

CAN THE ZOMBIE APOCALYPSE HELP YOU SURVIVE YOUR IT PROJECTS?

© 2013-2015

Hans Eckman | HansEckman.com

@HANSECKMAN | #BAOT #PMOT

The content in this presentation is the sole responsibility of Hans Eckman.

Stay Connected, Learning is Infectious

- Hans Eckman
 - <http://HansEckman.com>
 - Hans@HansEckman.com
 - <http://www.linkedin.com/in/hanseckman>
- Twitter
 - @HansEckman
 - #BAOT #PMOT
- The content in this presentation is the sole responsibility of Hans Eckman.
- No animals were harmed during the creation of this presentation. Please support your local animal rescue groups.



Preparing Project Disasters



- Why Zombies?
Metaphor for the worse case scenario



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

Scope: Survive a Zombie Apocalypse



- 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?

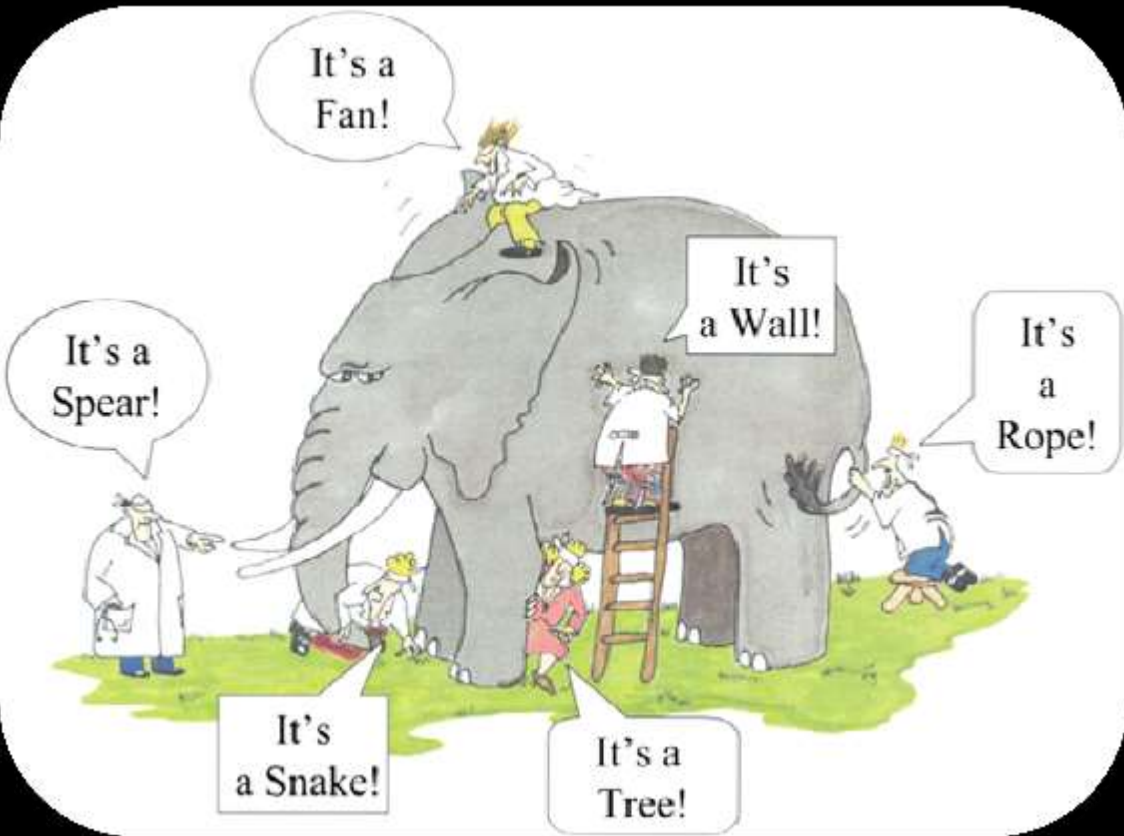
(NFRs, External Entities)



