TITLE:
ENVIRONMENTAL MONITORING PROJECT

INTRODUCTION

- Introduction
- Modern companies are more aware than ever of the value of data collected in the field and how it can ensure their equipment, systems and processes stay environmentally safe, efficient and productive. So — what is environmental monitoring? While the use cases are broad, we can define it as a system of distributed sensors, wireless connectivity, edge computing and visibility tools that monitor conditions, processes and equipment to track environmental health and/or prevent events and failures that can harm the environment.

IN-

- Even more broadly, "environmental conditions" in many cases indicate heat, cold, moisture, vibration and other environmental variables that can be adverse to consistent and reliable equipment operations. In other words, while we may first think of the ecological definition of environmental monitoring, the term is inclusive of these variables and their impact on operations as well.

  Although environmental monitoring technology has been around for some time, organizations that need to quickly respond to changing environmental conditions can find it challenging to act on this data, which is generated well outside traditional on-prem or cloud environments. Industries like manufacturing, agriculture and energy are using networks of Internet of Things (IoT) devices to integrate environmental monitoring into their operations, dramatically transforming the way these businesses interact with and respond to their surroundings.

PROJECT SCOPE

- Project scope is the part of project planning that involves determining and documenting a list of specific project goals, deliverables, tasks, costs and deadlines. The documentation of a project's scope is called a *scope statement* or *terms of reference*. It explains the boundaries of the project, establishes responsibilities for each team member and sets up procedures for how completed work will be verified and approved.


This slide is 100% editable. Adapt it to your needs and capture your audience's attention.
Project Objectives
Deliverables
Milestones
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.
PROJECT SCOPE
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.
Limits and Exclusion
Technical Requirements
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

SCOPE IMAGE

THE IMPORTANCE OF DEFINING A PROJECT'S SCOPE

- that includes information on the project deliverables is a first step in project planning. The benefits a project scope statement provides to any organization undertaking a new initiative include the following:
- articulates what the project entails so that all stakeholders can understand what's involved;
- provides a roadmap that managers can use to assign tasks, schedule work and budget appropriately;
- helps focus team members on common objectives; and
- prevents projects, particularly complex ones, from expanding beyond the established vision.
- Establishing project scope ensures that projects are focused and executed to expectations. The scope provides a strong foundation for managing a project as it moves forward and helps ensure that resources aren't diverted or wasted on out-of-scope elements.

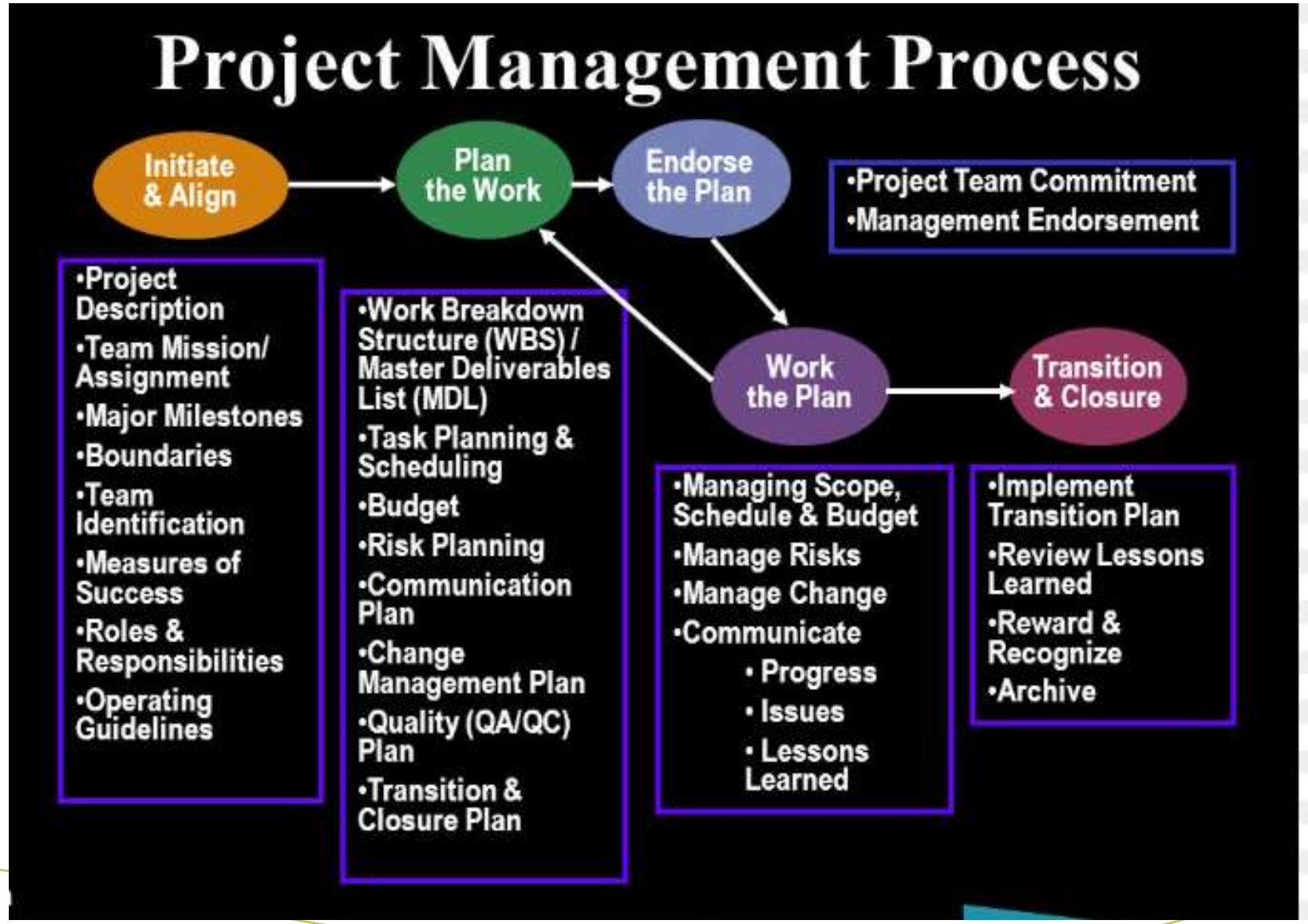
PROJECT TEAM

- The project team is the group of people responsible for executing the tasks and producing deliverables outlined in the project plan and schedule, as directed by the project manager, at whatever level of effort or participation defined for them. Project team members may or may not be involved during the entire life cycle of the project and may or may not be full time to the project. Project teams are comprised of many different roles such as project manager, subject matter experts, business analysts, and other stakeholders.

