CAN THE ZOMBIE APOCALYPSE HELP YOU SURVIVE YOUR IT PROJECTS?

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MakeMeZombie.com

Preparing Project Disasters

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

- ## Why Zombies?
  ## Metaphor for the worse case scenario

Everyday Example	Transferable Skills	Project Skills
Project Skills	Everyday Challenges	Practice, Development
Disaster Cycles	Mirror Project Cycles	Greater Preparedness

Lesson: Work skills can be developed and enhanced through everyday activities and scenarios.

Scope: Survive a Zombie Apocalypse

| Analysis and Planning | Elicitation | Requirements Management | Enterprise Analysis | Requirements Analysis | Solution Assessment |

- What are the expected outcomes and deliverables?

- What resources will we need?

- How should we approach the project?

Lesson: Your project approach is filled with subconscious biases and constraints. You must recognize them before you can mitigate them.

What Could a Zombie Apocalypse Look Like?
(NFRs, External Entities)

| Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

- A Zombie outbreak would claim city of 500,000 in just 3 days[6]

- 2005 Hurricane Katrina[3] Displaced over 1 million people

- 2003 power grid failure affected 45 million people[9]

- 1918 Spanish Flu[1] 30% of the world's population infected and 3-6% died

- 2002 SARS,[2] spread to 37 countries in weeks with a 9.6% fatality rate

- Major cities have only a 3 day supply of food in stores

Lesson: Models, prototypes, and proofs of concept can be an excellent way of defining enterprise requirements in new areas.

Properly Defining Needs

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

- Project approach
  - Start with solution
  - Base on the wrong threats or needs
  - Goal doesn't solve threats or needs
  - Unattainable goals
  - Insurmountable constraints
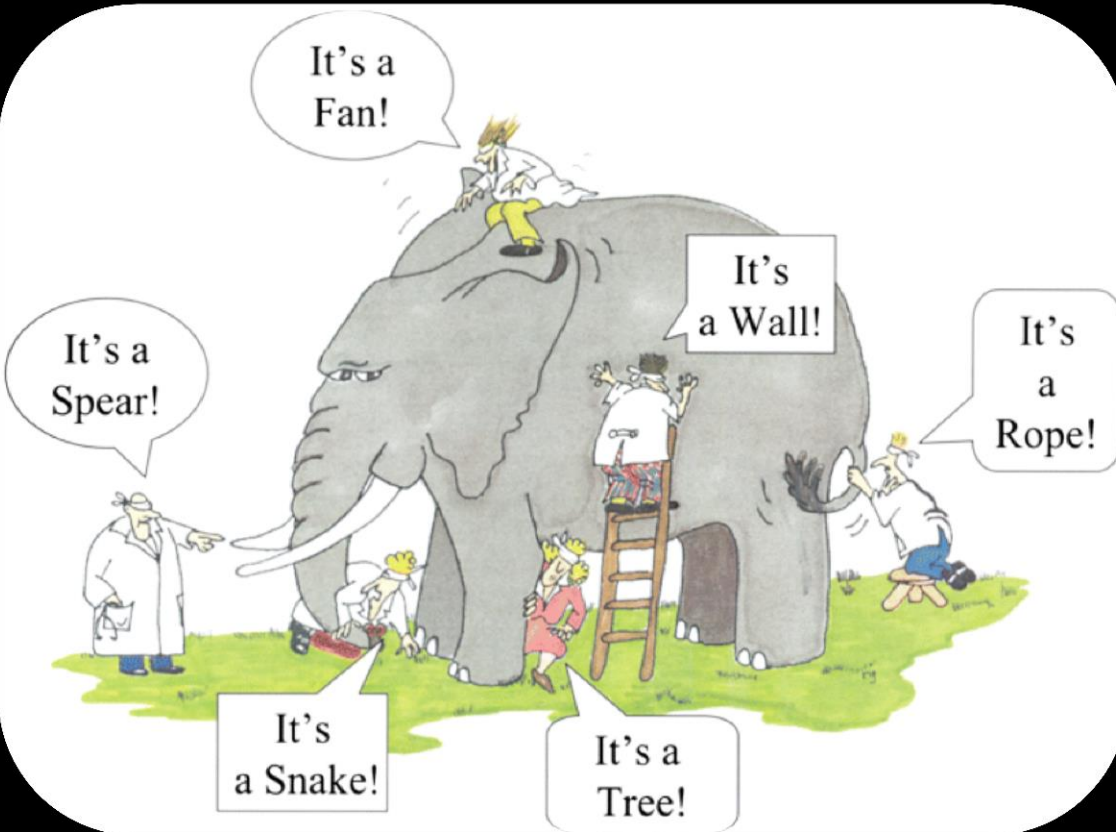
Lesson: How you define the needs or opportunity can radically affect the solution's value.

