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Surviving a Mock Disaster Building an effective Tabletop Exercise

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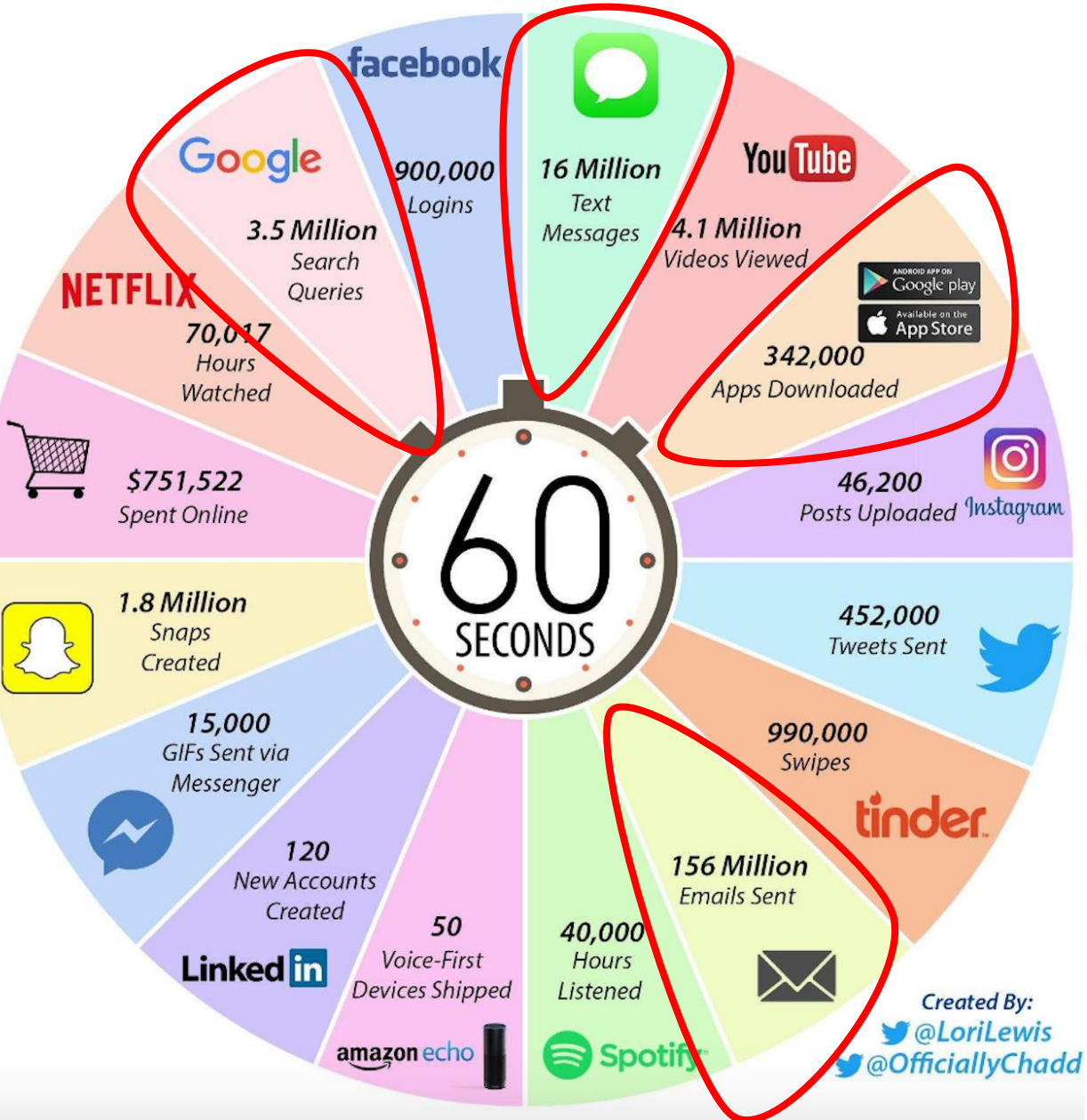
Objectives

- Importance of Tabletop Exercises
- Identify the major components for BCP/DR.
- Understand the types of Testing.
- What is a Script versus a Scenario?
- Why is a timeline base script important?
- Discuss ties to Incident Response.

