# Bridging the Gap: Bringing Free Cyber Security Education to America's Small Businesses



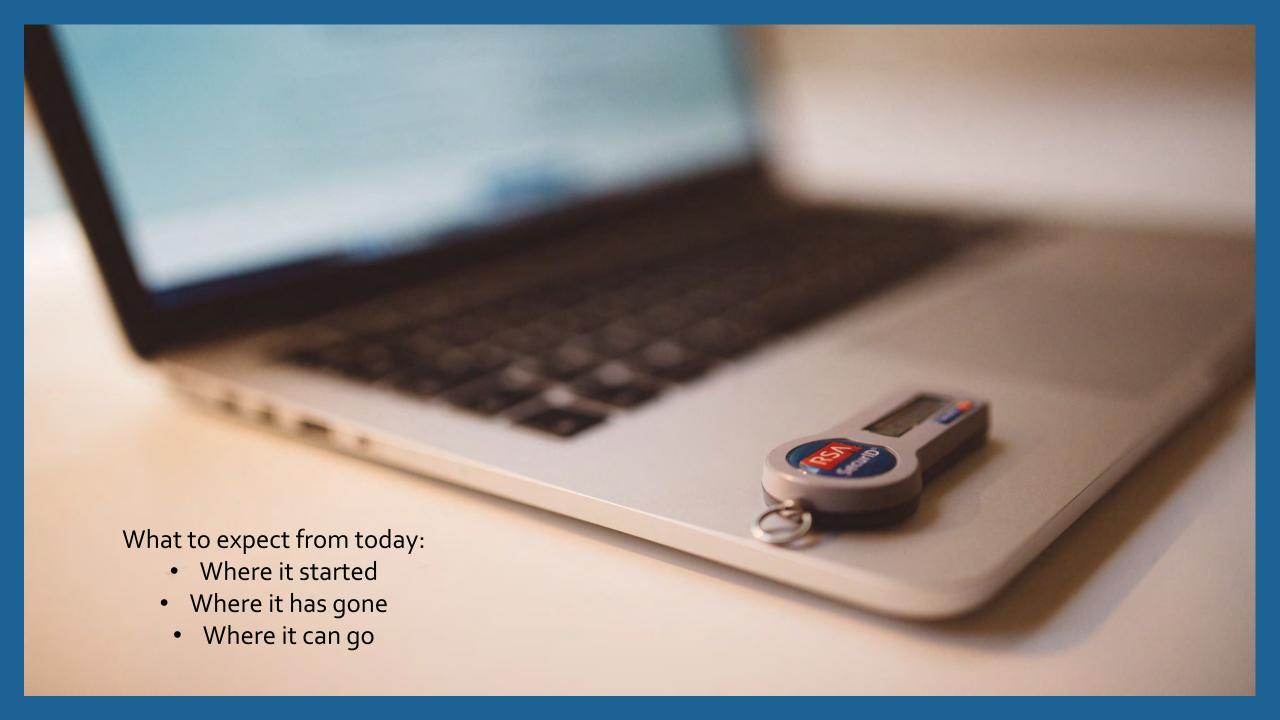
Brian S. Dennis

Director

Cybersecurity Center for Small Business

Kansas Small Business Development Center





### Brian S. Dennis

- Frontline Experience in Disaster Response and Recovery
  - Hurricane Katrina 2005
  - Hurricane Rita 2005
  - Hurricane Gustav 2008
  - Hurricane Ike 2008
- Disaster Recovery Institute International Certification
  - ABCP 2014- Present
    - Certification #: 44083
- Masters of Emergency Management & Homeland Security
  - Arizona State University, 12/2017

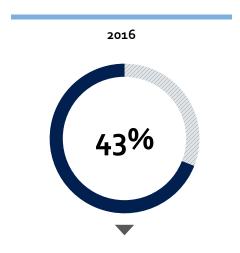
### 2017 National Defense Authorization Act

IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Administrator of the Small Business Administration and the Secretary of Homeland Security shall work collaboratively to develop a cyber strategy for small business development centers to be known as the "Small Business Development Center Cyber Strategy".

#### Small Businesses are a Target

According to Symantec, Nearly HALF of all cyberattacks are now levied against small businesses

60% of companies breached never recover....



40% 60%

An attack can set a small business back anywhere from \$54,000 to over \$100,000 per incident (CNBC).