Redefine Scope and Outcomes

| Analysis and Planning | Elicitation | Requirements Management | Enterprise Analysis | Requirements Analysis | Solution Assessment |

- If you can survive zombies, you can survive anything (Over engineering the solution)

- Recognize limited time and resources

- Scope: Create a roadmap

  - Create a survival plan
    (Phase 1 - Business Processes and quick wins)

  - Prioritize implementation
    (Future phases - Operational reengineering, solution enhancements, additional capacity)

Lesson: If your outcome is only a tool, you will fall short. People, processes, org change management, training and support must be part of the solution.

Keys to Survival
(Business Context Diagram, Key Business Features, Critical Entities)

Sustenance
- 1 Gallon water/day
- ~2,500 calories/day[5]
- Medication

Provides ↑

Requires ↓

Survival Plan

Safety
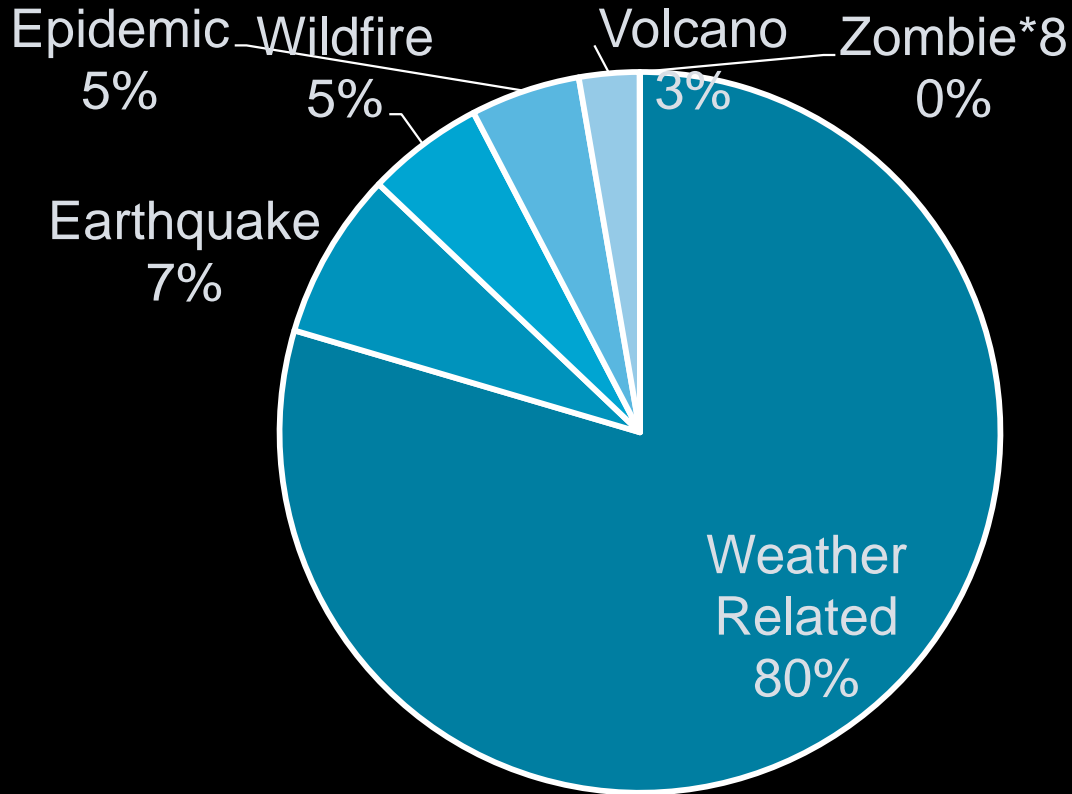- From people and animals
- For supplies and shelter

Shelter
- From weather
- For people and supplies

Lesson: When in doubt, start with a context diagram.
What are the key entities and capabilities that must exist for value realization?

