

**CAN THE ZOMBIE APOCALYPSE HELP
YOU SURVIVE YOUR IT PROJECTS?**

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

Preparing for Any Project Demand



■ Why Zombies?

- Metaphor for the worse case scenario
- Model for transferrable skills
- Zombies are fun!
Creates an new way to develop/practice skills

■ Transferrable Skills

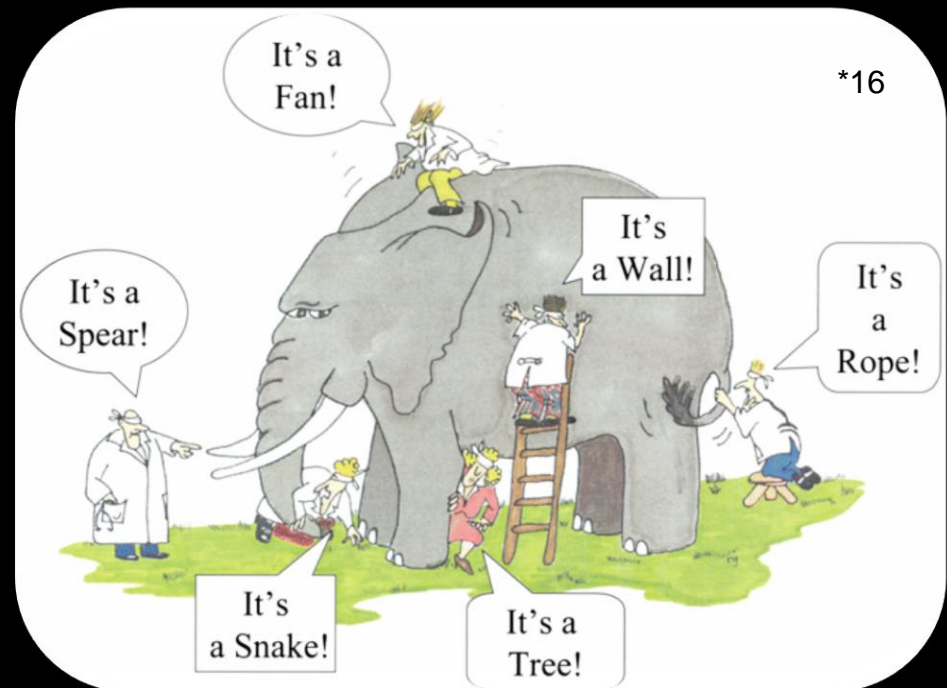
- Enterprise analysis
- Planning
- Change management
- Data analysis
- Solution validation
- Process decomposition

Lesson: Work skills can be developed through everyday activities.

Properly Defining Needs



- Project approach
 - New goal
 - Market opportunity
 - Respond to threat
 - Start with solution



Lesson: How you define the needs or opportunity can radically affect the solution's value.

