

GeoTAK



Co-funded by the
Erasmus+ Programme
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Developing Interdisciplinary Postgraduate Programmes and Strengthening
Research Networks in Geoinformation Technologies in Armenia and Kyrgyzstan

GEOTAK

RISK ASSESSMENT

What is a Risk?

Definition:

The chance of something happening that will have an impact upon the achievement of objectives.

Effect of uncertainty on objectives (ISO 31000)

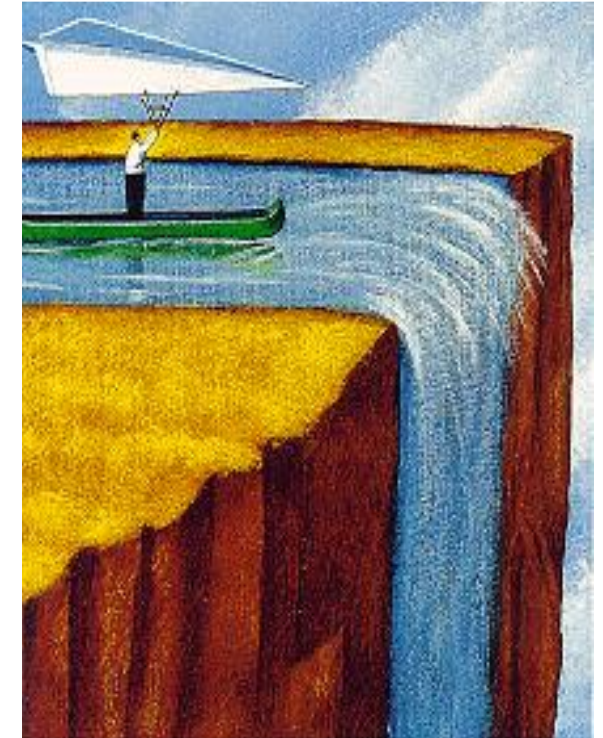
- An event
- Related to uncertainty
- Unavoidable and omnipresent
- Neutral – Should be viewed as both an opportunity and a threat
- Inherent vs. residual
- Measure: Likelihood * Impact
- Response: Accept, Suppress, Transfer, Mitigate (could be a combination)



What is Risk Management

“The culture, processes and structures that are directed towards realizing potential opportunities whilst managing adverse effects”.

“The process whereby organisations methodically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities”



Defining organisational objectives

GeoTAK

Organizational objectives are the **realization of an (enterprise) vision & mission** of achievements **towards a defined community of individuals** (what is delivered to whom to what purpose when and how) **leading to a (business) strategy** and **Long Range Plan** endorsed by executive management.

REMEMBER: IT ALL STARTS FROM THE OBJECTIVES !!!

GEOTAK project objectives

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The main goal of GEOTAK is to develop postgraduate Higher Education programmes in Geoinformation Technologies (GIT) and strengthening the links in research and innovation between Higher Education Institutions (HEI), industry and administration in Armenia and Kyrgyzstan.

Specific project objectives

GeoTAK

In order to achieve the broad objective, the specific objectives of GEOTAK will be:

- To identify research and development needs of Kyrgyzstan and Armenia in the field of Geoinformation Technologies.
- To create a Research Node in GIT per partner country to promote and harmonise collaborative innovation projects and joint research lines.
- To create and/or update research laboratories of GIT.
- To train trainers from partner countries in relevant topics of GIT that have special interest for regional development of innovation and environmental protection.
- To provide teachers and managers from HEI's knowledge and skills in transversal topics of higher education, such as quality assurance practices, innovation and entrepreneurship, curricula development by competences and learning outcomes, and others following Bologna process standards.
- To create interdisciplinary postgraduate programmes (master and PhD levels) that enhance the potential of GIT in different areas and degrees and focus research outputs on contemporary problems at regional and global scales.
- To foster and strength the cooperation between university and industry in those topics identified as critical for the sustainable development of the partner countries.
- To exchange and share experiences and perspectives between two emerging countries from different geographic regions, Armenia and Kyrgyzstan, that are facing common socio-economic challenges and need to stimulate new strategies in research and development

Risk Management

TWO SIMPLE QUESTIONS PARTNERS SHOULD BE ABLE TO ANSWER

What could go wrong in our organization/project?

What are we doing to address these situations?



Understanding risk: 3 key questions



Risk identification

RISK IDENTIFICATION					
#	CATEGORY	RISK EVENT (What is it that you are working to avoid or reduce likelihood or impact of occurring? Risks are future events that could interfere with meeting project objectives. One risk per row.)	RISK CAUSE (What are the triggers, sources or circumstances that could act alone or together to increase the likelihood of the Risk Event occurring? There are usually multiple causes leading to a Risk Event.)	IMPACT/ CONSEQUENCE (If the Risk Event did occur, what would be its consequences/impacts on this project and on other initiatives or projects that depend on this project, where dependency relationships and across-project linkages are required/known?)	EXISTING MITIGATIONS
1	Operations	Equipment failure at a critical venue	<ul style="list-style-type: none"> - Equipment - Process - People - Material - Environment - Management - ... 	<ul style="list-style-type: none"> - Operational - Financial - Reputation - Health & Safety - ... 	<ul style="list-style-type: none"> - Preventative maintenance - Backup equipment - Insurance - ...