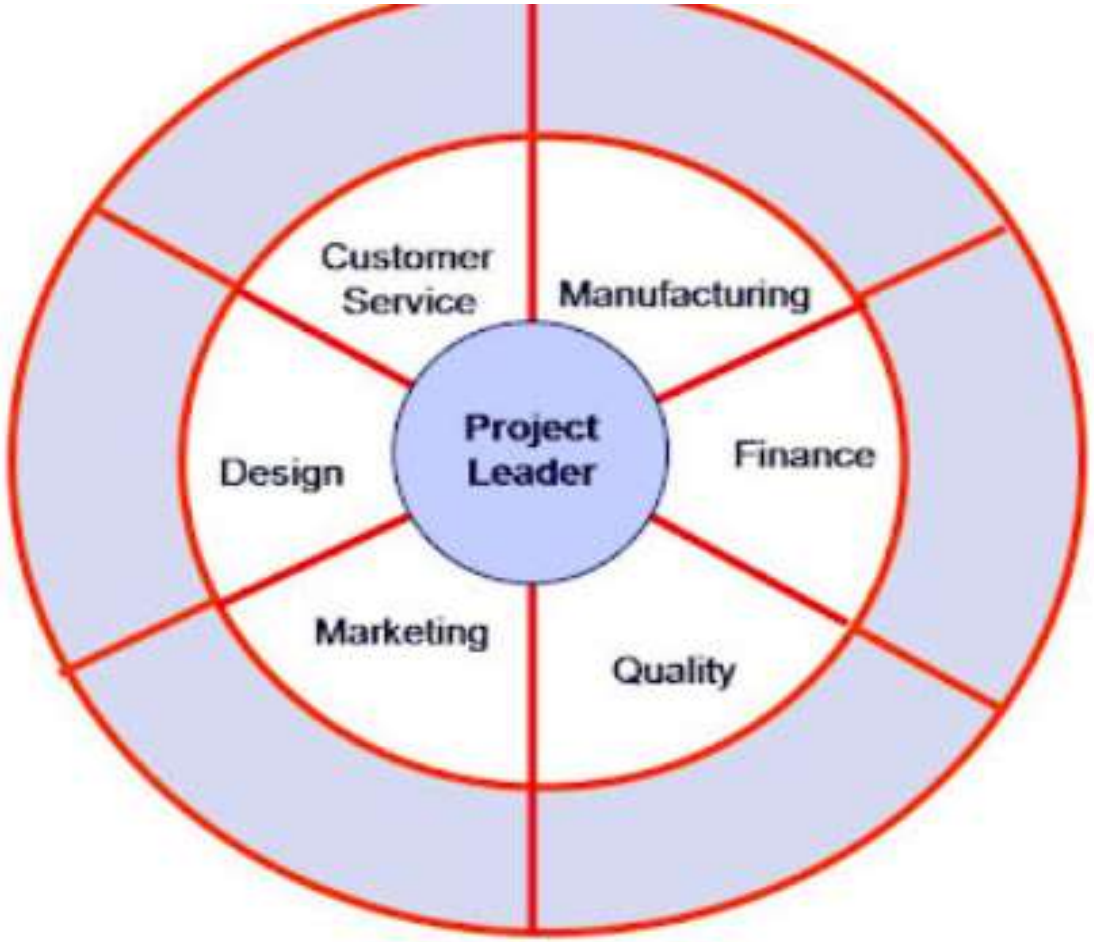
TEAM


Outward Boundary / buffering
Inhibits:
• Distractions
• Perturbations
Outward Boundary / spanning
Provides:
• Resources
• New ideas
• Belonging to organization
Team
Inward Boundary
Enables:
• Identity
• Focus
• Persistence

MANAGEMENT


Project Management Process
Initiate & Align
Plan the Work
Endorse the Plan
Work the Plan
Transition & Closure
•Project Team Commitment
•Management Endorsement
•Project Description
•Team Mission/ Assignment
•Major Milestones
•Boundaries
•Team Identification
•Measures of Success
•Roles & Responsibilities
•Operating Guidelines
•Work Breakdown Structure (WBS) / Master Deliverables List (MDL)
•Task Planning & Scheduling
•Budget
•Risk Planning
•Communication Plan
•Change Management Plan
•Quality (QA/QC) Plan
•Transition & Closure Plan
•Managing Scope, Schedule & Budget
•Manage Risks
•Manage Change
•Communicate
• Progress
• Issues
• Lessons Learned
•Implement Transition Plan
•Review Lessons Learned
•Reward & Recognize
•Archive