<u>PCWorld</u> in August 2013 reported that of the small businesses who suffered a breach, roughly 60 percent go out of business within six months after the attack.

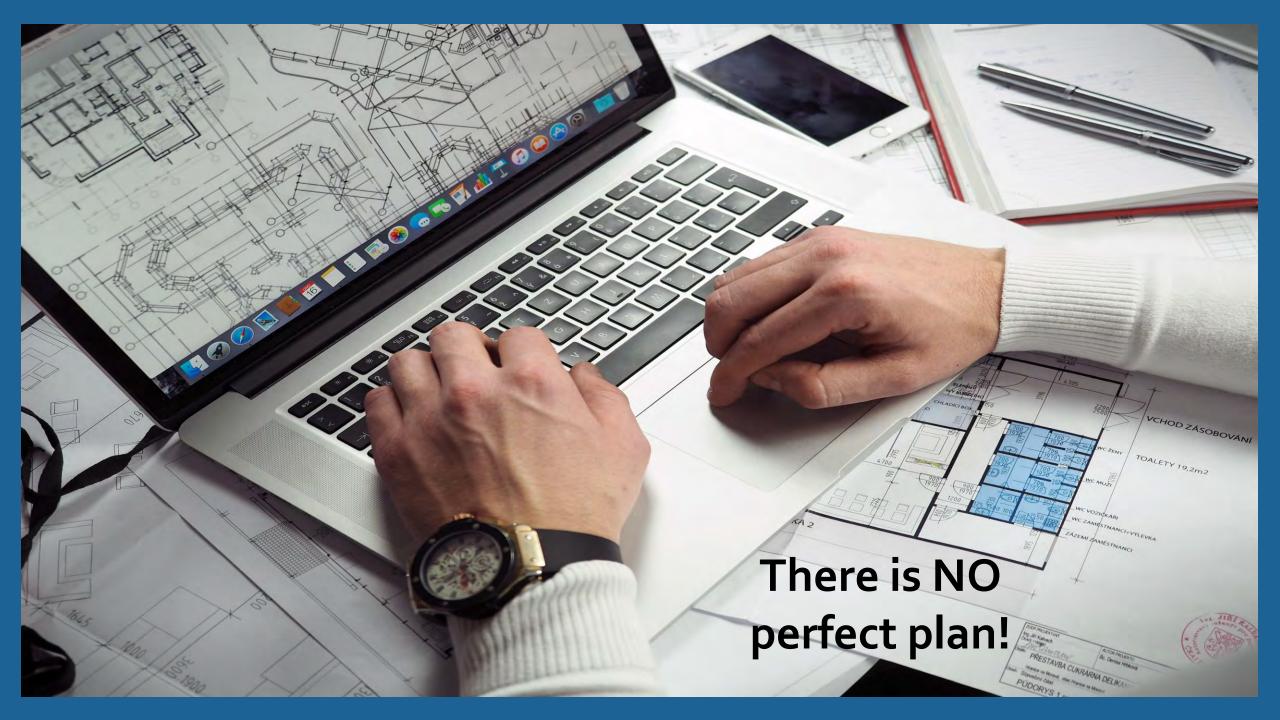
### Small Business Challenges

#### Staying ahead of the threat curve

- Lack of awareness of the threat
- Increased scrutiny and liability from buyers, business partners, etc.
- Business-wide education (not just technical—also behavioral)
- Cost of implementation of adequate protection
- Recovery after becoming victim
- Lack of support network

#### Simple Solution to a Difficult Problem: Cast a Wide Net





 Raise awareness of cyber risk within America's small business community.

Help businesses manage the threat and impact of cyber interference.

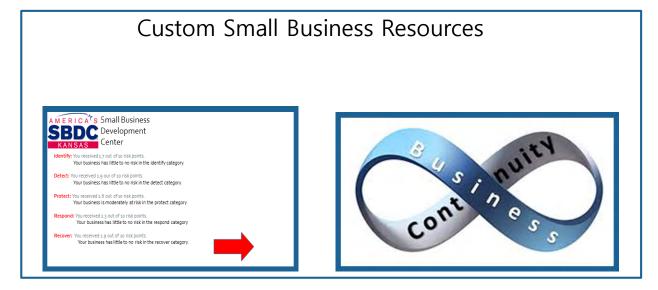
Foster innovation in cyber security

### Cyber Program Elements









- Launching in Fall of 2017 to assist Kansas' small business community to make a reasonable effort to protect their critical data and infrastructure
- Based off the NIST Framework
- Serves as the foundation for KSBDC trainings and counseling efforts
- Designed as a functional tool, not white paper or scare tactic