Natural Disasters Reported 1975-2011



Analysis and
Planning

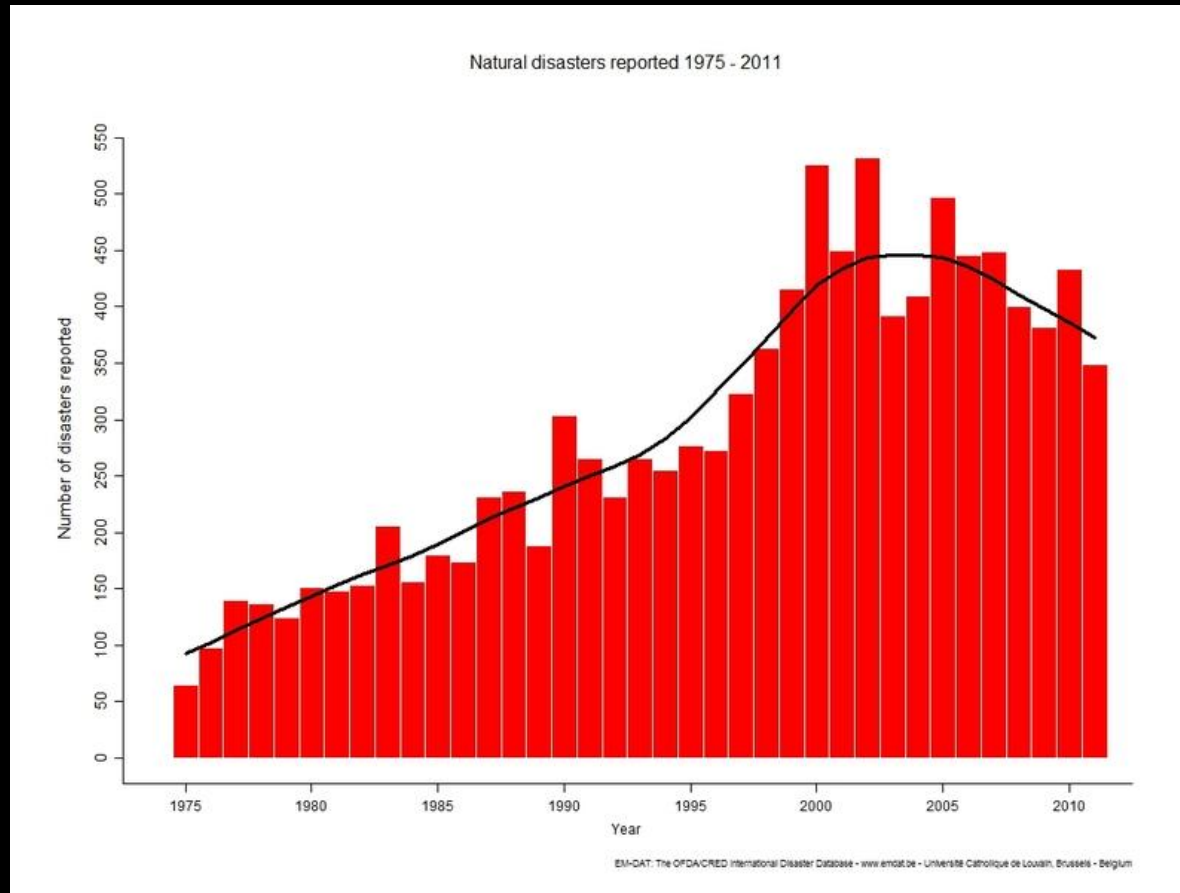
Elicitation

Requirements
Management

Enterprise
Analysis

Requirements
Analysis

