

Introduction to Risk Management

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Aim and objectives

- This presentation introduces learners to **Risk management** defining basic terms and concepts. It also describes the **management lifecycle** within which the risk management process is identified and defined.
- The **objectives** of this presentation are to:
 - Familiarize learners with risk management
 - Highlight where risk management is located within the service lifecycle and define it
 - Define basic concepts

- At the end of this presentation, you will be able to:
 - Recall the definitions of the key concepts of Risk Management
 - Identify the basic factors risk management is based upon
 - Explain what risk management means

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Introduction



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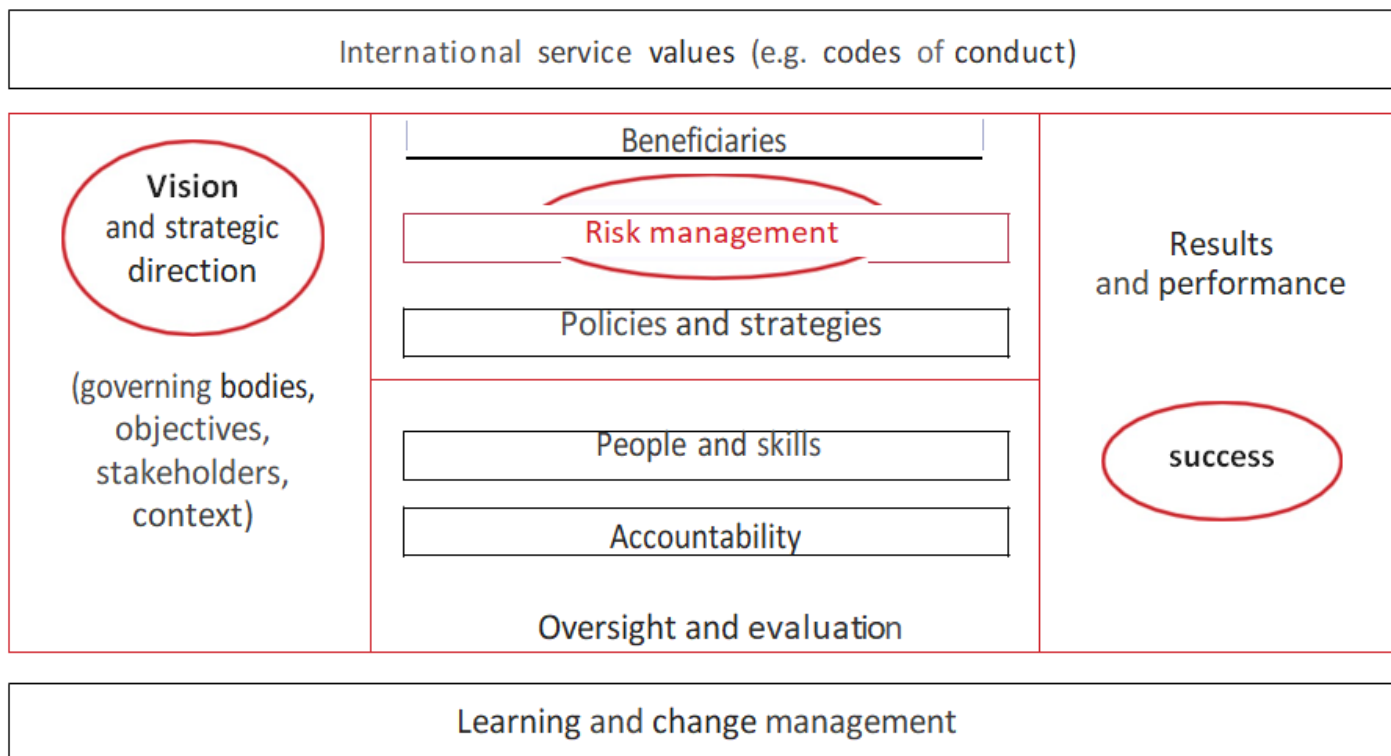
- **Risk Management** is a set of techniques related to the design, identification, analysis, management and continuous monitoring of risks and their sources.
- **Risk Management techniques** can be applied to any process, operation, project or organisation.
- **Risk Management processes** are active throughout the management process. Their goal is to increase the likelihood and effect of positive events and to reduce the likelihood and consequences of the negative ones.