- 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



- 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



- 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

Survival Plan

Requires

Safety

- From people and animals
- For supplies and shelter

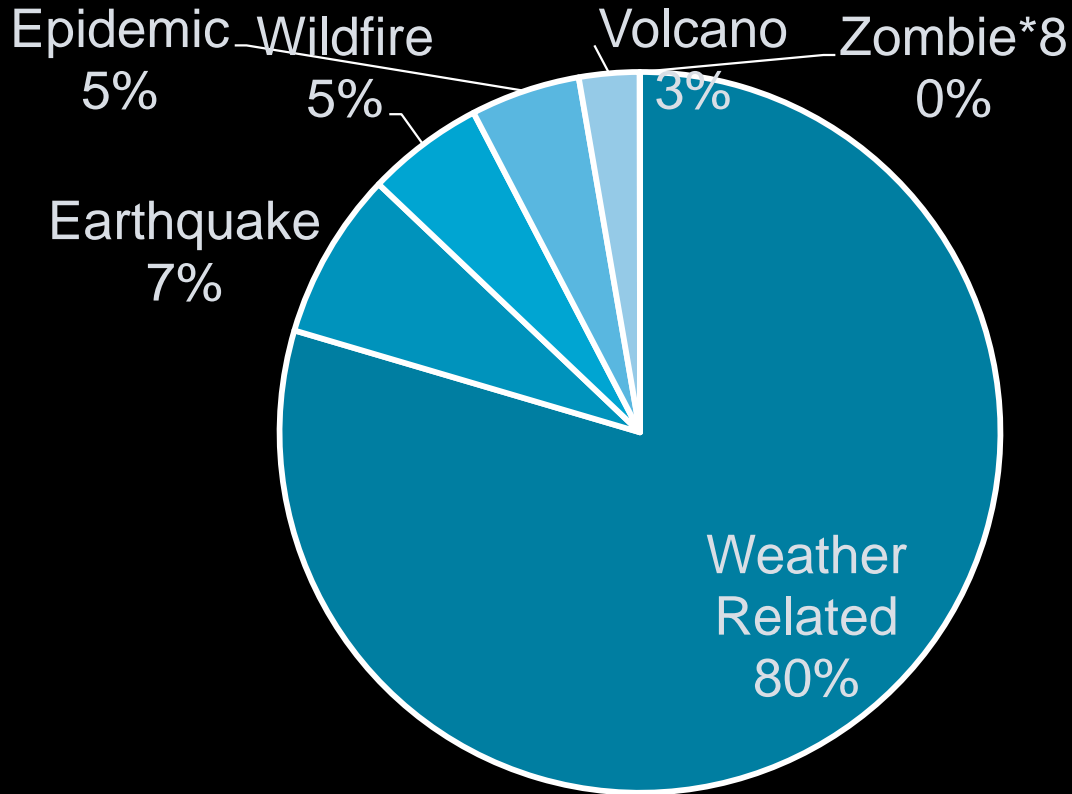
Shelter