LEADER


Customer Service
Manufacturing
Project Leader
Design
Finance
Marketing
Quality


90.8
STOP/STORE
RUN/PAUSE
ON/OFF
TOOLS

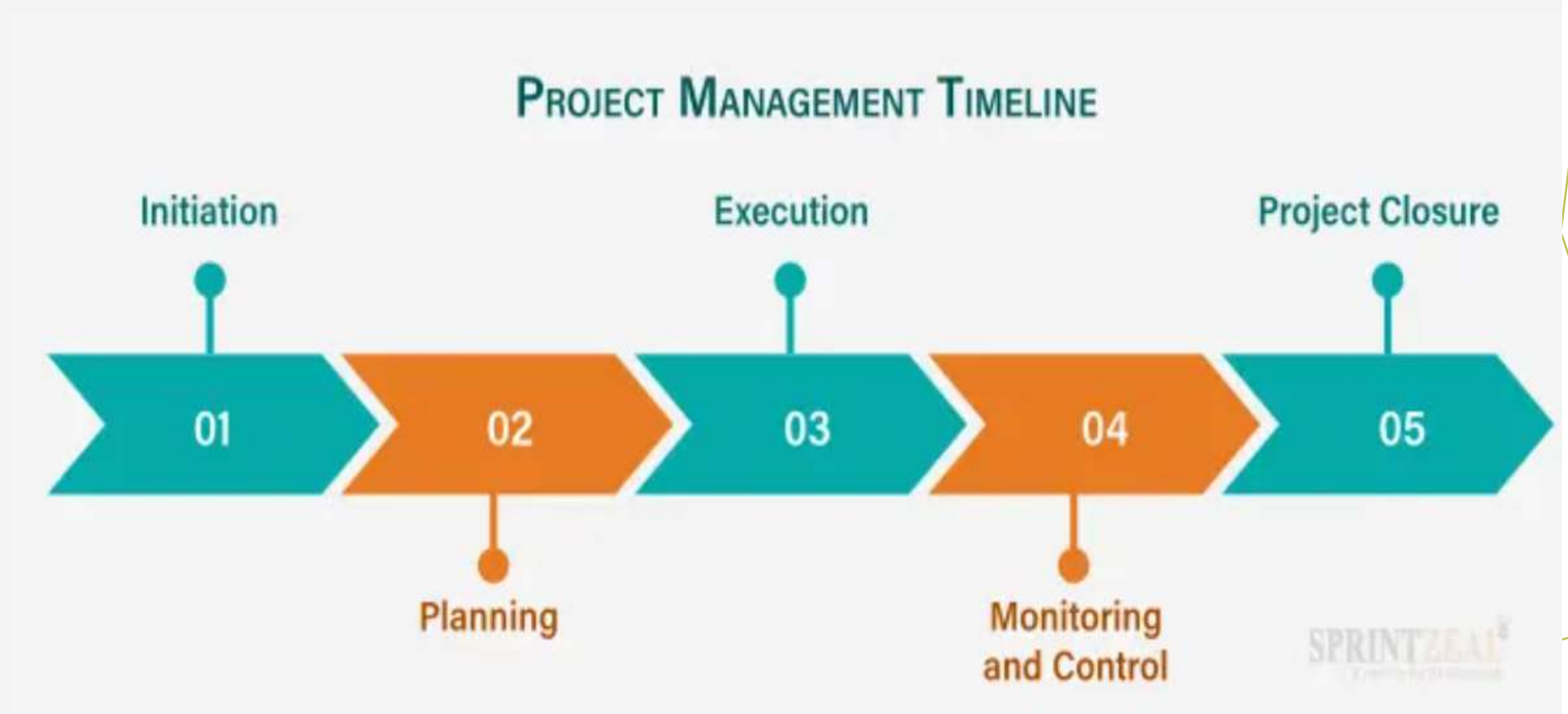
0

- Ensure compliance with applicable legal requirements and the conditions of environmental licenses; –
- Define environmental compliance responsibilities for all parties involved and assign tasks to site personnel; –
- Document communication and environmental monitoring; –
- Ensure the execution of other environmental programs during the implementation of the project; –
- Ensure the implementation of mitigation and

PROJECT TIMELINE

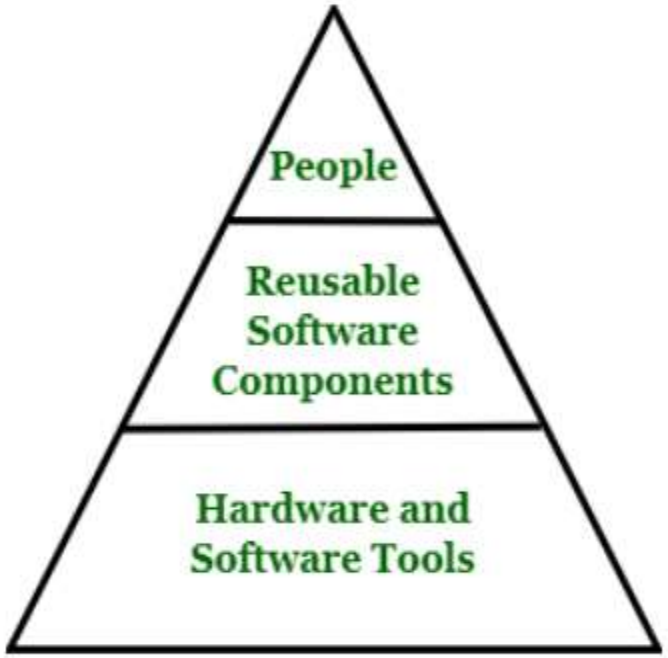
- A project timeline is a graphic representation of the order in which project tasks, deadlines, and milestones occurred.
- It offers a comprehensive perspective of the project timeline, enabling team members and project managers to monitor progress and spot potential problems.
- Task titles, start and end dates, duration, dependencies between tasks, and any milestones or deliverables are often included in a timeline.
- Timelines for projects can be represented in a variety of ways, from straightforward Gantt charts to more intricate software solutions that enable real-time tracking and communication.

IMAGE


PROJECT MANAGEMENT TIMELINE
Initiation
Planning
Execution
Monitoring and Control
Project Closure
01
02
03
04
05
SPRINTZEAL

RESOURCE REQUIREMENTS

- **Project resources** simply mean resources that are required for successful development and completion of project. These resources can be capital, people, material, tool, or supplies that are helpful to carry out certain tasks in project. Without these resources, it is impossible to complete project. In project planning phase, identification of resources that are required for completion of project and how they will be allocated is key element and very important task to do. In project management, some resources that are required are assigned to each task of project to get job done.
- There are three types of resources that are considered and are very essential for execution of project and completion of project on time and on budget. These resources can be denoted by pyramid which is also known as Resource Pyramid. At base of pyramid i.e. last layer, hardware and software tools are present, then at middle layer, reusable components are present, and at top of pyramid i.e. top layer, human resources are present. This is shown in following diagram :