2017 This Is What Happens In An Internet Minute



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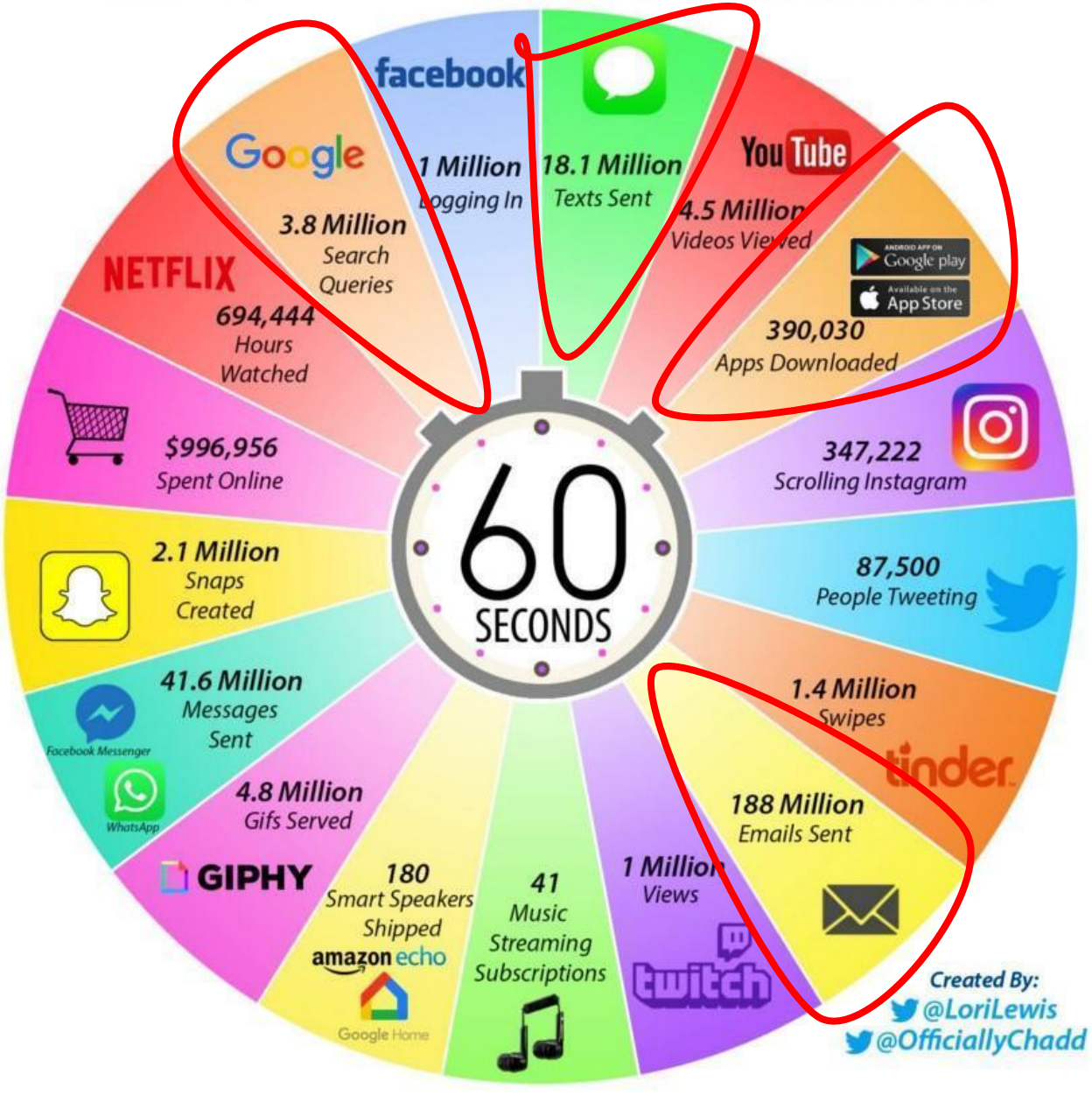
2019 This Is What Happens In An Internet Minute



