAIN. your BUSINESS checking account is NOT protected by your bank when it comes to hacking? (Animation.) 75% of small business owners do not know that their business accounts are not protected. The thinking – and the laws that then implement that thinking is that your average individual with a consumer checking. account isn't really expected to have strong security in place. But the average business owner IS. If your business bank account gets hacked into and the bank can prove that it has met its security obligations with respect to federal guidelines, then the banks will say it's your fault. They'll say they did their part – YOU should have had better protections in place. 45 A construction company in Maine learned this the hard way. Patco Construction, Inc. In 2009, hackers siphoned off \$588,000 from Patco's commercial bank account. Its bank absolutely refused to \$588,000 reimburse the full amount. Patco was stunned – because they hadn't realized that the liability for that account was theirs, not the bank's. They ended up suing the bank and finally won after two appeals. (Animation) The court ruled that despite the bank's security, it should have caught the suspicious transactions. But can you imagine how much Patco spent in resources – human and financial - to fight those two appeals? A lot of small businesses would not be able to survive losing over \$500,000 in a cyberattack. 46 With more than 55% of small businesses suffering cyberattacks each year, attacks are now the norm. 55%: Vhere? The uncertainty is really just where, when, and how. When? How? 47 How serious are these issues to your business continuity? About 60% of Very serious. About 60% of all small businesses that suffer a small businesses cyberattack close in about six months. that suffer a cyberattack **SHUT** You might recognize this picture from our section on extreme DOWN weather. That's because there is more than one challenge after six months. that can bring a business down - more than one kind of "shut" that can happen.

48	Welcome to the Age of Turbulence, the 21 st Century when UNcertainty is the new normal. But the truth is that uncertainty and disruptions don't have to	We see risk management as: Stylengtic April One for our Concerns Bookinsss
	become disasters for your business IF you learn to incorporate risk management as a basic component of your business plan.	We Outperform Our Peers We Dury Perform As Well as Out- Peers
	In fact, there's some GREAT news here.	
	Travelers Insurance surveyed a large sample of business owners and executives to find out what kind of attention they paid to risk management and how they saw their business' performance relative to other businesses in their field.	
	What they found – which you can see on this graph – is that those companies that focused the greatest attention on risk management – who named it as a strategic priority for their business – that's the left side of the graph were more likely to describe themselves as outperforming their industry peers.	
	And those that said risk management wasn't all that important or was just one of many issues they have to deal with – but was certainly not a strategic priority for their business – those on the right side of the graph were more likely to describe themselves as underperforming with respect to their industry peers.	
49	When you build risk management and resiliency into the fabric of your business structure, you won't have to go to Plan B or Plan C when disaster strikes – because the processes for coping effectively with that disruption will already be in place.	Plan A Plan B Plan C
	That's Plan A.	Enter Name
50	So what do we mean when we say we're going to help you develop resilience into your business?	
	Usually when we talk about resilience, we think of it in terms of human qualities – grit, determination, courage.	Resilient? Not necessarily.
	But that's a good description of an athlete. Not a business.	Em-
51	For businesses, resilience is not about who you are, but what you do.	For businesses, resilience is not about who you are, but what you do.
	Resilience is set of practices and processes that anyone can learn. These practices pre-empt the impacts of disruptions, whether they're caused by natural disasters, technological or market changes, attacks or accidents.	Resilience is set of practices and processes that anyone can learn.

52	It's those specific practices and processes that we're going to be guiding you through as we move forward. In the next three modules, we'll put the "how to" in becoming change-ready – identifying specific tasks and steps that will allow you to develop the best risk management plan for your specific business.	How do you build resilience into your business? We'll show you.
53	You'll learn how to make your organization resilient to disruption—and why those same qualities make you more competitive as well. (Module2) So, we've talked about how resilience is not just about preparedness; it's about prosperity. In the second module, we'll learn what makes organizations resilient. In resilient organizations, leaders set a clear vision and goal posts. But, there is also a culture of listening and learning, because good ideas come from the front lines, from people who are dealing with clients, customers and problems first- hand. In resilient organizations, authority to make decisions is devolved to the lowest reasonable level to create flexibility and agility. And often as a result, employees feel engaged and empowered which is the number one proven way to boost productivity and revenue. The bottom line is that qualities that make organizations resilient in a disaster are actually the same ones that help them thrive the rest of the year.	Module 2 How to Make Your Organization Resilient to Disruption —and Why Those Same Qualities Make You More Competitive
54	How to create a business continuity plan so you'll be ready for falling coconuts (Module 3) President Dwight Eisenhower once famously said: It's not about the plans, it's about the planning. Just the process of putting together a business continuity plan helps you understand your critical people, critical assets, critical partners and processes. That exploration is just as valuable for positioning yourself to seize opportunities as it is for putting out fires.	Module 3 How to Create a Business Continuity Plan so You'll be Ready for Falling Coconuts