Distribution of Disasters in the Americas 1980 - 2008

| Analysis and Planning | Elicitation | Requirements Management | Enterprise Analysis | Requirements Analysis | Solution Assessment |

Epidemic 5%
Wildfire 5%
Volcano 3%
Zombie*8 0%
Earthquake 7%
Weather Related 80%

Source: http://www.preventionweb.net/english/countries/statistics/index_region.php?rid=2

Lesson: Decompose data and requirements in all core areas.
This helps prioritize needs to improve ROI and lower TCO.
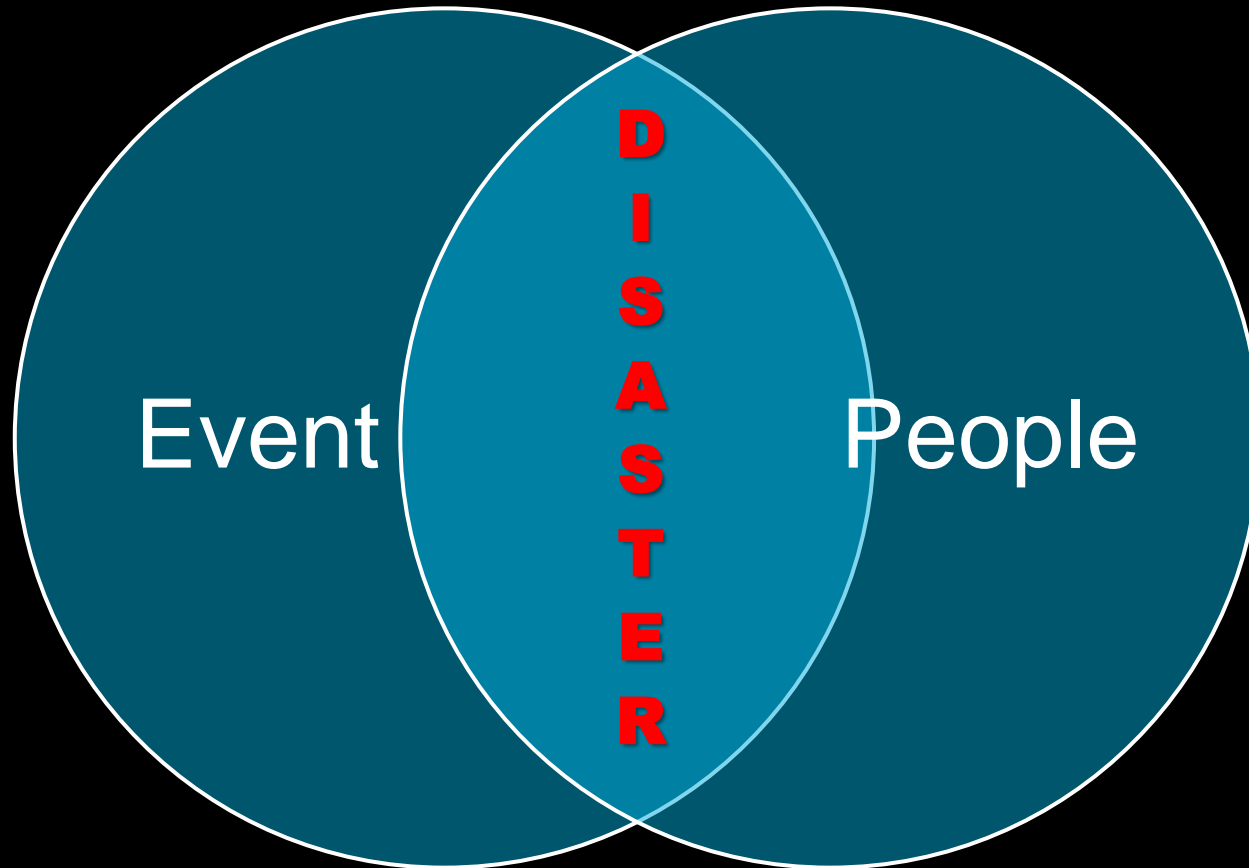
Natural Disasters Reported 1975-2011

