

M1- PROJECT MONITORING OVERVIEW AND DEVELOPMENT

PROJECT MONITORING

- Project monitoring is an integral part of the project management.
- Refers to the process of keeping track of all project-related metrics including team performance and task duration, identifying potential problems and taking corrective actions necessary to ensure that the project is within scope, on budget and meets the specified deadlines
- Project monitoring is focused on tracking project performance and progress using key performance indicators (KPIs) agreed during project planning.

KEY PERFORMANCE INDICATORS (KPIs)

- Consist of various specific measurement tools for indicating how well teams are achieving specific goals. Project management KPIs are generally agreed upon early in the project.
- KPIs are usually developed following the wellknown **S.M.A.R.T.** criteria originally developed by George T. Doran (Management Review, 1981) and popularized by Peter Drucker
 - o Specific. Measurable.
 - o Achievable. Relevant. Time-bound

WHY USE KPIs

- Performance effectiveness.
- For the accuracy, actual reflection of the process, efficacy in delivering the outcome.
- The effects of a change can be monitored reliably, repeatedly and accurately by KPI.

ADVANTAGES OF PROJECT MONITORING

- Align progress with the plan
- Involvement of interested parties - Customer satisfaction - Team motivation and responsibility.
- Management of external suppliers.
- Continuous learning and improvement.

STEPS IN PROJECT MONITORING

1. Study of the project, its schedule, and costs.
2. Selection of the parameters to be monitored.
3. Selection of the frequency of reporting and its format.
4. Collection of data for the parameters being monitored.
5. Analysis of the data by using appropriate monitoring technique
6. Presentation of the analyzed data and reporting it to the management.
7. Review of the presented data by the management for decision making.

PROJECT MANAGER ROLE

- Project Manager is responsible for managing or overseeing all aspects of a project applying the Office of Systems Integration (OSI) Best Practices, industry standards, principles, methods, and techniques to deliver an information technology product, service, or system

PROJECT MANAGER RESPONSIBILITIES

- (Plans) the project.
- (Oversees) and manages) all aspects and phases of a project.
- (Ensures) deliverables and functionality are achieved as defined in the Project Charter and subsequent plans
- (Plans), (guides), and (oversees) the day-to-day internal activities that support the Project Office.
- (Develops) or (assists) in the development of the master project schedule and all other project work plans.
- (Makes) policy recommendations to management on sensitive or complex issues.
- (Works) with control agencies to comply with state administrative requirements.
- (Conducts) presentations or briefings on aspects of the project(s) to Executive management and may testify before committees, control agencies, review boards, and/or the legislature.

- (Conducts) presentations or briefings on aspects of the project(s) to Executive management and may testify before committees, control agencies, review boards, and/or the legislature. - (Manages) IT activities.

PROJECT MANAGEMENT TOOLS

✚ Verbal Communication

- This is probably the most effective mode of communication. Among its advantages is that it is quick, and its presentation can be adapted to concerns and questions of the audience.

✚ Written Communication

- This is probably the most reliable mode of communication. Among its advantages is that it provides clear data and removes the possibility of any misunderstandings.

✚ Meetings

- The very nature of project management makes it inevitable that certain meetings are convened to communicate and share project information. Collection of data for the project monitoring can even require meetings with different players involved with project implementation.

✚ Reports

- The monitoring reports are important since they are an essential part of project monitoring. Activities undertaken, inputs supplied, funds disbursed etc. have to be recorded and accounted for in the reports.

✚ Diary Notes

- While many of the people involved in project monitoring do not use this mode of recording information, it remains an important option. It is essential to record key decisions, which may have been made at formal or informal meetings.

PROJECT MONITORING TYPES

✚ Process Monitoring

- Process monitoring is implemented during the initial stages of a project as its sole purpose is to track the use of inputs and resources, along with examining how activities and outputs are delivered.

✚ Compliance Monitoring

- The purpose of compliance monitoring is to ensure compliance with donor regulations, grant, contract requirements, local governmental regulations and laws, ethical standards, and most importantly compliance with the expected results of the project.

✚ Context Monitoring

- It tracks the overall setting in which the project operates. Context monitoring helps us identify and measure risks, assumptions, or any unexpected situations that may arise within the institutional, political, financial, and policy context at any point during the project cycle.