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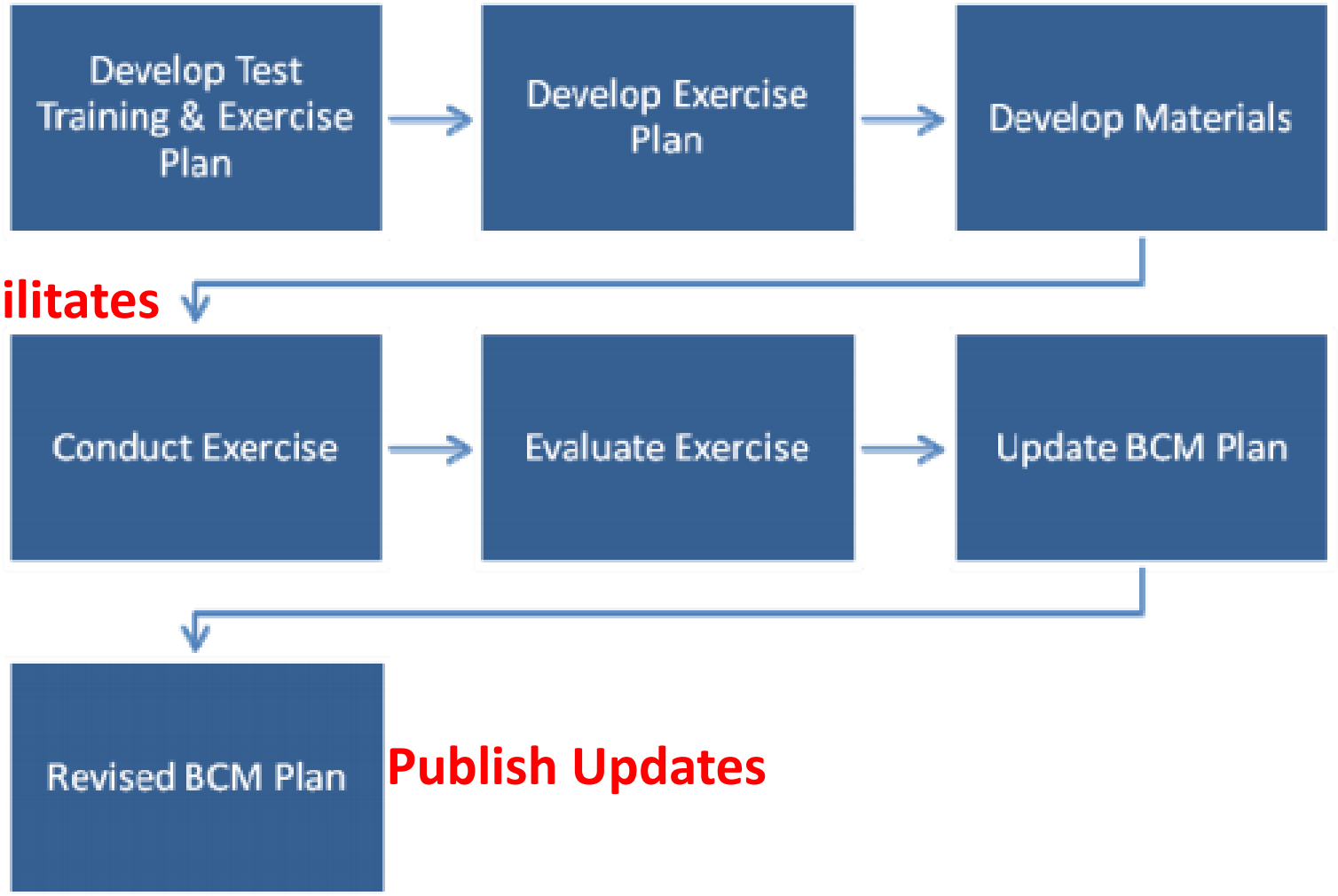
Strategy