- 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



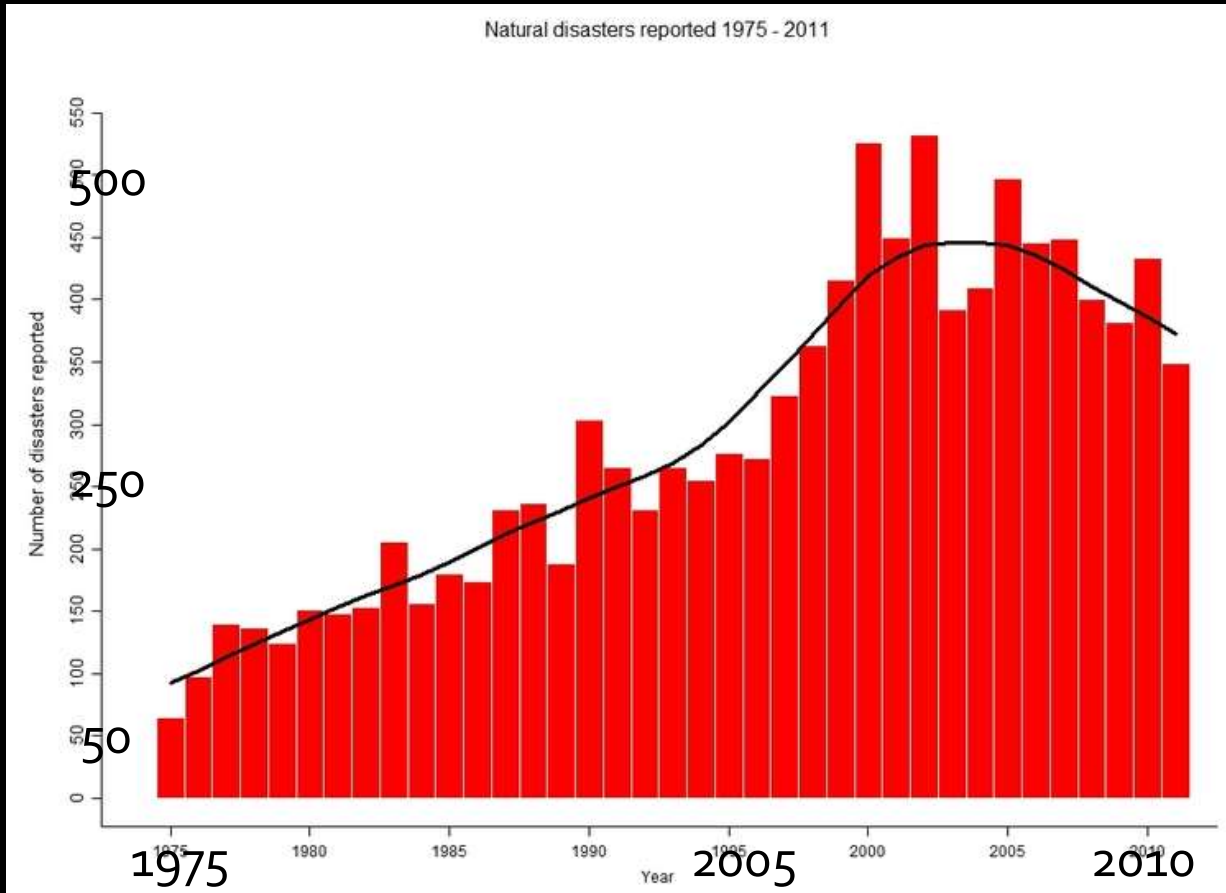
Source: http://www.preventionweb.net/english/countries/statistics/index_region.php?rid=2

Lesson: Decompose data and requirements in all core areas. This helps prioritize needs to improve ROI and lower TCO.