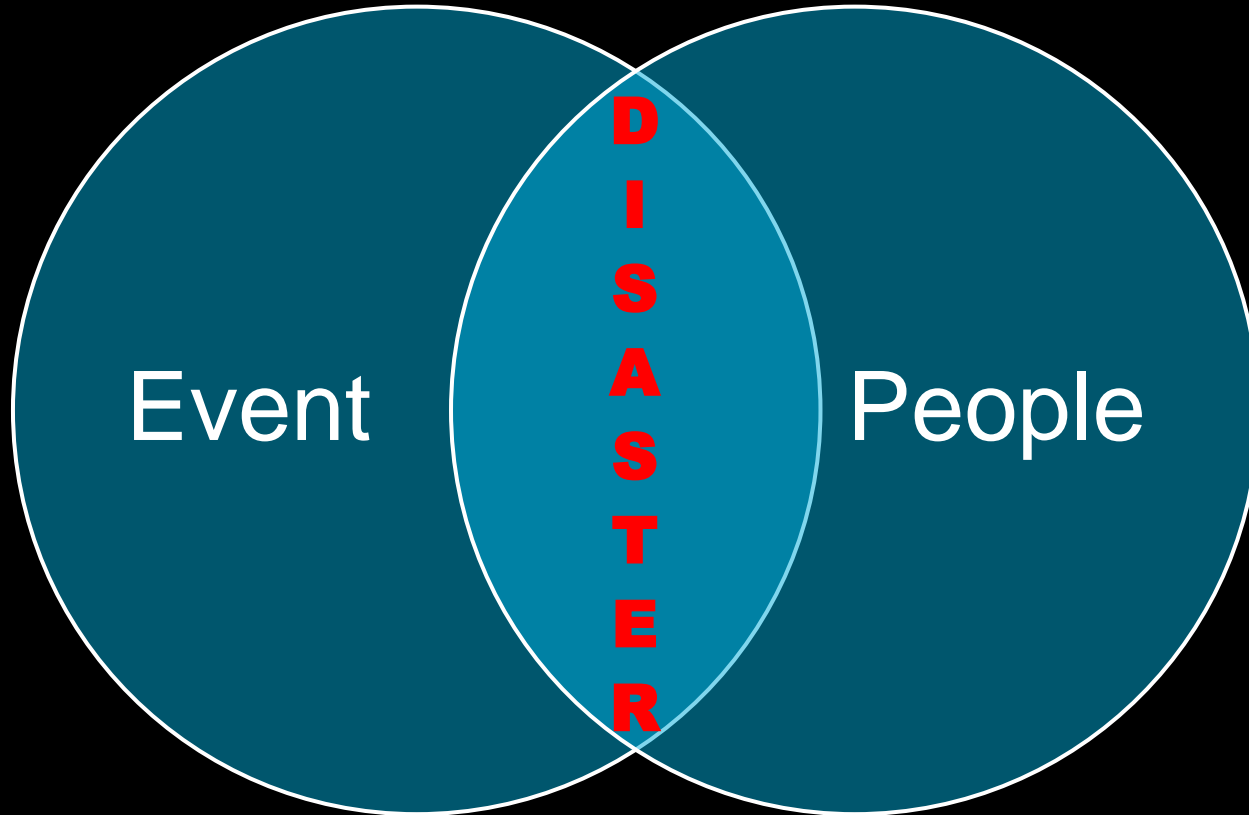
Solution
Assessment



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}



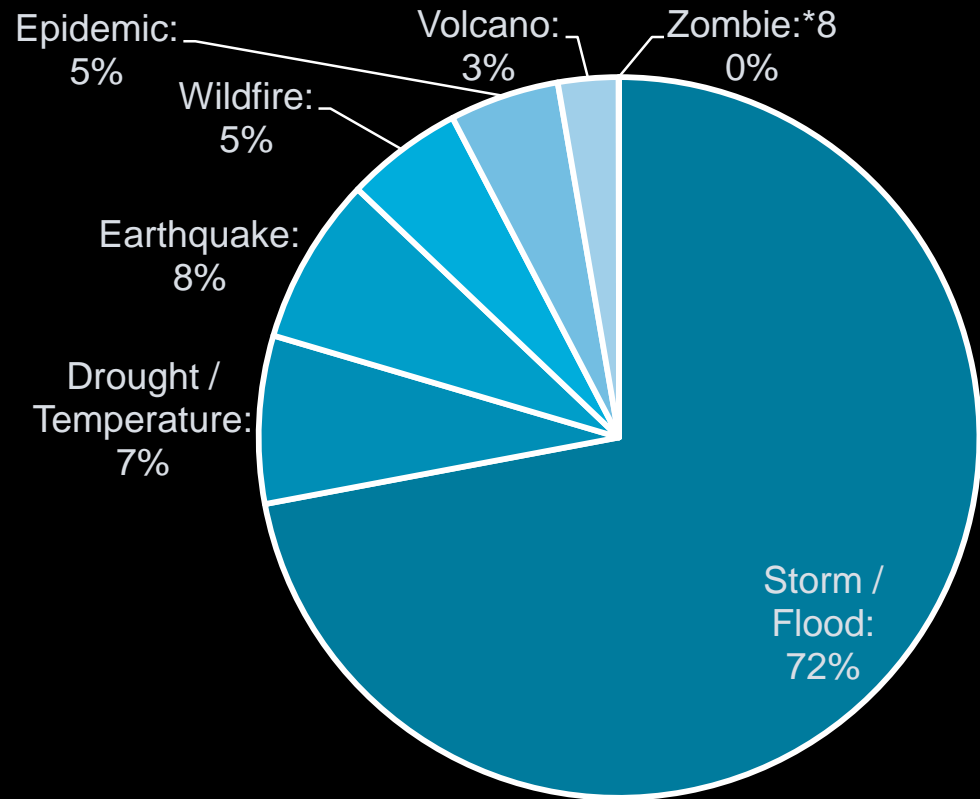
Today^{*15}

Lesson: Understand the context.