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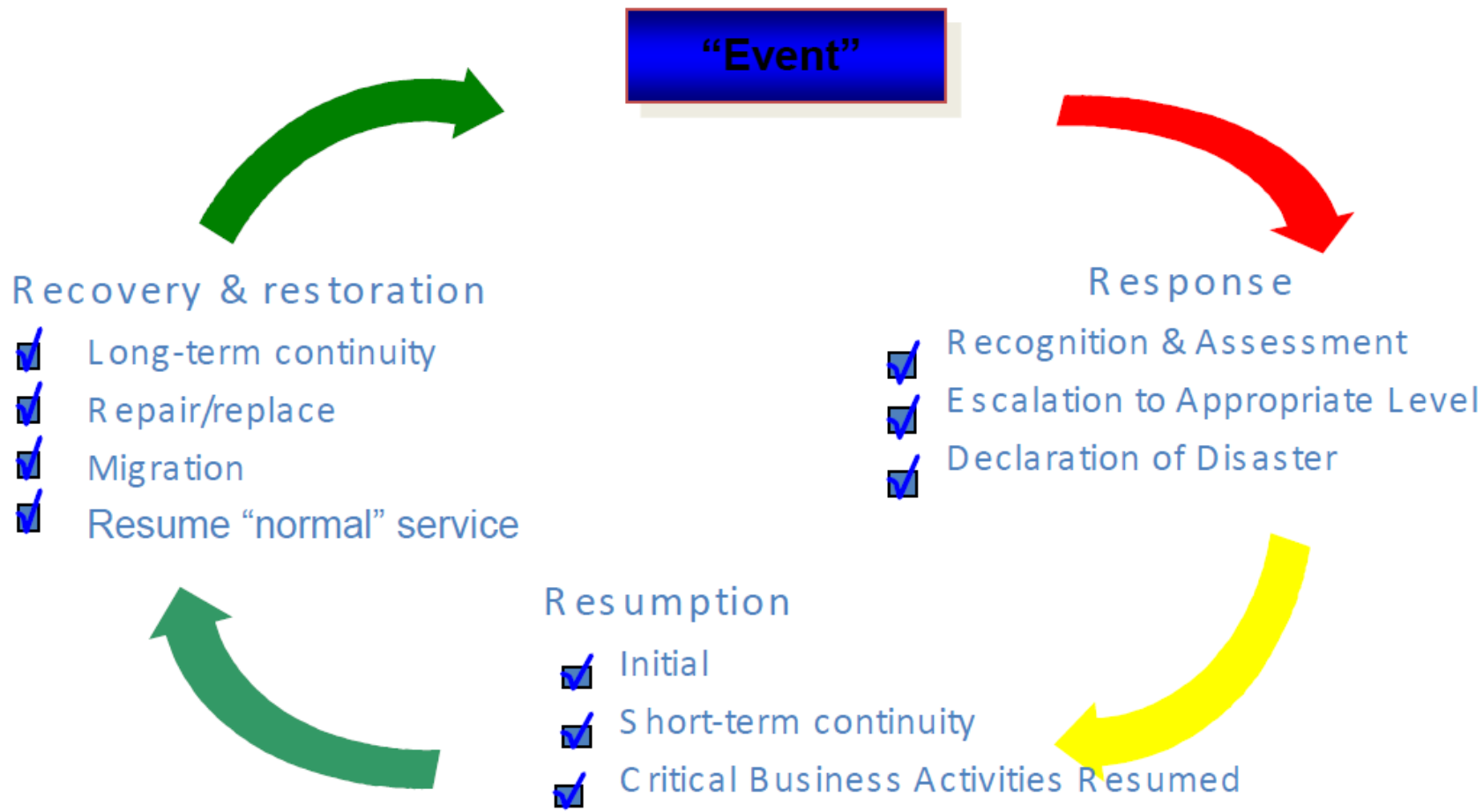
Business Continuity Cycle