Resource Pyramid

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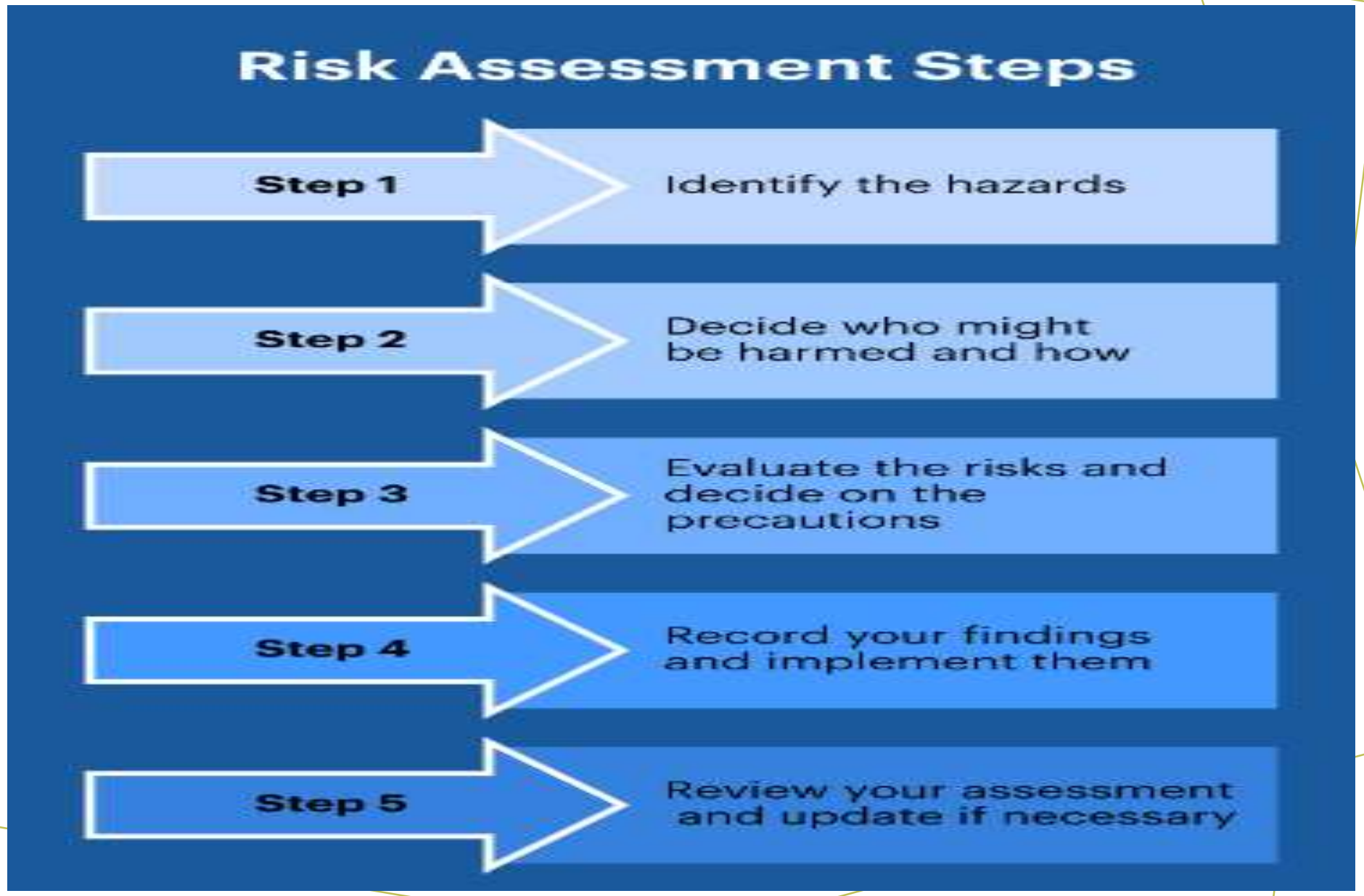
- Description of resource
- Resource availability
- Time of resource when it will be available
- Duration of resource availability
- **Types of resources :**

1 Human Resource –
Human plays an important role in software development process. No matter what size is and how much complexity is there in project, if you want to perform project task in an effective

,,

- **2**
- **Reusable Components –**
  For bringing ease in software development process or to accelerate development process software, industry prefers to use some ready software components. The components can be defined as the software building blocks that can be created and reused in software development process. Generally, regardless of their type, size, or complexity, all projects need money. Managing budget for project is one of most important tasks that all project managers have to do. The reusable resources also known as cost resources are very helpful as they help in reducing overall cost of development. The use of components emphasizes reusability. This is also termed as Component-Based Software Engineering.
- **3**
- **Hardware and Software tools –**
  These are actually material resources that are part of project. This type of resource should be planned before starting development of project otherwise it way causes problems for the project.
- For example, if you require certain software elements during performing task and

RISK ASSESSMENT



- The project risk management plan addresses the process behind risk management and the risk assessment meeting allows the project team to identify, categorize, prioritize, and mitigate or avoid these risks ahead of time. Risk assessment is a step in a risk management procedure. Risk assessment is the determination of quantitative or qualitative value of risk related to a concrete situation and a recognized threat. Risk assessment involves measuring the probability that a risk will become a reality. But in any project, risk assessment is not a project manager's sole responsibility. A special meeting has to be conducted to bring in the ideas of the