Natural disasters reported 1975 - 2011

Number of Disasters Reported

Source: http://www.emdat.be/natural-disasters-trends
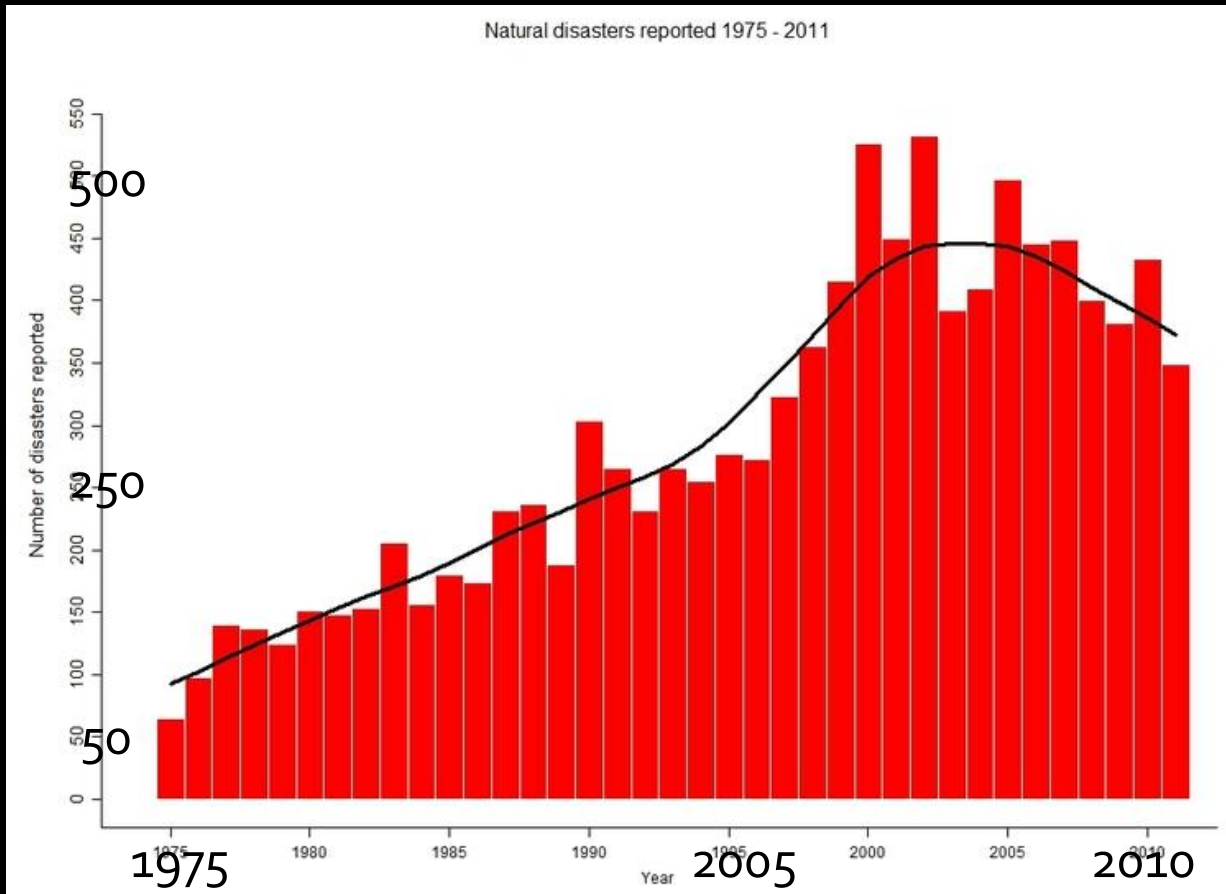
Lesson: Start with the data you have. Remember there is a big difference between data and knowledge.