Risk assessment, Risk scale

Impact description				Risk Matrix			
Reputation Operations, Compliance H&S	> USD XXX (15% of XXX)	Critical	4	MODERATE	HIGH	EXTREME	EXTREME
	USD XXX- XXX (5% - 15% of XXX)	Major	3	LOW	MODERATE	HIGH	EXTREME
	USD XXX- XXX (1% - 5% of XXX)	Moderate	2	LOW	LOW	MODERATE	HIGH
	< USD XXX (1% of XXX)	Minor	1	LOW	LOW	LOW	MODERATE
If more relevant Other Impact Criteria	If applicable Financial impact	Likelihood Description (horizon end of 2016)	1	2	3	4	
			Unlikely (<10%)	Possible (10% - 50%)	Likely (50% - 90%)	Almost Certain (> 90%)	
			The event could occur in unusual circumstances.	The event might occur at some point.	The event will probably occur.	The event is unavoidable or nearly unavoidable.	

EXAMPLE

CM Consulting: Risk Analysis

Risk No.	Reporting phase	Identified Risks	Impact	Likelihood	Risk Level	Strategy and Actions to Minimize Risk
R1	1	Privacy policy	1	0,1	0,10	Transfer. Close cooperation with project coordinator, communication with participants on privacy issues, endorsement of data protection act
R2	1	Data collection	0,25	0,1	0,03	Acceptance. Direct access to stakeholders. Harmonized collection methods across countries. Web-online survey accessible 24/7
R3	1	Data storage	1	0,50	0,50	Mitigation/control. Backup systems and cloud to avoid losing of any data collected.
R4	1	Data transmission.	0,1	0,25	0,03	Acceptance. Close cooperation with stakeholders and support by project coordinator. Avoidance of translations.
R5	1	Turnover changes	0,75	0,1	0,075	Mitigation/control. Identification and involvement of alternative expert collaborators in case the principle consultants become unavailable. This is mitigated by the extensive academic network of both principle consultants.
R6	2	Evaluation methodology and approach not adequate to comprise full causalities	0,50	0,50	0,25	Mitigation/control. Use of triangulation. Mixed qualitative and quantitative methods and acknowledgement of approach limitations.
R7	2	Involvement of participants. Not achieving desired number of respondents on time	0,50	0,25	0,13	Mitigation/control. Planning ahead. May need more time and resources. May need support of project coordinator for further cooperation.
R8	2	Data based on surveys and Interviews	0,1	0,1	0,01	Acceptance. Research strategy and findings based on most efficiently approach upon approval of project coordinator. Recommendations based on valid and accepted data.
R9	2	Physical meetings restricted due to covid 19	0,1	0,25	0,03	Transfer and acceptance. Videoconferencing infrastructure available and functional. Support expected by local coordinators if necessary (e.g. to arrange team meetings).
R10	2	-Lack of necessary data for proper review and reporting -Incompleteness	0,50	0,25	0,13	Mitigation/control. Debriefing instructions defined, distribution of consent forms. Use of sprint backlogs based on scrum methodology
R11	2	-Low involvement of stakeholders -Feedback does not help improvement for evaluative learning	0,50	0,25	0,13	Mitigation/control. Sending reminders to partners, Close communication with partners, Close monitoring for continuous improvement. Regular review meetings to critically assess and interpret monitoring and evaluation data in order to guide program decisions and actions
R12	2	Set up a proper risk assessment and quality Assurance system taking into consideration all critical factors	0,50	0,25	0,13	Mitigation/Control. This is a critical project management task and needs to be clearly monitored using scrum methodology. CM consulting in association with project coordinator should monitor the progress.
R13	3	Problems in communication and collaboration	0,50	0,25	0,13	Mitigation/control. Close cooperation among partners, local coordinator offices. Definition of communication strategy from the onset of the project for evaluative learning.
R14	3	Complains and conflict	0,50	0,50	0,25	Mitigation/control. Adequate instructions well ahead of official reporting deadline, collecting and checking info from partners ahead of reporting time, asking for more info in case there are gaps, close cooperation and assistance to partners and participants. Use of risk and issue logs, PBIs and Sprint Backlogs.
R15	3	Delay in project reporting (also linked to financial issues)	0,10	0,25	0,03	Acceptance. Maximise activities with limited time and budget. Planning in editing process. Close cooperation and communication with project coordinator

Exercise

Armenian-Kyrgyz partners - Identify 1-2 risks for each of the specific project objectives

EU partners – identify 1-2 risks for each WP

Thereafter, assess those risks

Exercise

	UNLIKELY	POSSIBLE	PROBABLE	ALMOST CERTAIN
CRITICAL				
MAJOR				
MODERATE				
MINOR				

Exercise (add rows as necessary)

Risk number	WP	Identified risk	Strategy and actions to minimize risk (accept, supress, transfer, mitigate)
1			
2			
3			
4			
5			
6			
7			
8			