Natural Disasters Reported 1975-2011



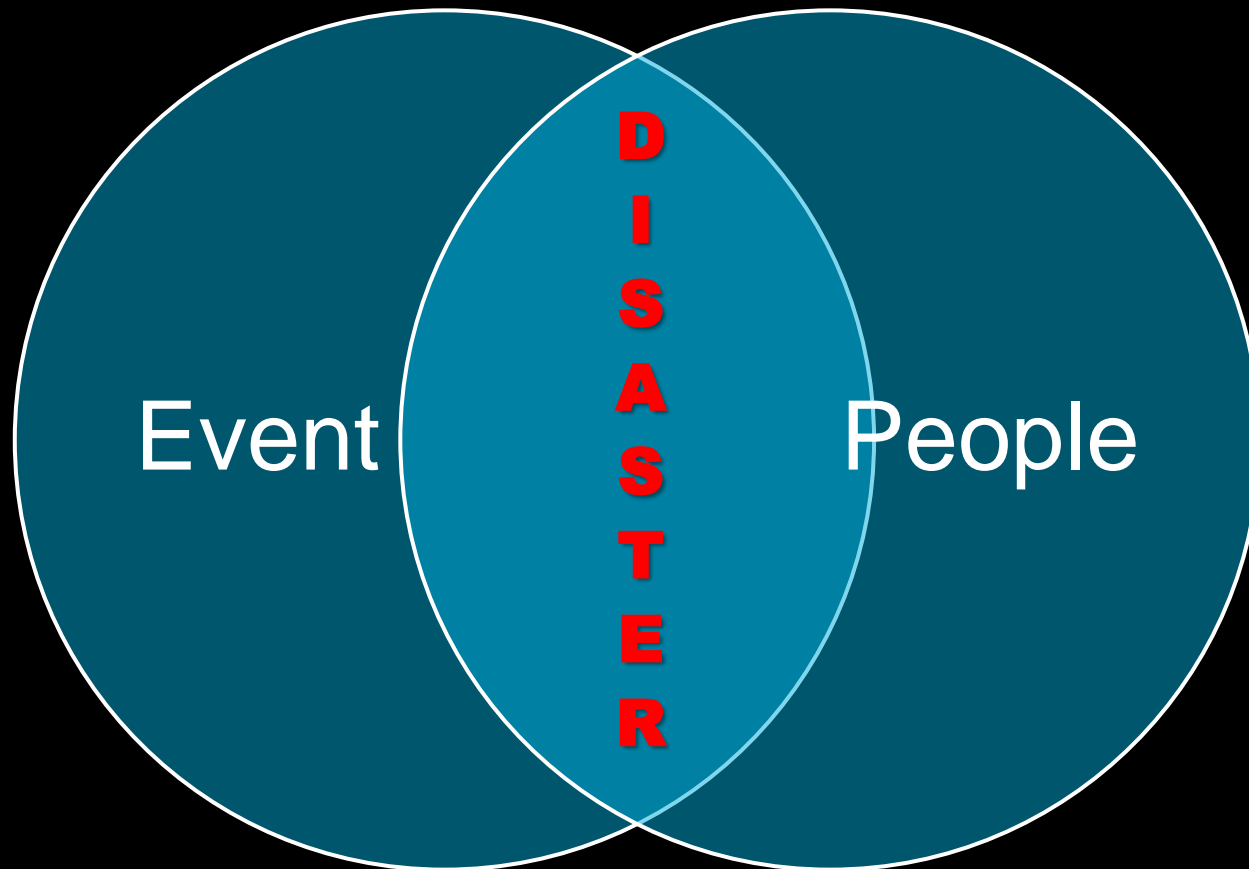
Number of Disasters Reported



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?