Why is Risk Management important? (1/2)

- In this fast-paced world, **changing environments** and constant innovation (e.g. in science and technology) bring risks in the shape of threats but also opportunities.
- The huge increase in connections — e.g. travel and information technologies — involves a higher degree of interdependence, which means that **stakeholder views** become increasingly important.
- Demonstrating results has become increasingly important in maintaining a Museum's rank among the leading agencies, its ability to **deliver expertise and added value**, and its overall credibility in the international arena.

Why is Risk Management important? (2/2)

- Every organization has to live with risk. Managing risks well is therefore a vital element of good governance and management, as illustrated in the figure below



What is a risk?

- **Risk / hazard** is a measure of the likelihood and consequences of not achieving one or more service/process/project objectives.
- The rendering of the English term 'risk' excludes the positive meaning of the term: a risk can have **positive effects** as well.
- For example, the decision of a Digital Collection Curator to upload a digital collection in an on-line database at 80% of the time normally required (fast tracking), is a risk that can turn into a problem (if something goes wrong) or an advantage (if all goes well).
- Usually a risk is more likely to develop into a **problem** and for the sake of simplicity this perspective will be discussed from this point onwards.

- The risk contains **uncertainty**.
- For example, when executing a process, questions such as "will we be able to deliver the X-piece within the timeframe?" Or "did the team that designed the process made no mistakes?" arise.
- Risk is therefore linked to:
 - **Probabilities**: the risk of becoming a problem and
 - **Consequences**: affecting the objectives of the project.

These two parameters should be treated together rather than separately.

➤ Consider the following example:

In a Museum digital collection project, Objective A is the design of a new digital collection and Objective B is the production of the digital artefacts of the collection.

- The **probability** of the development team failing to achieve A is 5% and B is 20%.
- But the **consequences** of not achieving A are far more serious (more difficult to deal with) than not achieving B.
- Thus these two parameters must be examined together.

- Generally, risk has three (3) parameters:
 - an event (which is usually an unwanted change)
 - one possibility (for the event to take place)
 - consequences (on one or more of the objectives of the process or organization under investigation)

- The risk of any risk can be expressed as a function of probability and consequences:

$$\textit{Risk} = f(\textit{event}, \textit{probability}, \textit{consequences})$$

Sources of risk (1/2)

- As the probability or severity of the consequences increases, so does the risk.
- Another factor to consider is the causes of the risks. Some sources of danger are well known and highly manageable through safety triggers.



- The following example is a typical one:
- In a digital collection project, two groups of curators work on two different sub-collections of digital artefacts that later need to be joined together and uploaded to the Museum's Information System (IS). There are two sources of risk in this case:
 - the risk of the two sub-collections not being thematically compatible with each other and
 - the risk of either (or both) being incompatible with the IS.
 - Anticipating this risk, the Digital Strategy Project Manager,, provided detailed thematic and technical guidelines to the project teams before hand.

- The previous analysis leads us to formulate one more logical relation to risk:

$$\textit{Danger} = f(\textit{source of danger, safety triggers})$$

- As the risk sources increase, so does the risk. On the contrary, it decreases with the increase in safety trigger efficiency.
- It is now generally accepted that as long as we recognize the existence of risk we must be prepared for the consequences. This process led to the design of specific risk management methods.