✚ Beneficiary Monitoring

- Its primary purpose is to track the overall perceptions of direct and indirect beneficiaries in relation to a project. It includes beneficiary satisfaction or complaints with the project and its components, including their participation, treatment, access to resources, whether these are equitable, and their overall experience of change.

✚ Financial Monitoring

- The main purpose of financial monitoring is to measure financial efficiency within a project. It tracks the real expenditure involved in a project in comparison to the allocated budget and helps the project team to form strategies to maximize outputs with minimal inputs.

✚ Organizational Monitoring

- tracks institutional development, communication, collaboration, sustainability and capacity building within an organization and with its partners and stakeholders in relation to project implementation.

✚ Results Monitoring

- This is where monitoring entwines with evaluation. It gathers data to demonstrate a project's overall effects and impacts on the target population. It helps the project team to determine if the project is on the right track towards its intended results and whether there may be any unintended impacts.

GANTT CHART

- is a project management tool assisting in the planning and scheduling of projects of all sizes and they are a useful way of showing what work is scheduled to be done on a specific day. They

also help you view the start and end dates of a project in one simple view

WHY USE A GANTT CHART

- Establish the initial project schedule
- Allocate resources
- Make project adjustments
- Monitor and report progress
- Control and communicate the schedule
- Display milestones
- Identify and report problems

MODULE 2 – PROJECT EVALUATION

SURVEY METHOD

- The essence of survey method can be explained as “questioning individuals on a topic or topics and then describing their responses”
- In business studies survey method of primary data collection is used in order to test concepts, reflect attitude of people, establish the level of customer satisfaction, conduct segmentation research and a set of other purposes.
- Survey method can be used in both, quantitative, as well as, qualitative studies.

ADVANTAGES OF SURVEY METHOD

- Surveys can be conducted faster and cheaper compared to other methods of primary data collection such as observation and experiments.
- Primary data gathered through surveys are relatively easy to analyze

DISADVANTAGES OF SURVEY METHOD

- In some cases, unwillingness or inability of respondents to provide information
- Human bias of respondents, i.e. respondents providing inaccurate information
- Differences in understanding: it is difficult to formulate questions in such a way that it will mean exactly same thing to each respondent

CATEGORIES OF SURVEY METHOD

† Survey according to instrumentation

- The types of surveys according to instrumentation include the questionnaire and the interview.

† Survey according to the span of time involved

- The types of surveys according to the span of time used to conduct the survey are comprised of cross-sectional surveys and longitudinal surveys.

TYPES OF SURVEY INSTRUMENTATION

○ Questionnaires

- a questionnaire is a paper-and-pencil instrument that is administered to the respondents. The usual questions found in questionnaires are closed-ended questions, which are followed by response options.
- **Advantages:** Ideal for asking closed-ended questions; effective for market or consumer research
- **Disadvantages:** Limit the researcher’s understanding of the respondent’s answers; requires budget for reproduction of survey questionnaires

○ Interviews

- are more personal and probing.
- An interview includes two persons - the researcher as the interviewer, and the respondent as the interviewee.
- survey methods that utilize interviews. ○ personal or face-to-face interview ○ the phone interview ○ the online interview
- **Advantages:** Follow-up questions can be asked; provide better understanding of the answers of the respondents
- **Disadvantages:** Time-consuming; many target respondents have no public-listed phone numbers or no telephones at all

SAMPLING

- is the process of selecting units (e.g., people, organizations) from a population of interest.
- is a statistical procedure that is concerned with the selection of the individual observation; it helps us to make statistical inferences about the population.

TYPES OF SAMPLING

1. Random Sampling

- In data collection, every individual observation has equal probability to be selected into a sample. In random sampling, there should be no pattern when drawing a sample.
 - o Significance: Significance is the percent of chance that a relationship may be found in sample data due to luck. Researchers often use the 0.05% significance level.

Types of Random Sampling

A. Simple Random Sampling

- By using the random number generator technique, the researcher draws a sample from the population

B. Equal Probability Systematic Sampling

- a researcher starts from a random point and selects every nth subject in the sampling frame

C. Stratified Simple Random Sampling

- a proportion from strata of the population is selected using simple random sampling

D. Multistage Stratified Random Sampling

- a proportion of strata is selected from a homogeneous group using simple random sampling

E. Cluster Sampling

- occurs when a random sample is drawn from certain aggregational geographical groups

F. Multistage Cluster Sampling

- occurs when a researcher draws a random sample from the smaller unit of an aggregational group

Types of Non-random Sampling

A. Availability Sampling

- occurs when the researcher selects the sample based on the availability of a sample

B. Quota Sampling

- This method is similar to the availability sampling method, but with the constraint that the sample is drawn proportionally by strata.