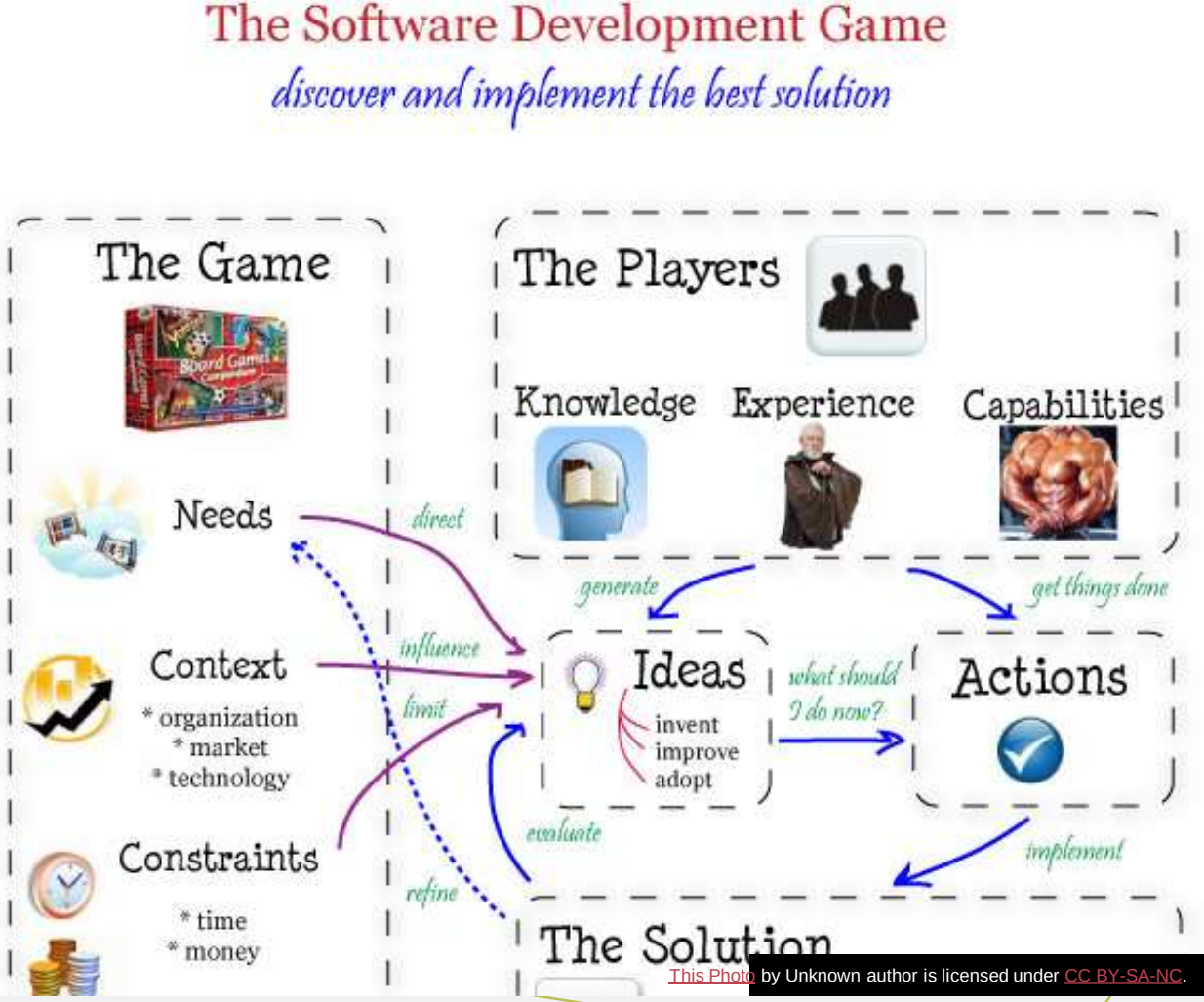
TRANSFORMATION STEPS

- Project planning is a discipline addressing how to complete a project in a certain timeframe, usually with defined stages and designated resources. One view of project planning divides the activity into these steps:
- setting measurable objectives
- identifying deliverables
- scheduling
- planning tasks
- Supporting plans may encompass human resources, communication methods and risk management.
- Enterprises often have an information technology project planning guide that identifies the processes used. Tools used for the scheduling parts of a plan include Gantt charts and PERT charts.

- Project planning is important at every phase of a project. It lays out the basics of a
- project, including the following:
- scope
- objectives
- goals
- schedule
- Planning enables project managers to turn an intangible idea into reality. Key purposes of planning include the following:
- facilitate communication and provide a central source of information for project personnel;
- help the project sponsor and other key stakeholders know what is required;
- identify who will perform certain tasks, and when and how those tasks will happen;
- facilitate project management and control as the project progresses;
- enable effective monitoring and control of a project;
- manage project risk; and
- generate feedback useful for the next project planning phase.

(A)ACQUISITION OF EQUIPMENT:

- When you consider things from a distance, the equipment procurement process might seem basic and straightforward.
- Find what you need. Buy the equipment. Receive the shipment. Pay.
- However, the growth of the global economy has led to some complexities in this process. Like all business functions, procurement can become complex and incorporate several stages.
- Here, you can take a look into the equipment procurement process stages and how they can impact your organization.
- Understanding Equipment Procurement
- As you already know, equipment procurement is the process of finding and purchasing the tools your company needs to operate effectively. This process aims to reduce your overhead by seeing what you need and working with the equipment you already



B(B) **SOFTWARE DEVELOPMENT:**

C-DATA COLLECTIO

- Of course, the method used for collection of environmental data depends on the type of data required, and this will vary greatly. Weather data, for example, will require access to on-the-ground sensors (or human reporters) or satellite observations, while data on fish catches, as another example, will probably depend heavily on form-based field data collection at ports or aboard fishing vessels.
-
- The UN’s Food and Agricultural Organization (FAO) gives detailed insight into the many factors that come into play for collecting fishing data (boldface added):
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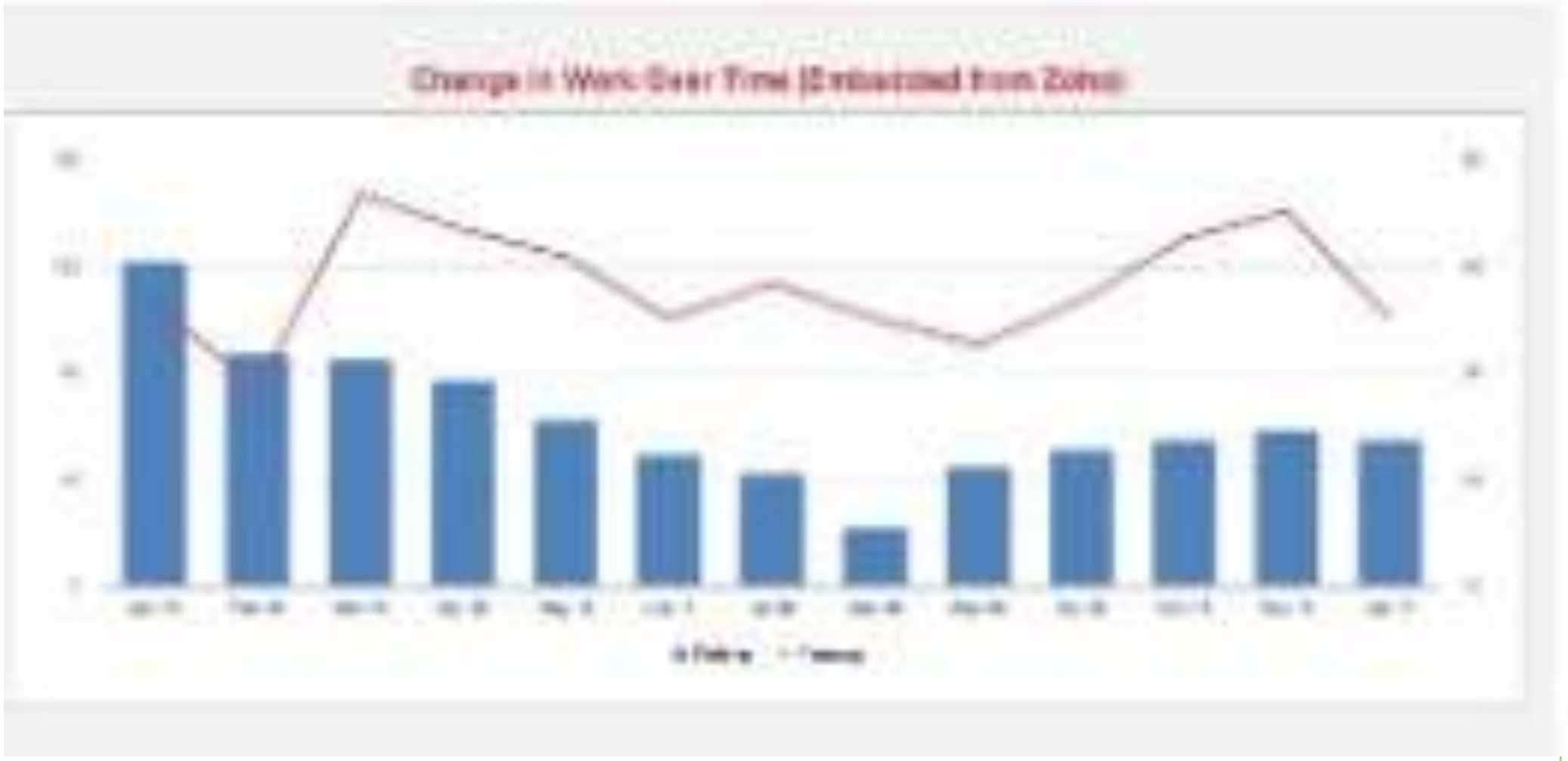
- “The choice of the many methods for collecting fishery data will depend on the variables to be measured, the source and the resources available. In many cases, there is a natural way to collect particular variables. For example, relatively static variables, like vessel length or engine size, are often best collected through a registration system. Highly dynamic variables, like catch or effort, may often be best obtained through daily records, such as logsheets.
-
- For the same variable, the methods can be different depending on the type of fishery. For example, for a large-scale fishery, catch data would be best collected from logbooks, whilst in a small-scale fishery interviews and/or questionnaires would often be the best method. The sources (fishers, processors etc.) are also an important factor for the choice and design of methods. Buyers, processors and other intermediaries are likely to keep their own sales records, which should be used as the basis of data forms. Small-scale fishers often do not keep any records, and data acquisition in this case would be restricted to one-to-one interviews, but the interview structure could be more flexible.”