What Causes a Disaster?

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

Event

D I S A S T E R

People

Miami Beach

1940s[14]

Today[15]

Lesson: Understand the context. Look for interpretation errors leading to false constraints.

Stages of a Disaster
(As Is Process Analysis, Requirements Approach)

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

Stage	Disaster	Project	Operations
Stage 0	Before the Event	Business Arch, Roadmaps	Business as Usual
Stage 1	Disaster Strikes	Scope and Deadline	Change, Failure or Need
Stage 2	Resupply	Resources	Available Tools and Support
Stage 3	Secondary Collapse	Constraints	Demand > Support
Stage 4	Recovery	Implementation	Resolution

Lesson: Business Process Mapping can be a great structure for eliciting requirements and design.

Defining Actors

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

Disaster

Unaware
Unprepared
Prepared

Project/Solution

Users	Clients
Tiered User Groups	Roles
Downstream Consumers	Management
Support Groups	Systems

Lesson: Define principal Actors, then refine scope and approach. Limit solution to required or primary Actors.

Requirements Approach

Process Modeling

- Actors
- Use Cases, Stories
- Entities
- User Experience
- NFRs

Decomposition, Elicitation
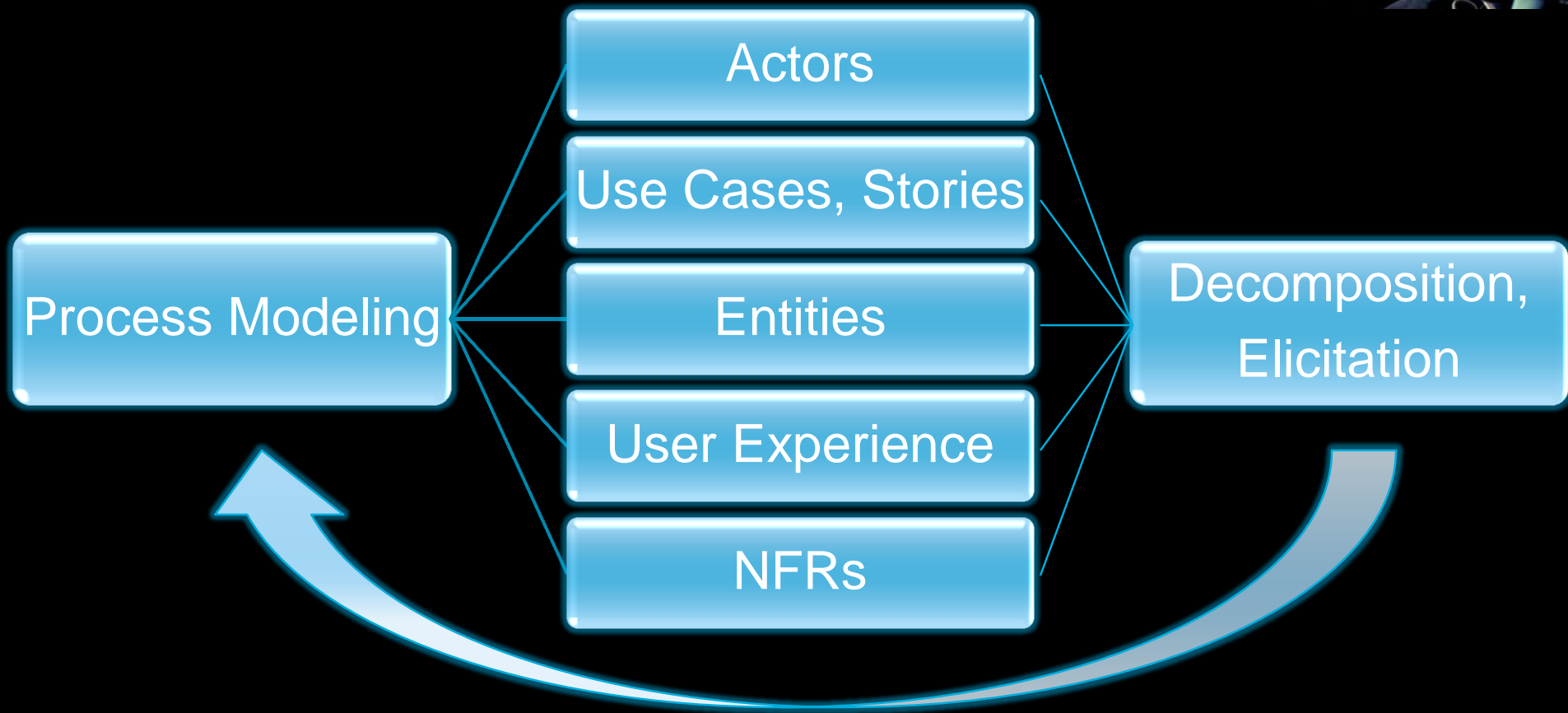
Lesson: Decide what is central to your requirements approach. Use an iterative approach to drive further discovery based on your prioritization criteria.