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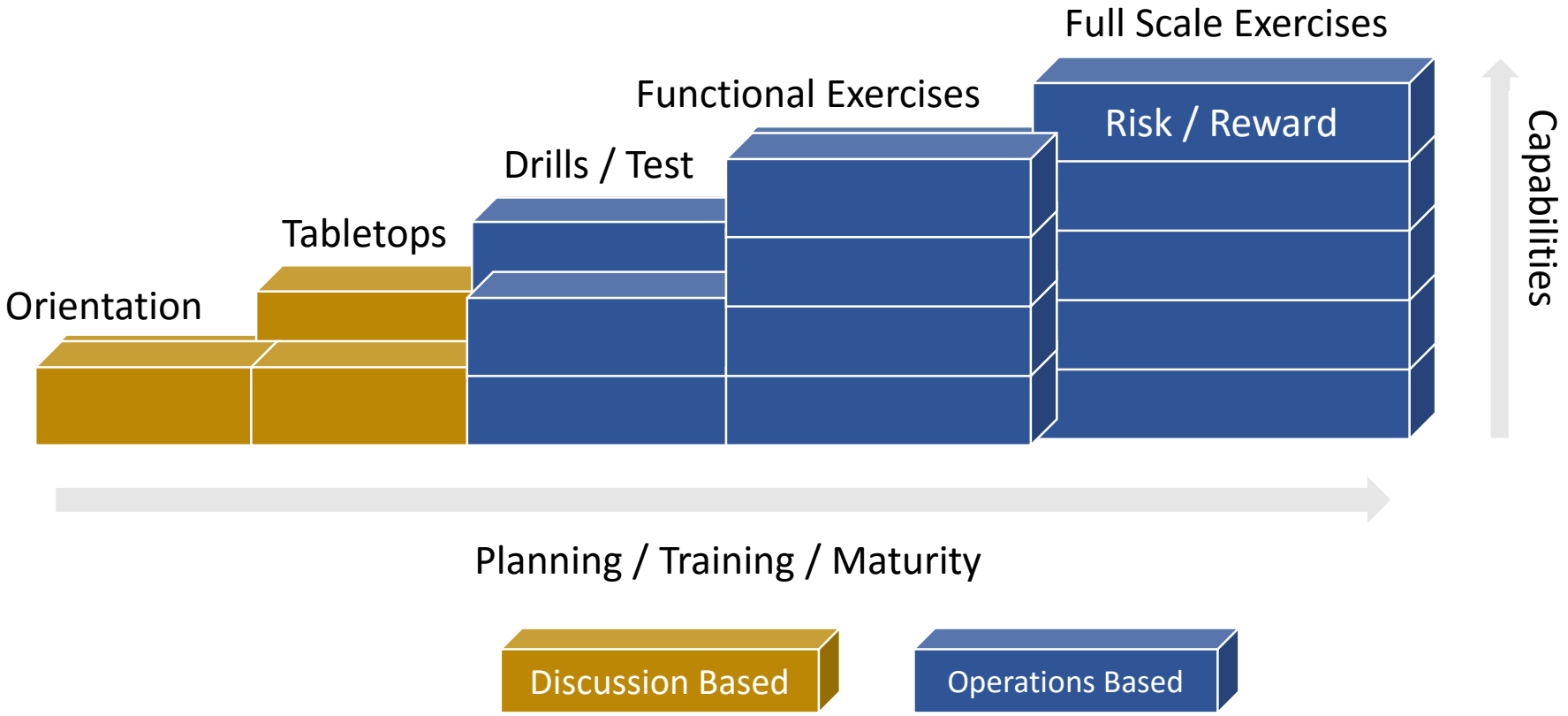
Ongoing Multi-Year Testing