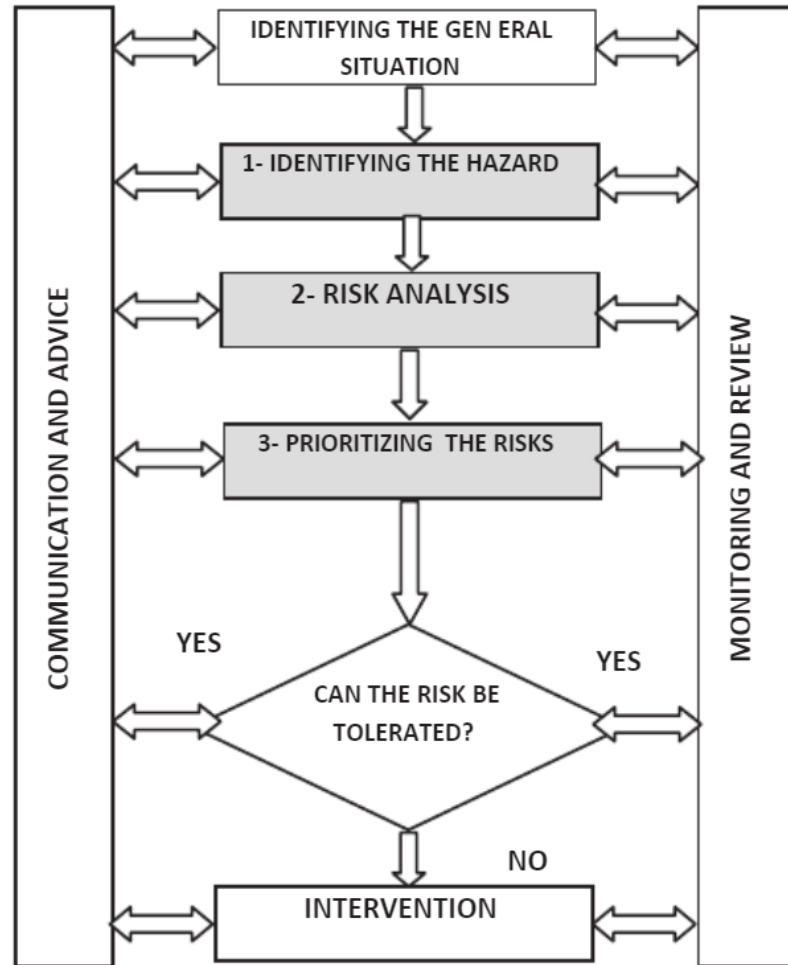
The cost of Risk Management

- It is worth stressing that the introduction of management processes increases the cost of any project or process.
- In many small (but also large organizations), managers prefer to ignore the risk either because of mentality or because of cost.
- Unfortunately, the "if something bad happens, solutions must be improvised on the spot" mindset often raises the costs and, in particular, reduces the morale of the human resource.
- Practice shows that Risk Management can be designed to be effectively applied to organizations of all sizes.

Processes and functions



The figure depicts the processes of risk management according to the International Standardization Organization (ISO):



- Risk Management usually includes the following processes:
 - **Risk Management Planning:** deciding on how to design and implement the risk management procedures. It focuses on the way in which risk management procedures are enacted.
 - **Risk identification:** identification of risks that may affect the work and recording of their characteristics.
 - **Qualitative Risk Analysis:** Ranking of risks based on the probability of occurrence and the impact.

- Risk Management usually includes the following processes:
 - **Quantitative Risk Analysis:** Quantitative analysis on the impact of identified risks to project goals.
 - **Risk Response Planning:** design of actions for the mitigation of risks that have a great probability to become problems for the project.
 - **Monitoring and controlling risks:** tracking identified risks, identifying new application response plans and ongoing evaluation of risk management processes.

Planning and tolerance

- **Proper planning** guarantees the proper operation of the other Risk Management activities.
- Planning focuses on the way in which risk management processes are implemented. It is directly related to the tolerance to be attributed to the potential risks of a project.
- In some cases the **tolerance** is high because the risks are high but the profit is high (high risk / high gain).
- In other cases the tolerance may be low because e.g. the museum wants to attract new people and establish a long-term relationship with them.

Risk Management within Cultural Organizations

- UNESCO, the umbrella organization of the UN for culture:
 - ...is undergoing a management culture change, shifting **focus from activities to outcomes**. So should other cultural organizations, including museums.
 - Outcomes do not respect organizational boundaries and outcomes are less controllable as there are more factors which can affect them.
 - An organization can be successful only if risks are anticipated; carefully measured and adequately managed against set objectives.

- A general categorization of risk sources for Museums is depicted in the following figure:



➤ The following processes within a Museum Management lifecycle are fit for applying risk management techniques:

- Collection management
- Inventories and documentation
- Care and preservation of collections
- Human resource management
- Marketing
- Visitor management

- Risk Management Training Handbook (2010). UNESCO.
- IEC 31010:2019 (2019) Risk management — Risk assessment techniques.
- Running a Museum: a practical handbook (2004). International Council of Museums/UNESCO.



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