- ENVIRONMENTAL COMPLIANCE DATA
- For many companies, including in construction and manufacturing, it’s important — and often a legal requirement — to document environmental impact and processes on a routine and continuous basis. Data can be used to document:
- corporate sustainability processes
- waste management
- environmental remediation progress
- status of equipment
- The data might be gathered through the use of site inspection checklists, a tool that Magpi is ideal for creating and deploying quickly and at low-cost — and most often without a single line of code.
- That speed of deployment can also come into play for ad hoc data collection around emergencies (read more: “Mobile Forms: An Essential Tool in Florida’s Hurricane Response), when there really is no time to lose.



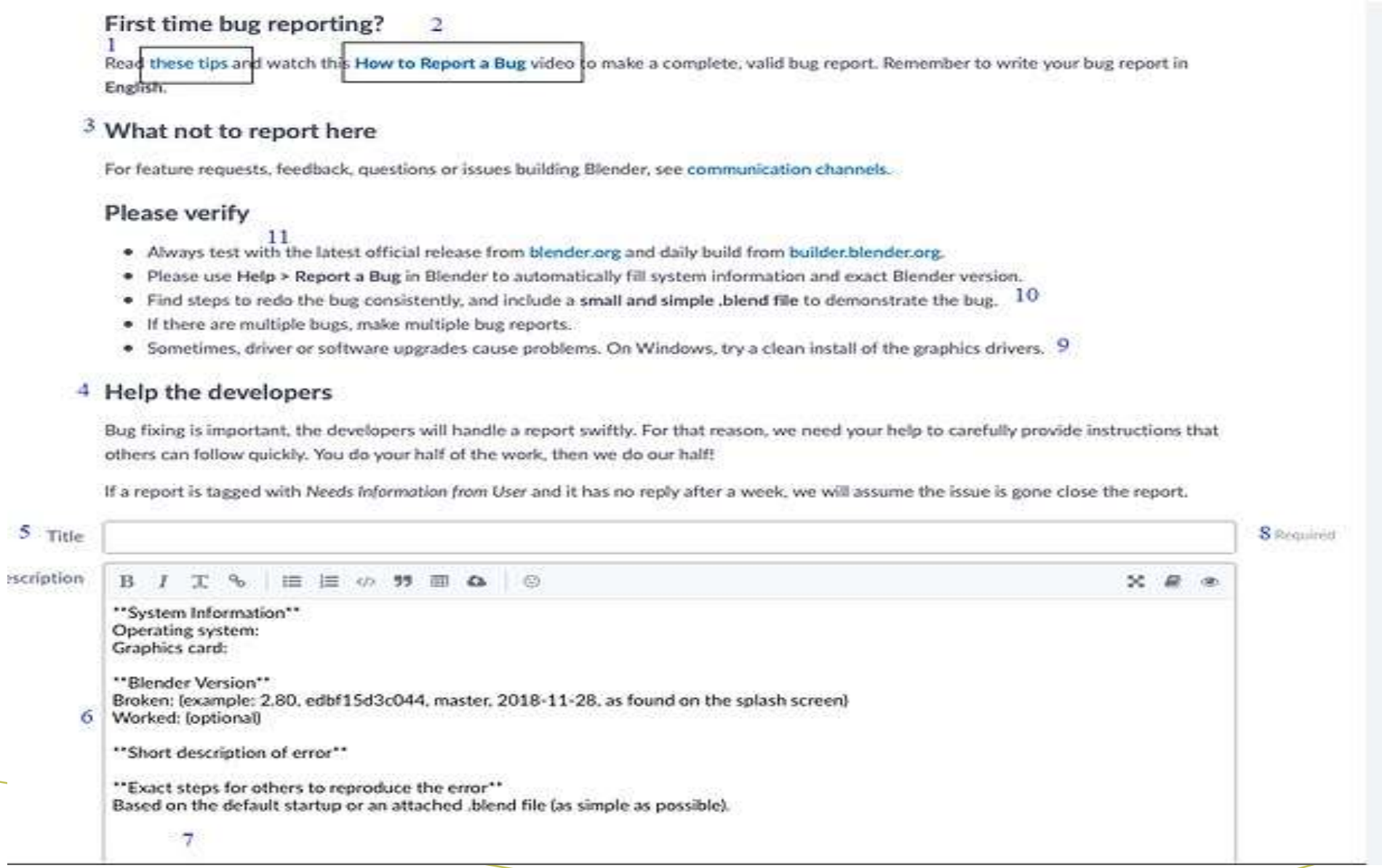
D- DATA ANALYSIS

- Environmental monitoring allows us to understand and observe the quality of the natural environment to create evidence in preparation for environmental impact assessments, as well as helping to protect it from human activities.

- In preparation for environmental impact assessments, monitoring is a crucial step, enabling us to build an understanding of surface water and groundwater systems and investigate how these interact. Monitoring also provides an evidence base for regulatory compliance, demonstrating what the impacts to the environment might be with human intervention.
- Envireau Water works with a close network of instrument providers to design and implement monitoring schemes which are robust, practical, and cost-efficient. We ensure the designs deliver the right solutions to meet the needs of your projects.