STEP 1 IDENTIFY	What structures and practices do you have in place to identify cyber threats? PAGE 8
STEP 2 PROTECT	What are the basic practices you have in place to protect your systems? PAGE 12
STEP 3 DETECT	What do you use to identify someone or something malicious? PAGE 19
STEP 4 RESPOND	How will you deal with a breach if and when it occurs? PAGE 21
STEP 5 RECOVER	How will you get your business back to normal after a breach? PAGE 23

# STEP 1 IDENTIFY

Other pieces of the Identify section:

- Who is responsible for cybersecurity in my organization?
- What devices need protecting?
- What operating systems are you using?
- Where do I store my data?

#### What Data Do You Keep?

This is the root of a cybersecurity policy so take your time here. What data do you maintain that could be useful (or profitable) to a hacker? Some examples include



- · Personal Identifiable Information (SSNs, DOBs, etc.)
- Payment Card Information (Credit Card Numbers)
- · Personal Health Information
- · HR Records that could contain Bank Account Information
- · Business Plans
- Proprietary Schematics, Patent Applications, etc.

#### **Our Sensitive Information**

### STEP 2 PROTECT

Other pieces of the Protect section:

- How do you use firewalls?
- Encryption checklist
- Accessing files remotely
- Username check
- Password check
- \*Note, Identify and Protect sections are larger than last 3

DATA SEGREGATION LIST:	Today's Date:
Type Of Data	Who Should Have Access

#### How Do You Train Your Employees?

If your business has employees, you should be training them regularly on cybersecurity best practices. They should be provided training on hire and annually, and also on an as-needed basis. If you have an event at your firm that highlights poor cybersecurity choices, you may want to spend some time training your employees on how to better react to cyber threats. There are many free resources available for cybersecurity training. A couple good places to start are:

SANS Information Training - www.sans.org

OPEN DNS Phishing Training - www.opendns.com/phishing-quiz/

If you are writing down a policy to go with your plan, try the following language:

"Personnel are provided training regarding information security practices upon hire, annually going forward, and as necessary based upon events at our company."

## STEP 3 DETECT

### Other pieces of the Detect section:

- Determining the Impact of an event
- More complex methods detection

Antivirus Information:			Date:			
We Use the Following Antivirus Product:						
We update Antivirus Definitions   Automatically		cally	☐ Manually Before Each Scan			
We Run Scans	☐ Hourly	□ Daily	Weekly	As Necessary		
Scans are Initiated	☐ Automatically		☐ Manually			

#### **Antimalware Applications**

Antimalware applications are similar to antivirus applications, but most systems do typically require some combination of the two as they are designed to address different areas. Similar to Antivirus applications, there are many free antimalware programs out there. The same caveats apply to Antimalware applications as to Antivirus Applications: They must be scheduled to update as well as to run scans in order to be effective!

Antimalware Information	Date:		
We Use the Following Antima			
We update Antimalware Definitions ☐ Automatically		☐ Manually Before Each Scan	
We Run Scans	☐ Hourly ☐ Dail	y 🔲 Weekly 🔲 As Necessary	
Scans are Initiated	Automatically	☐ Manually	

# STEP 4 RESPOND

Other pieces of the Respond section:

- Incorporating Lessons Learned
- Data Backup
- Digital Forensics Contact
- Containing an event

vate of incident:	
xplanation of Incident:	
low Discovered?:	
low Remediated?:	
Pata Affected:	
teps Taken To Close Vulnerability:	

## STEP 5 RECOVER

Other pieces of the Recover section:

 Customized with statespecific information

 Coming soon, a list of local cyber specialists, lawyers, insurance agents, state agencies, and educational opportunities. Who are your resources?

Before a breach identify what resources you will need to help you in the event of a serious IT security event or one which involved client/sensitive information.

In the event of a breach your first call should likely be to legal support, an attorney with knowledge of breach response and remediation. Again, you need not put an attorney on retainer, but knowing who you are going to call before you need them will save valuable time in the event of a breach. Identify your legal resources now!