Distribution of Disasters in the Americas 1980 - 2008



Overview:	
Events:	2,101
People killed:	154,662
Avg. killed/year:	5,333
People affected:	165,729,935
Avg. people/year:	5,714,825



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

Lesson: Decomposition is required in core areas. Helps prioritize needs, improve ROI and lower TCO.

Zombies, not likely... Potential Apocalypses?



Analysis and
Planning

Elicitation

Requirements
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Requirements
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Solution
Assessment

- Spanish Flu – 1918*¹
 - 30% of the world's population infected
 - 3-6% of the entire global population died
- SARS: Severe Acute Respiratory Syndrome 2002*²
 - 8,273 cases and 775 deaths worldwide (9.6% fatality)
 - Only weeks to spread to 37 countries
- Hurricane Katrina– 2005*³
 - Displaced over 1 million people (Failure of levees)
 - Reduced Gulf oil production by 24% for 6 months

**Lesson: Past performance is not an indicator of future performance.
Reaction = Short term solutions; Root Cause = Long term solutions**

Our Fragile Society

(NFR, Process Analysis, External Entities)



- A Zombie outbreak would claim city of 500,000 in just 3 days^{*6}
- Most major cities have only a 3 day supply of food in stores and local markets
- A 3 day gas interruption after hurricane Katrina caused a 3+ week shortage in Georgia^{*11}
- 2003 power grid failure affected 45 million people^{*9}, and 700,000 without power during 2013 snow storm Nemo^{*10}
- In 2013, public statements from VP Biden on gun control caused a 18+ month ammunition shortage

Lesson: To implement long term improvements, focus on the cause not the symptoms.

Redefining Project Scope and Outcome



- Failed Scope / Needs Definition
 - Increasing frequency of threats
 - Type of threat:
 - Sorry, no zombies
 - Disease – High fear factor, lower probability
- New Scope
 - Create plan to cope with core needs during any disaster

Lesson: How you define the problem/outcome dramatically affects the value of the solution. Target individual symptoms or root cause for any situation.

Keys to Survival

(Business Context Diagram, Key Business Features)



Lesson: When in doubt, map with a context diagram.

Stages of a Disaster

(As Is Process Analysis, Requirements Approach)



**Stage 0
Before the Event**

**Stage 1
Disaster Strikes**

**Stage 2
Resupply**

**Stage 3
Secondary Collapse**

**Stage 4
Recovery**

- Use cases / Stories
- Non-functional requirements
- Models
- User experience
- Entities
- Detailed process decomposition

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

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



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.

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: 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.



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- Download presentation and guides
- 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 rescue groups.



The background image is a dark, monochromatic scene of a ruined city. The sky is filled with heavy, dark clouds, with some light breaking through, creating a dramatic, high-contrast atmosphere. The city's structures are mostly skeletal, with exposed steel beams and twisted metal. In the foreground, there is a large pile of rubble and debris, suggesting a recent disaster or war. The overall mood is one of desolation and survival.

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

Weapons for Survival

- Machete (not swords)
- Light weight pry bar (defense and entry)
- .22LR rifle with detachable or tube magazine (Ruger 10/22, Henry lever action)
- Pistol: .38 revolver, 9mm/.45 semi-auto, .22LR
- Shotgun: 12 or 20 gauge pump (Mossberg 500)
- Rifle: 30/30 lever, 30/06 or .308 bolt action
- Semi-auto Rifle: AR-15 semi-auto 5.56/.223
- Most common ammunition (resupply):
 - Government: 5.56x45 (.223), 7.62x52 (.308), 9mm
 - Private: .22, 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 center
- Relying on government or relief groups
- Underestimating consumption
- Rural = Food
- Pharmacies/Hospitals for medical supplies (veterinarian offices)
- Loss of communications

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
- 150gr 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-itch
 - 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

Web 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/>

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
- 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

Citations

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- 28 Days Later Trailer, Source: <http://youtu.be/eunaclr-WgU>
- City background: <http://www.presidiacreative.com/wp-content/uploads/2010/04/apocalypse-37.jpg>
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- 13. <http://www.earthrights.org/blog/long-wait-over-un-general-assembly-resolution-establishes-human-right-access-water-and>
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- 15. <http://askaskowitz.com/about-miami-beach/>
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