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Types of Tests

Exercise Type	Description
Orientation	A seminar and/or briefing activity used to familiarize participants with BCM responsibilities
Test or Functional Drill	Coordinated, supervised activity normally used to test, develop, or maintain skills in a single operation or function in a single office or organization
Tabletop Exercise	Simulates emergency situation in an informal, stress-free environment; designed to elicit constructive scenario-based discussions for an examination of the existing BCM plan and individual state of training and preparedness
Functional Exercise **Combination Test**	Used to validate the capability of an organization to respond to a simulated emergency, in order to test one or more functions of the plan
Full Scale Exercise **ALL OUT TEST**	Simulates an actual emergency; intended to evaluate operational BCM procedures and capabilities under simulated stressful conditions

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Defining Roles and responsibilities

Position	Roles and Responsibilities
DR/BCP Coordinator / Information Security Officer	• Coordinate schedule / Exercise facilitator
Management Team	• Provide guidance and approval of Exercise Plan
IT – Manager / Network Admin	• Coordinate IT Recovery Plans • Plan and conduct IT Tests • Support BCP Coordinator in Development and exercising
Participants (all employees, DR/BCP Team, Business Area Managers/SME)	• Member of recovery team • Familiar with Plan • Know assignments • Perform specific business duties

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Functional and Full Scale Tests

- IT Recovery - test restore of technology, (i.e. data, network)
- Going offsite to a backup location tests recovery site preparedness, communications and utilities
- Trained and informed personnel are typically performing recovery steps
- Transaction testing verifies restore, connectivity and access using a person that knows the business process
- Community resources may be involved

What verifies the completeness of the Plan?

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Why Tabletop Exercises?

Provide a forum for the following:

- Team Building
- Discuss components difficult to exercise
- Validate the Plan Documentation
- Information Collection and Sharing
- Obtain consensus from team
- Evaluation of Differing Perspectives
- Practice makes Easier

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Why Tabletop Exercises?

Provide a forum for the following:

- Check that functional testing occurs
- Problem solving of complex issues
- Test considerations for new situations, ideas, processes and/or procedures
- Training/Awareness for management and staff

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Exercise Development Steps

Goals and Objectives –

What will success look like?

(SMART)

- Simple (concise)
- Measurable (how to document)
- Achievable (can this be done)
- Realistic (and challenging) (can it happen)
- Task Oriented (fits to business functions)

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Exercise Development Steps

Scope:

- Exercise Activities
- Departments Involved
- Hazard - Type of Threat Source
- Geographic or outage Impact Area
- Staff Impacted
- Facilities Impacted

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Exercise Development Steps

Building a Script from a Scenario

Threat
Risk Asmt

- Choosing a Threat to Test
  - Vulnerability – Threat Assessment
- Start with simple basic scenarios – basic Fire minimal damage

Note: For example tornado incidents in the Midwest increased awareness of their threat risk.

The state may provide ongoing tasks of planning, preparing, and training for Tornado preparedness.

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Threat Risk Assessment

Threat·Description¤	High¤ Medium¤ Low·¤ °¤	High¤ Medium¤ Low·¤ °¤	High¤ Medium¤ Low·¤ °¤	Risk·Rating¤
Accidental·explosion·—·off-site¤	°¤	°¤	°¤	°¤
Accidental·explosion·—·on-site¤	°¤	°¤	°¤	°¤
Aircraft·crash¤	°¤	°¤	°¤	°¤
Ancillary·equipment·failure¤	°¤	°¤	°¤	°¤
Arson¤	°¤	°¤	°¤	°¤
Bomb·threat¤	°¤	°¤	°¤	°¤
Bombing¤	°¤	°¤	°¤	°¤
Central·computer·equipment·failure¤	°¤	°¤	°¤	°¤
Computer·Intruder¤	°¤	°¤	°¤	°¤

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Exercise Development Steps

Using a Scenario and Building a Script

- As your DR/BC matures - make scripts more complex – increase maturity, add advanced “INJECTS”
- Consider the unexpected – not could it happen, but what if it did.
- Don’t share the scenario before the exercise
- Does the DR/BCP Team always know when a tabletop will occur?