You may also wish to consider identifying your local police resources who may be of assistance.

#### Cybersecurity Assessment



### Kansas SBDC Cybersecurity Center for Small Business

This assessment will take approximately 30 minutes. It will help you identify areas of strengths and weakness in your current cybersecurity policies and procedures.

At the end of the assessment you will have an opportunity to ask for

Thank you for your interest in cybersecurity. This assessment will assess cybersecurity issues.

further assistance.

Please click "Continue with Assessment" and then the Forward arrow.

Continue with Assessment

Exit



Introduction





Cybersecurity for Small # Business (NAC-PT188010)

troduction

nnouncements

lentify

rotect

etect

Respond ecover

II Coursework



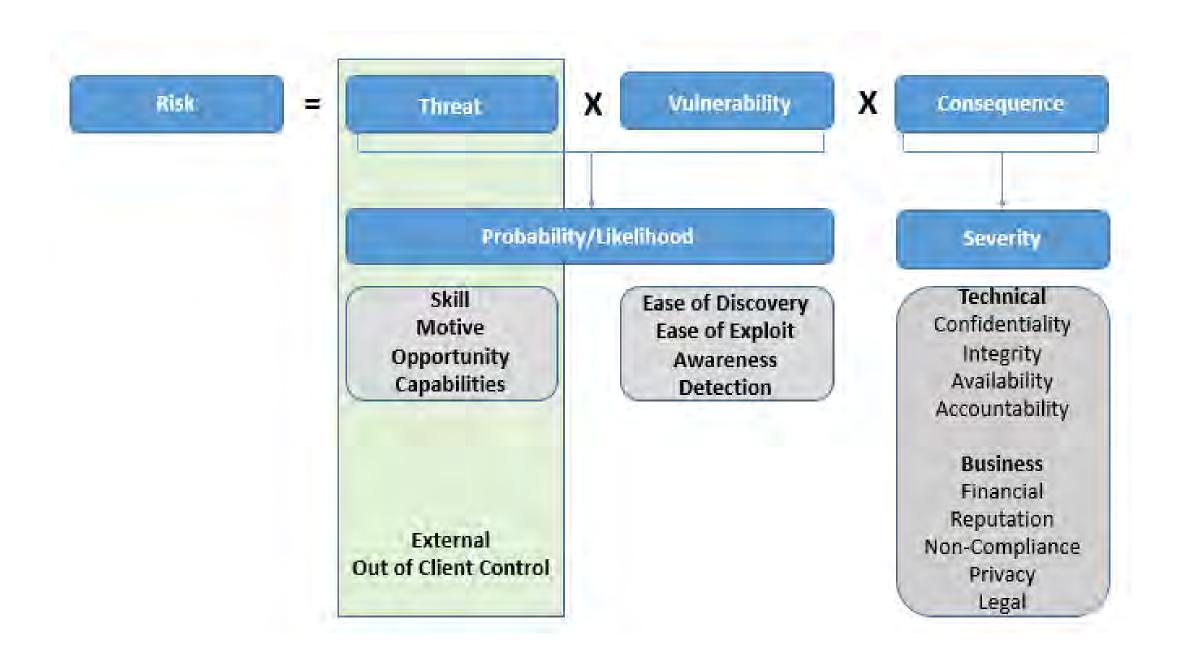
#### Introduction

The Kansas Small Business Development Center in partnership with the University of Kansas' School of Business has created this free training for small business owners to better improve their digital footprint. Take your time and go through the videos at your own pace. A safer on-line presence takes effort from everyone to make a difference. Share the information you gather with your team and refer them to the training if needed!

The Cybersecurity Center for Small Business will be adding new courses constantly! Don't forget to check back to see if there are new learning opportunities!

If you have any questions, or require additional assistance, please reach out to Brian S. Dennis at the Cybersecurity Center for Small Business' KU offices: 785-864-0286 or brian.dennis@ku.edu

Cyber needs? We'll get you connected.



- Assessments are updated regularly
- Training modules (45 by the end of 2018) can be created quickly with immediate launch into portal
- Client usage from the assessment to the training will be tracked via a CRM that can move data to Neoserra/CenterIC—allowing for a true virtual center to exist in an SBDC network





Brian S. Dennis
Director
Cybersecurity Center
for Small Business
785-864-0286
Brian.dennis@ku.edu