- We design, specify, supply, install and manage data gathering equipment for a whole range of parameters including water level, flow rate and volumes, turbidity, water quality and chemistry. The use of telemetry systems, where required, will manage, interpret and report on the data, which is held securely on off-site servers. This data can be hosted by us or internally on your systems.
- Whatever the project, our team of hydrogeologists and hydrologists can provide solutions to cover groundwater monitoring, surface water monitoring and water quality sampling. We believe the key to reporting is to deliver appropriate periodic reports targeted at the needs of the site, as well as meeting the relevant regulatory expectations.

E-REPORTING



First time bug reporting?

1 Read these tips and watch this **How to Report a Bug** video to make a complete, valid bug report. Remember to write your bug report in English. 2

3 What not to report here

For feature requests, feedback, questions or issues building Blender, see communication channels.

Please verify

- Always test with the latest official release from blender.org and daily build from builder.blender.org. 11
- Please use **Help > Report a Bug** in Blender to automatically fill system information and exact Blender version.
- Find steps to redo the bug consistently, and include a **small and simple .blend file** to demonstrate the bug. 10
- If there are multiple bugs, make multiple bug reports.
- Sometimes, driver or software upgrades cause problems. On Windows, try a clean install of the graphics drivers. 9

4 Help the developers

Bug fixing is important, the developers will handle a report swiftly. For that reason, we need your help to carefully provide instructions that others can follow quickly. You do your half of the work, then we do our half!

If a report is tagged with *Needs Information from User* and it has no reply after a week, we will assume the issue is gone close the report.

5 Title 8 Required

escription

```
**System Information**
Operating system:
Graphics card:

**Blender Version**
Broken: (example: 2.80, edbf15d3c044, master, 2018-11-28, as found on the splash screen)
Worked: (optional)

**Short description of error**

**Exact steps for others to reproduce the error**
Based on the default startup or an attached .blend file (as simple as possible).
```

6 7

BUG REPORT TEMPLATE

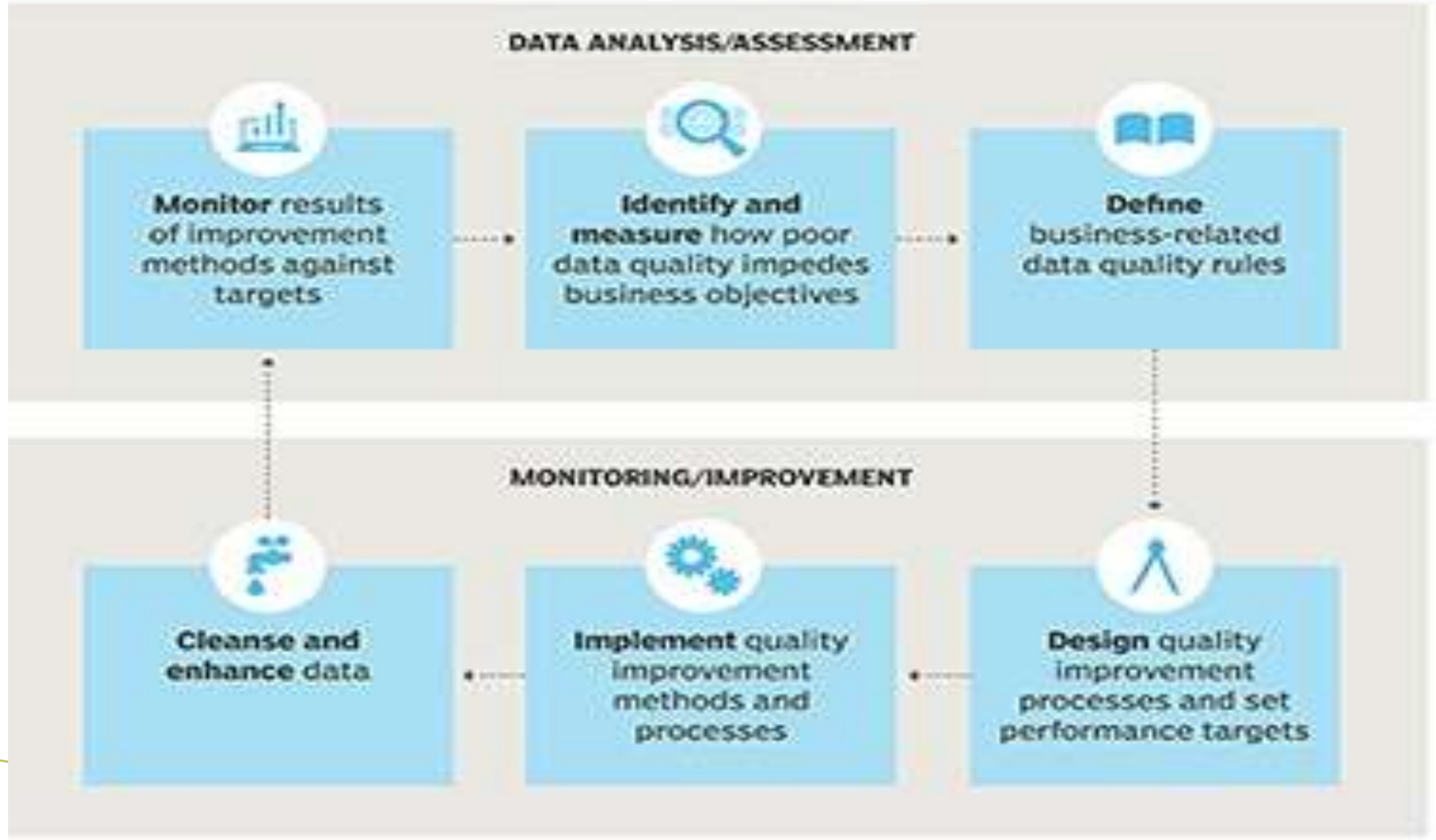
Severity:	Estimate:

Bug Report (required):	
Summary	[A summary of the bug or issue being reported]
Steps to Reproduce	[Detailed steps to reproduce the bug]
Expected Outcome	[Describe what a user expects as a result]
Actual Outcome	[Describe errors or unexpected outcome a user gets]

Additional Information (only if available):	
Environment	[Operating system, browser, device, network, etc.]
Workaround	[What alternative does a user have to perform the task]
Screenshots	[Images of error or unexpected outcome]
Attachments	[Files that can help reproduce and fix the issue]
Log Files	[Relevant log files that can help trace the issue]
Reproducibility	[How often the issue occurs]
Assignee	[Who is responsible to fix the bug]
Deadline	[When the bug should be fixed by]