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Exercise Development Steps

Building on a Scenario

- How quickly can you pull together key Business Team Members?
- How quickly can all key individuals be contacted and mobilized to the alternate location?
- Do you test the involvement of any outside parties? (i.e. law enforcement, safety, utilities, telephone, ISP

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Exercise Development Steps

Objectives of Exercise

Tabletop Exercise Program Objectives

- To improve operational readiness by demonstrating knowledge of the DR/BCP Plan overall
- To improve Company-wide coordination and response capabilities for effective disaster response
- To identify communication pathways and problem areas between IT, outside entities (utilities, media) business areas, regional and state emergency operations centers
- To establish timely response for safety, recovery and restore to normal operation.

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Tips for an Effective Tabletop

- **Decide how much gloom and doom you want.**
  - Do you want this to be a physical event with assets damaged and destroyed,
  - Do you just want things inaccessible?
  - Do you want death and injuries, or just to test the ability to get work up and going someplace else?
  - Do you test unavailable key people?
  - How long will your downtime duration be?

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Conducting the Exercise

- Set the Ground Rules
  - Silence Cell Phones
  - Establish timelines – Maximum 4 Hours - breaks, lunch etc..
  - Has Internal Audit been invited?
  - Who leads the exercise?
    - Can they facilitate and participate.
  - Consider issues that need to be tabled for later discussion

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Conducting the Exercise

- Set the Ground Rules (cont…)
  - Accept the Scenario as Real
  - Stay in the Scenario - stay in the mindset that the disaster is really occurring
  - Who will take notes – record issues / follow-up
  - Consider taping the exercise on an audio recorder

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Exercise – Evaluate - Update

- Planned Test scheduled in advance
  - Attendance by all BCP Team required
  - Team is aware of test scenario
- Document Team Member Attendance
- Confirm that all Team Members have their own up-to-date copy of the plan
- The BC/DR coordinator confirms updates are in the plan.

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Exercise – Evaluate - Update

- Review policies and procedures
- Discuss business area changes since last updates – detail continuity procedures
- Confirm accuracy of phone numbers
- Verify Secure and accessible storage of plan (at home)
- Executive summary of the test and discussion results

TESTING

Simulation can help you design your defense; An incident handling and disaster recovery life cycle shares similar characteristics with a business and military strategy known as OODA.

Observe, Orient, Decide Act

The OODA Loop

Military Strategist - Colonel John Boyd

Used to deal with human opponents, applicable to cyber security and cyber warfare.

OODA Loop and Disaster Recovery

- Use the OODA Loop to integrate process, technology and resources into incident response and recovery
- •The OODA Loop is not a static plan but rather a way to make accurate decisions in a rapidly changing environment
- The OODA Loop is not only about responding to an incident but preparing resources
- Incidents are often not static but rather an evolving set of events

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TIP

Experience has shown that well planned and interesting exercises yield a high level of preparedness with personnel who are able to better cope with the stressful environment of an actual emergency.

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Resources

- NIST SP800-84 - Guide to Test, Training, and Exercise Programs for IT Plans and Capabilities (google it)
- Homeland Security Exercise and Evaluation Program (HSEEP) hseep.dhs.gov, FEMA: www.ready.gov/
- National Incident Management System (NIMS: https://www.fema.gov/national-incident-management-system
- Homeland Security and Emergency Management for Your State https://dps.mn.gov/divisions/hsem
- CSOonline Business Continuity, https://www.csoonline.com/resources/
- FIPCO, https://www.fipco.com/solutions/it-audit-security/cyber-security-resources-links

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If Time Allows,
if not:

https://www.fipco.com/solutions/it-audit-security/cyber-security-resources-links

Sample Tabletop Exercise Testing

FIRE

CLICK HERE

STORM

CLICK HERE

Cyber Incident

CLICK HERE