Why consider using a model similar to the “what if” hazard analysis model used in technical/industrial engineering for remote storage facilities?

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Topics

... « what if » hazard analysis model ...

Aim

Really a need?

- From the ideal conception to so other many realities
- From the theoretical result to the reality
- From the current means to what the future holds for us

The model in a few words and why think about it for our concern?

Examples of issues/topics/items which could go through a « what if » approach

How to put this into practice?
Aim

... « what if » hazard analysis model ...

Whatever the situation, providing, as soon as an opportunity arises, space to risks assessment

Why?

Necessity to ensure

- staffs safety (from the institution + others that could be called to intervene)
- collections security
- staffs comfort and buy-in

How?

Through a concept

- Flexible
- Easily adaptable
- Practical oriented
- Which doesn't look like a Loch Ness monster

Really a need ?
From the ideal conception to so other many realities

... « what if » hazard analysis model ...

What do you expected? With such circumstances (*) we try to do our best.....

(*) between the ideal solution dictated by good practice and the facilities made available as well as the operating conditions there is often a difference which in some cases can be substantial

Let’s think about some elements that can have an impact:
- Political stakes
- Fully busy agenda’s by other projects
- Budget limits
- .......

Heaven

Hell
Really a need?
From the theoretical result to the reality

**Infrastructures**
- Gap with as-built

**Use**
- Inappropriate use
- Lack of maintenance

**Incidents**
- Even with good materiel you can be confronted to failures
- “External” hazards

Previous slide may have a serious impact on all this!!

A Rolls Royce driven by a bad driver may also lead to damageable swerves !!!!

Budgetary it was a bargain. Nevertheless, a building in a flood risk area was maybe not the best choice, so sorry about that !!!

Really a need?
From the current means to what the future holds for us

**Budget cuts**
- Lack of maintenance
- Lack of staff
- Lack of time
- ....

**Perverse effects**
- Turn-over → lack of knowledge
- Not used, why keeping it?
- ....

**Environment changes**
- Flood
- A district that has evolved into a dangerous one
- ....

From the theoretical result to the reality

... « what if » hazard analysis model ...

All these problems, I really do not understand, this project was so beautiful !!

Environment

.... « what if » hazard analysis model ...

A district that has evolved .... « what if » hazard analysis model ...

... « what if » hazard analysis model ...

External hazards

.... « what if » hazard analysis model ...

From the theoretical result to the reality

... « what if » hazard analysis model ...

Budget cuts

.... « what if » hazard analysis model ...

From the theoretical result to the reality

... « what if » hazard analysis model ...

Budget cuts
**The model in a few words**

**Why think about it for our concern?**

**Key elements**
- Structured brainstorming method of
  - with the help of "what if?" questions, identifying what things can go wrong concerning a process, a system, an equipment, a procedure, an activity ...
  - judging the likelihood and severity of those consequences/situations occurring
  - formulating recommendations / proposing solutions
- Led by a team presenting diversity in terms of experiences & knowledge (from designers to users/operators familiar with or involved in such facilities/operations)
- Based on the relevant gathered information & documentation

**Key advantages**
- Easy to organize
- Flexibility
- Can evolve by steps (from modest to ambitious)

**Examples of Issues/topics/items which could go through a “what if?” approach**

- **Transport**
  - What if?
    - Accident
    - Blocked in the traffic
    - Van breaking down
    - ....

- **Collection return procedure**
  - Collection items departure procedure
  - What if?
    - No operational alert system
    - No staff present
    - Lack of intervention material/equipment
    - ....

- **Intrusion**
  - Flood
  - Strategic equipment
  - Control teams
  - Perverse effect
  - What if?
    - Power outage
    - Failure of any kind
    - ....
    - ....

**“What-if” Analysis**

**Summary of the “What-if” Review of a Veolia’s Compressed Air System**

- Immediate corrective actions
- Ultimate corrective actions
- Safeguards
- Recommendations

- Interconnections with other systems/safety aspects
- Interactions between the facilities and equipment involved
- Reactions which might affect the environment or materials stored in those areas

Even if the processes or systems seem less clearly definable in our case than in industry, being able to apply such a method appears as a good choice to easily develop a “risk assessment” spirit for remote storage

**KBR**

Where time is treasured
How to put this into practice? … « what if » hazard analysis model …

What about making a game of it?

Keen on helping us to develop it?

What about starting the process now?

Thank you for your attention