Most Common Mistakes
(Negative Testing, Requirements Validation)

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

Survival Mistakes

- Waiting too late to prepare or take action

- Lone wolf: Works for short duration only

- Resupply: Government, retail or distribution center

- Underestimating consumption

- Loss of communications

Project Equivalent

- Start after business impact causes loss

- Cross-team collaboration required

- Surplus resources may be gone later

- Poor forecasting and planning

- Inadequate communication

Lesson: Analogies can often help work through problems, as long as the analogy does not create false constraints or dependencies.

Preparing Project Disasters

Analysis and Planning → Elicitation → Requirements Management → Enterprise Analysis → Requirements Analysis → Solution Assessment

- Why Zombies?
  Metaphor for the worse case scenario

Everyday Example	**Transferable Skills**	**Project Skills**
Project Skills	**Everyday Challenges**	**Practice, Development**
Disaster Cycles	**Mirror Project Cycles**	**Greater Preparedness**

Lesson: Work skills can be developed and enhanced through everyday activities and scenarios.

SURVIVAL APPENDIX AND REFERENCES

Don't Fear the Zombies

- Zombies
  - No scientific basis for the animated dead being able to exist or persist
  - Encounter = Death, especially fast zombies
  - Survive 3-6 weeks, plague will burn out
- Stages of Decay[7]
  - Rigor mortis after 3-24 hours, hardening of the body
  - After 36-72 hours, muscle tissue relaxes and tissue begins to decompose and liquify
  - Full skeletonization usually in 2 weeks to 2 years

Stage 0 – Before the Event
(Define Actors and Use Cases)

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

- Public becomes aware of pending disaster.
- Actor: Unaware
  - Ignores warnings
  - Takes no action
- Actor: Unprepared
  - Rush, panic buying
  - Stays or flees area with no plan
- Actor: Prepared
  - Evaluates situation, updates and follows plan

*4

Lesson: Define principal Actors, then refine scope and approach.
Limit solution to primary Actors or required Actors.

Stage 1 – Disaster Strikes
(Process Analysis, Requirements)

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

- Bugging In (Stay in Place)
- Local supplies depleted
  - Panic buying
  - Looting
- Temporary gas shortage
- Loss of power and water
- Private supplies dwindle

- Bugging Out (Flee the Area)
- Traffic jams and blocked roads
- Conditions better/worse at destination
- Shortage of hotels
- Limited supplies
- Limited resupply

Lesson: 1. Don't forget to consider TIME as an Entity.
2. A Use Case is either static when executed or flexible to allow decisions.

Stage 2 – Resupply
(External Entities, Disaster Recovery)

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

- Companies are able to restock

- Supplies from relief groups or government

- Communities provide assistance

- Repairs to infrastructure restore services

- Supplies stolen from secondary sources

  - Non-retail businesses, warehouses, and public buildings

  - Residences and vehicles

Lesson: Don't stop at defining Inputs. Consider throughput and constraints as well.