Miami Beach



1940s^{*14}



Today^{*15}

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

Stages of a Disaster

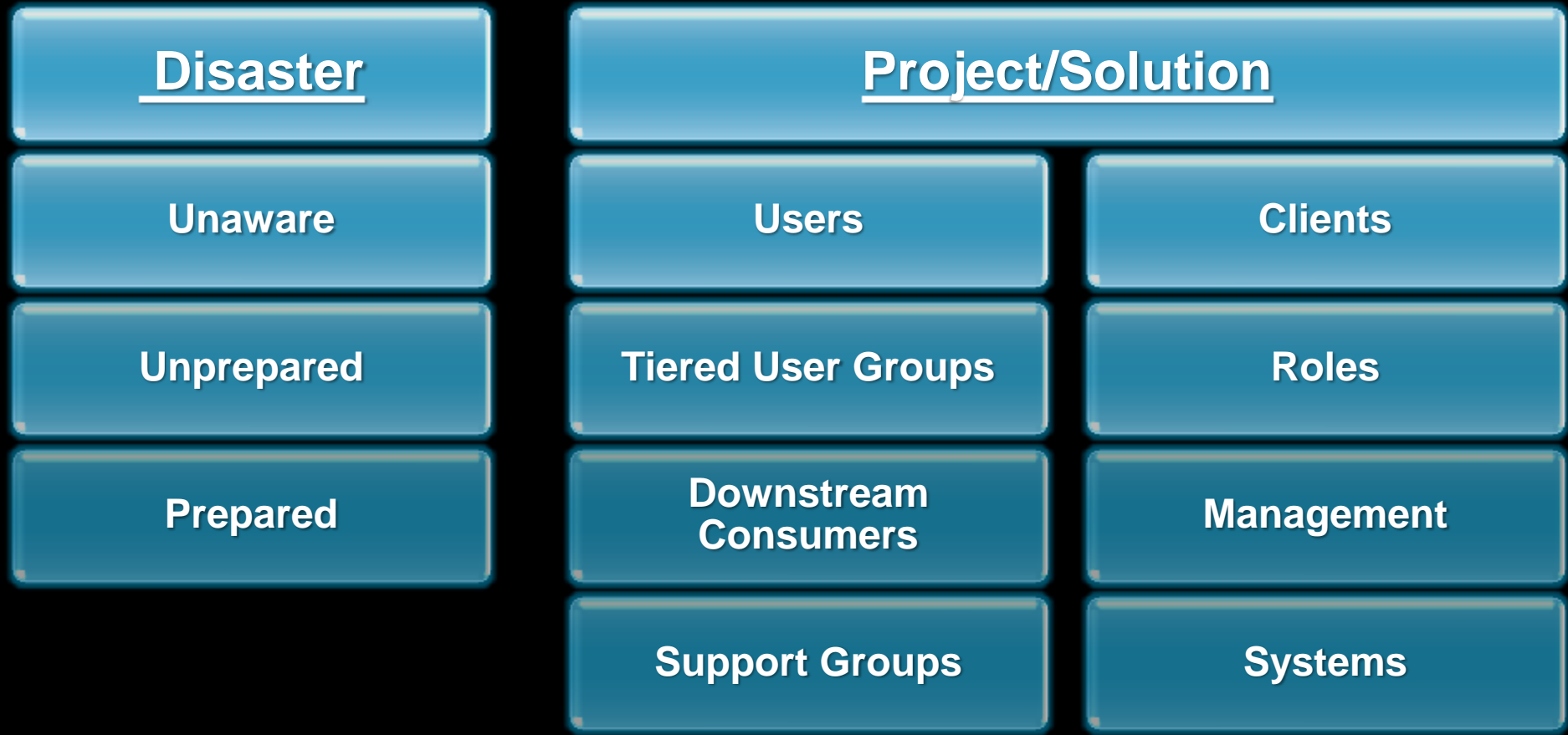
(As Is Process Analysis, Requirements Approach)



<u>Stage</u>	<u>Disaster</u>	<u>Project</u>	<u>Operations</u>
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