.F

The virtuous cycle of data quality management




Data Operations
Data Quality Monitoring
Data Quality Improvement
Data Manager
Data Architecture Managment
Data Quality Planning
Data Stewardship/ Flow Management
Data Administrator
Data Design
Data Quality Criteria Setup
Data Error Causes Analysis
Data Technician
Data Processing
Data Quality Measurement
Data Error Correction

G-PLAN


When/Frequency:
Monthly/Weekly Report
Project Milestone
Regularly Schedule
As needed
What/Strategy:
Initiation Plan
Project Kick-Off
Meeting
Project Task Review
Presentation to Interest Group
Type/Method:
Meeting
Via Email or Hardcopy
Presentation/Discussion
Demonstration
Announcements
Communication Plan
Who/Target:
All Stakeholder
Project Member/Team
Executive Level
Project Sponsor
Vendor
Purpose:
Identify Improvement Plan
Review/Update Status
Information Gathering
Schedule, Budget, Deliverable
Risk Management

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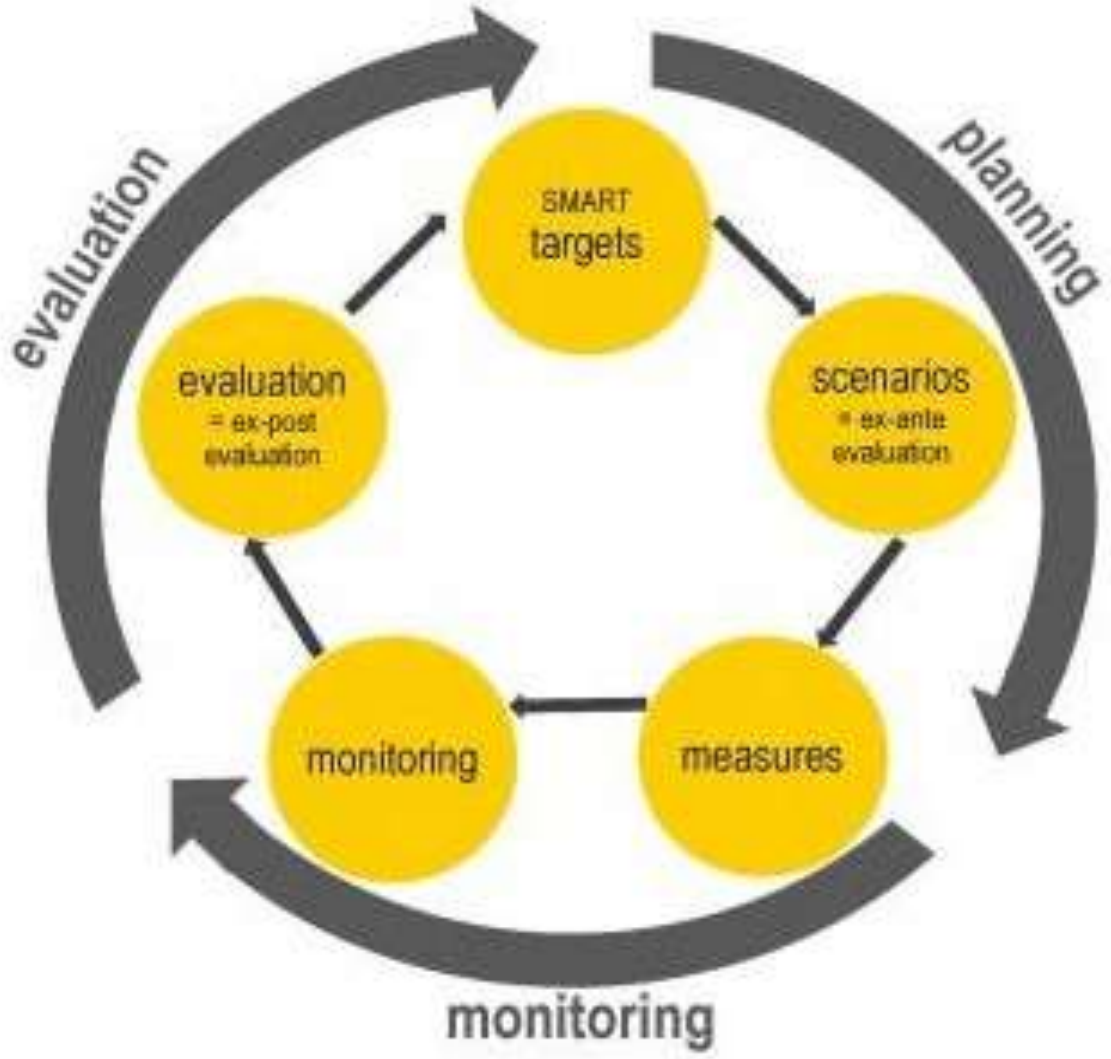
- Communication is essential for the success of a project. All involved in a project need to communicate and collaborate so that all the pieces, such as objectives, requirements, tasks, schedules, deliverables, risks, issues, and solutions fit together to form one successfully delivered project to satisfied stakeholders. Obtaining project stakeholder buy-in early on is key to project success. And one effective way to communicate and manage stakeholder expectations is through a

MONITORING AND EVALUATION



- Monitoring and Evaluation (M&E) is a continuous management function to assess if progress is made in achieving expected results, to spot bottlenecks in implementation and to highlight whether there are any unintended effects (positive or negative) from an investment plan, programme or project (“project/plan”) and its ..

- **.What are the six steps of monitoring and evaluation?**
- **Steps**
- Step 1: Identify Program Goals and Objectives. ...
- Step 2: Define Indicators. ...
- Step 3: Define Data Collection Methods and TImeline. ...
- Step 4: Identify M&E Roles and Responsibilities. ...
- Step 5: Create an Analysis Plan and Reporting Templates. ...
- Step 6: Plan for Dissemination and Donor Reporting.

CONCLUSION


Conclusion
EMS standard are process –NOT performance standards!
An environmental management system takes time and commitment from the entire organisation.
Implementation EMS has a wide variety of impacts an different level of a company
Effective running of an EMS will provide ongoing Environmental benefits, cost saving and contribute to building an attractive work place culture.

CONCLUSION

- Sikkim is one of the favorite tourist destinations in india the traditional. Handloom and handicrafts product of sikkim are very popular among the tourist but despite improvement in technology else where no noticeable change has been recorded in sikkim the pratices of using old age toofs like wooden , hammer scissors knife etc should be development unit need to estiblish in each district of state for generating sustainable livehood both in urban and rural areas .

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Thank You