Stage 3 – Secondary Collapse
(Process Analysis, NFRs, UAT)

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

- Hoarding creates artificial scarcity

- Additional infrastructure failures

- Disruption of public and private services

- People become more desperate leading to organized gangs

- Disease

- Starvation

*13

Lesson: When resources are scarce, hoarding often results.
(Resources, funding, inaccurate estimates, missed dependencies, rejected requests)

Stage 4 – Recovery
(Disaster Recovery, Release Planning)

Analysis and Planning	Elicitation	Requirements Management	Enterprise Analysis	Requirements Analysis	Solution Assessment

- ## Restoration or replacement of:

  - ### Food, clean water, and medical

  - ### Power

  - ### Transportation

  - ### Sanitation

  - ### Commerce

  - ### Residences

*14

Lesson: After a transformation, you are in the "new normal". Do you stop, look for incremental improvements or start over.

Weapons for Survival

- Good fixed blade knife
- Machete (not swords)
- Light weight pry bar (defense and entry)
- Rifle:
  - 30/30 lever, 30/06 or .308 bolt action
  - .22LR rifle (Ruger 10/22)
  - AR-15 semi-auto 5.56/.223
- Pistol:
  - .357/.38 revolver, 9mm/.45 semi-auto, .22LR
- Shotgun:
  - 12 or 20 gauge pump (Mossberg 500)
- Most common ammunition (resupply):
  - Government: 5.56x45 (.223), 7.62x52 (.308), 9mm
  - Private: .22LR, 30-30, 30/06, .223, .308, .38, 9mm, .45

Most Common Mistakes

- Waiting too late to prepare or take action
- Where to Bug Out: The mall, unfamiliar areas
- Lone wolf: Works for short duration only
- Weapons = Safety
- Resupply: Retail stores or distribution centers
- Relying on government or relief groups
- Underestimating consumption
- Rural = Food
- Pharmacies/Hospitals for medical supplies (use veterinarian offices)
- Loss of communications

Reference Materials: Non-Fiction

- <u>How to Survive the End of the World as We Know It: Tactics, Techniques, and Technologies for Uncertain Times</u> by James Wesley Rawles

- <u>Survival Wisdom & Know How: Everything You Need to Know to Thrive in the Wilderness</u> by The Editors of Stackpole Books

- <u>When There Is No Doctor: Preventive and Emergency Healthcare in Challenging Times</u> by Gerard S. Doyle (Author)

- <u>Medicine for the Outdoors: The Essential Guide to First Aid and Medical Emergency, 5th Edition</u> by Paul S. Auerbac

- <u>How to Shit in the Woods, 3rd Edition: An Environmentally Sound Approach to a Lost Art</u> by Kathleen Meyer

- <u>The Hot Zone: A Terrifying True Story</u> by Richard Preston

- <u>Parasite Rex: Inside the Bizarre World of Nature's Most Dangerous Creatures</u> by Zimmer, Carl

Reference Materials: Fiction

Books

- World War Z: An Oral History of the Zombie War by Max Brooks
- The Zombie Survival Guide: Complete Protection from the Living Dead by Max Brooks
- One Second After by William R. Forstchen
- Rot & Ruin by Jonathan Maberry
- Warm Bodies by Isaac Marion
- Patient Zero: A Joe Ledger Novel by Jonathan Maberry
- Apocalypse Z: The Beginning of the End by Manel Loureiro
- 77 Days in September by Ray Gorham
- The Moon Is a Harsh Mistress by Robert A. Heinlein
- Atlas Shrugged by Ayn Rand

Movies

- I Am Legend
- 28 Days Later
- Day of the Dead
- World War Z
- Warm Bodies

Web Resources

Preparation Organizations and Resources

- ZombieSquad - http://zombiehunters.org/
- SurvivaBlog.com
- Food Supply Guidelines for Survival Preparedness

Bug Out Bag and Survival Lists

- http://www.ready.gov/build-a-kit
- http://frugaldad.com/2010/02/10/bug-out-bag-essentials/
- http://www.survivalhour.com/Articles/bug-out-bag-checklist
- http://www.amazon.com/Bug-Out-Bag-Essentials/lm/R3GJVHW6V2NAZV
- http://www.howtosurvivestuff.com/survival-gear/bug-out-bag-checklist-essentials-for-your-tactical-supply-and-survival
- http://www.survivalblog.com/newbies.html
- http://www.thesurvivalistblog.net/category/bugging-out-bags-kits/
- http://inchsurvival.com/site/2012/12/bug-out-bag-checklist/
- http://www.bugoutbaglist.com/