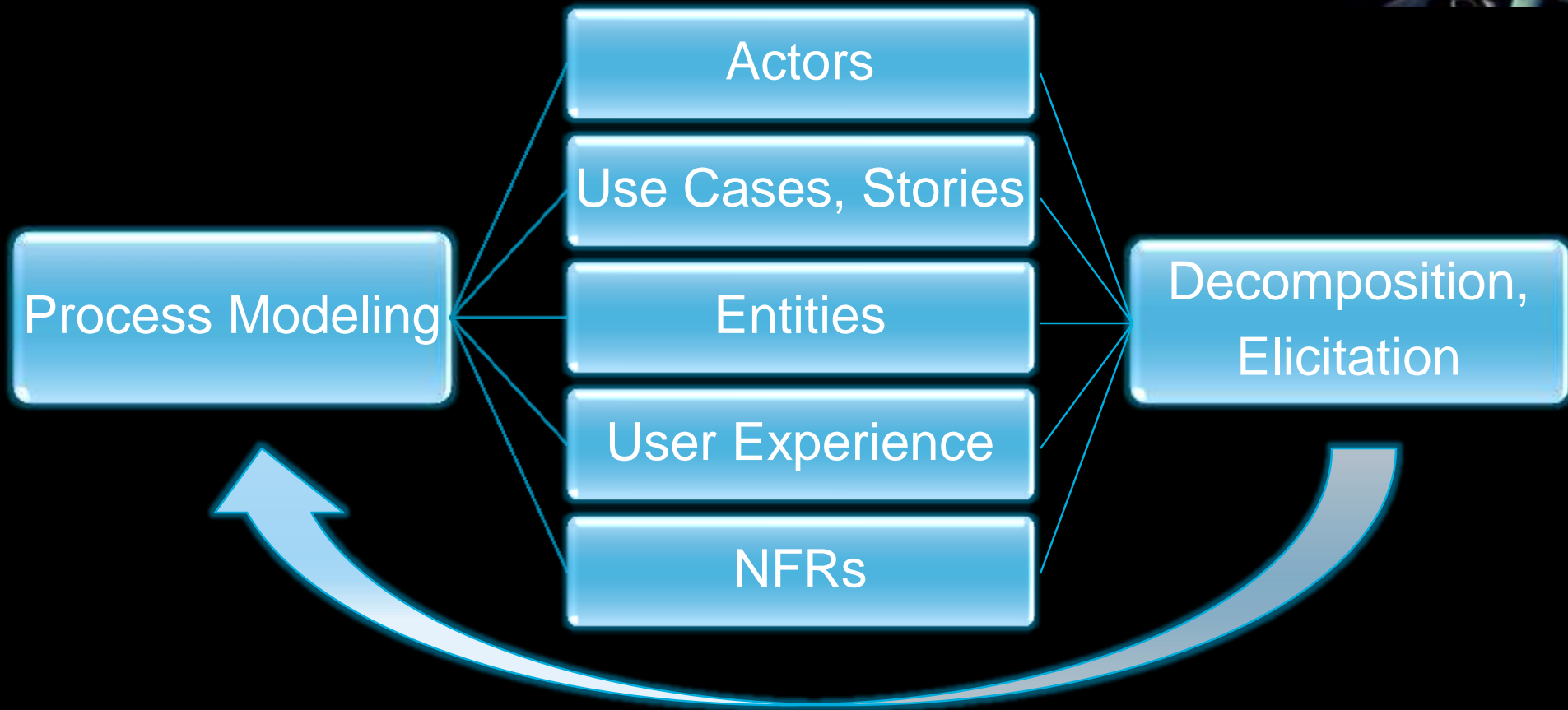
Lesson: Business Process Mapping can be a great structure for eliciting requirements and design.

Defining Actors



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

Requirements Approach



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)



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



- Why Zombies?
Metaphor for the worse case scenario



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

A dark, atmospheric scene of a ruined city. The image shows the skeletal remains of buildings and structures, with a cloudy sky in the background. The overall tone is somber and desolate.

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)



- 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)



- 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)



- 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)



- 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)



- Restoration or replacement of:
 - Food, clean water, and medical
 - Power
 - Transportation
 - Sanitation
 - Commerce
 - Residences



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

- How to Survive the End of the World as We Know It: Tactics, Techniques, and Technologies for Uncertain Times by James Wesley Rawles
- Survival Wisdom & Know How: Everything You Need to Know to Thrive in the Wilderness by The Editors of Stackpole Books
- When There Is No Doctor: Preventive and Emergency Healthcare in Challenging Times by Gerard S. Doyle (Author)
- Medicine for the Outdoors: The Essential Guide to First Aid and Medical Emergency, 5th Edition by Paul S. Auerbac
- How to Shit in the Woods, 3rd Edition: An Environmentally Sound Approach to a Lost Art by Kathleen Meyer
- The Hot Zone: A Terrifying True Story by Richard Preston
- Parasite Rex: Inside the Bizarre World of Nature's Most Dangerous Creatures 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/](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_n4OiaxrNI5kXQGV5C1yhJN
- <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>

Stay Connected, Learning is Infectious

- Hans Eckman
 - <http://HansEckman.com>
 - Hans@HansEckman.com
 - <http://www.linkedin.com/in/hanseckman>
- Twitter
 - @HansEckman
 - #BAOT #PMOT
- The content in this presentation is the sole responsibility of Hans Eckman.
- No animals were harmed during the creation of this presentation. Please support your local animal rescue groups.