3 Day Survival Pack

- Backpack
- MRE or Freeze dried food
- Flashlights
- Batteries
- Hand-crank radio
- Multi-tool
- Knives (folding and fixed)
- 550 paracord
- Clothes and shoes
- Water purification tabs or filter
- Multi-vitamins
- First aid kit
- Survival handbook
- Hygiene necessities
- Fire-starting materials

- Emergency blankets
- Bug repellent
- Compass
- Map
- Signal mirror
- Sun block
- Safety whistle
- Ziploc bags
- 150 grain alcohol
- Tarp
- Water bottles
- Moleskin
- Roll of duct tape
- Camp stove
- Can opener (small)

- Machete
- Prybar
- Folding shovel
- Saw
- Poncho
- Solar charging kit
- Cash
- Personal defense
- Medications
  - Anti-diarrhea medication
  - Anti- inflammatory
  - Pain
  - Decongestant
  - Prescription
  - Anti-fungal
  - Anti-inch
  - Honey

3 Weeks – 3 Months Survival

See Web Resources for detailed lists

- Expanded consumables
- Full backpack
- Solar recharger
- Water purification tablets, bleach and high flow water filter
- Camp toilet
- Cart, wagon, bike, etc. to collect/move supplies
- Firearms and ammunition (safety and barter)
- Improved shelter
- Water/rodent proof containers
- Sleeping bag

- Machete
- Prybar
- Extra boots
- Gas cans
- Fuel syphon or lightweight hose
- Alternate fuel supplies
- 2 way radios with multiple bands
- Handheld scanner
- Aluminum foil (cook, cover windows)
- Binoculars
- Night vision optics
- Additional medications

Citations

- Zombie title slide image: http://artescritorio.com/wp-content/uploads/2011/01/zombies_by_sunnydarkside.jpg
- 28 Days Later Trailer, Source: http://youtu.be/eunaclr-WgU
- City background: http://www.presidiacreative.com/wp-content/uploads/2010/04/apocalypse-37.jpg
- http://en.wikipedia.org/wiki/Spanish_flu
- http://en.wikipedia.org/wiki/Severe_acute_respiratory_syndrome
- http://en.wikipedia.org/wiki/Hurricane_katrina#Aftermath
- http://www.nypost.com/p/news/international/building_full_of_miracles_in_chile_n4OiaxrNl5kXQGV5C1yhJN
- http://www.cnpp.usda.gov/Publications/USDAFoodPatterns/EstimatedCalorieNeedsPerDayTable.pdf
- http://www.wired.com/wiredscience/2009/08/zombies/
- http://science.howstuffworks.com/body-farm1.htm
  http://www.environmentalgraffiti.com/chemistry/news-afterlife-human-corpse-stages-decomposition?image=1
- http://miami.cbslocal.com/tag/zombie-attack-florida/
  http://www.ibtimes.com/another-zombie-attack-naked-florida-man-jeremiah-haughee-climbs-roof-bites-home-owner-and-cop-722177
  http://www.nydailynews.com/news/national/florida-zombie-attack-naked-man-storms-girlfriend-house-bites-chunk-man-arm-article-1.1099760
- http://en.wikipedia.org/wiki/Northeast_blackout_of_2003
- http://en.wikipedia.org/wiki/February_2013_nor'easter
- http://money.cnn.com/2005/09/01/markets/gas_prices/
- http://www.vermonttimberworks.com/Web-Photos/Barns/Barn-Raising-hi-res.jpg
- http://www.earthrights.org/blog/long-wait-over-un-general-assembly-resolution-establishes-human-right-access-water-and
- http://www.myspace.com/alvininnaples/photos/15456183#%7B%22ImageId%22%3A15456183%7D
- http://askaskowitz.com/about-miami-beach/
- http://signature-strength.com/wp-content/uploads/2013/09/different-perspectives.gif
- http://images.alphacoders.com/203/203213.jpg

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