C. Expert Sampling

- This method is also known as judgment sampling. In this method, a researcher collects

the samples by taking interviews from a panel of individuals known to be experts in a field.

PROBABILITY SAMPLING – is the sampling technique in which every individual unit of the population has greater than zero probability of getting selected into a sample

NON-PROBABILITY SAMPLING – is the sampling technique in which some elements of the population have no probability of getting selected into a sample

SAMPLING SIZE

- is the number of completed responses your survey receives. It's called a sample because it only represents part of the group of people (or target population) whose opinions or behavior you care about

UNDERSTANDING SAMPLE SIZE

- ✦ **Population Size** – the total number of people in the group you are trying to study
- ✦ **Margin of error** – a percentage that tells you how much you can expect your survey results to reflect the views of the overall population
- ✦ **Sampling confidence level** – a percentage that reveals how confident you can be that the population would select an answer within a certain range

FURPS

- is a checklist for requirements, which help maintain a Software Quality Standard. It comprises of:
 - o **Functional** (features, capabilities, security)
 - o **Usability** (human factors, help, documentation)
 - o **Reliability** (frequency of failure, recoverability, predictability)
 - o **Performance** (response time, throughput, accuracy, availability, resource usage)
 - o **Supportability** (adaptability, maintainability, internationalization, configurability)

MODULE 3 – PROJECT EXECUTION

TESTING AND EVALUATION

- The purpose of testing is to formally challenge the functioning of a program, application or system - under controlled conditions - specifically to detect errors or unexpected system responses in order to manage risks of developing, producing, operating and sustaining systems.

5 KEY COMPONENTS OF TESTING METHODOLOGIES

1. **Planning** – the strategy
2. **Development** – the test plan
3. **Execution** – running the plan
4. **Reporting** – includes effectiveness, status and defect reporting and determining if the system or SW is ready for the next level of testing or release
5. **Evaluation** – always follows implementation of a new release

TEST STRATEGY COMPONENTS

- ✚ Testing scope and objectives
- ✚ Current business issues
- ✚ Roles and responsibilities
- ✚ Status reporting
- ✚ Test methods
- ✚ Industry standards
- ✚ Test tools
- ✚ Measurements and metrics
- ✚ Risks and mitigations
- ✚ Defect reporting and tracking
- ✚ Change management

TESTING METHODOLOGIES: WATERFALL ✚ Waterfall Model

- The waterfall model is one of the earliest structured models for software development. It consists of the following sequential phases through which the development life cycle progresses: ○ System feasibility ○ Requirement analysis ○ System design ○ Coding and unit testing ○ Integration and system testing ○ Deployment and maintenance

TESTING METHODOLOGIES: ITERATIVE

✚ Incremental or Iterative Development

- The incremental, or iterative, development model breaks the project into small parts. Each part is subjected to multiple iterations of the waterfall model. At the end of each iteration, a new module is completed or an existing one is improved on, the module is integrated into the structure, and the structure is then tested as a whole.

TESTING METHODOLOGIES: AGILE

- Agile methodology was developed to respond to changes quickly and smoothly. Although the iterative methodologies tend to remove the disadvantage of sequential models, they still are based on the traditional waterfall approach. Agile methodology is a collection of values, principles, and practices that incorporates iterative development, test, and feedback into a new style of development.

TEST TOOLS

✚ Manual testing

- involves direct human interaction with the system under test; manual test tools include:
 - written test plan
 - test script/scenarios to follow
 - method(s) of recording results

✚ Automated testing

- is the use of testing software to control the test execution and reporting
 - Primary automated test tool is the testing software
 - Many test automation programs are available in the commercial market
 - Most of these test automation programs can be specifically tailored to the organization executing the test

TEST EXECUTION METHODS

1. **Unit Testing:** A development procedure where programmers create tests as they develop software
2. **Integration Testing:** Testing where hardware and/or software components are combined and tested to confirm that they work together.

3. **Acceptance Testing:** A test conducted to determine if the requirements of a specification or contract are met.
4. **Regression Testing:** is any type of software testing that seeks to uncover software errors by partially retesting a modified program

ALPHA BETA TESTING

ALPHA

- This is a form of internal acceptance testing performed mainly by the in-house software QA and testing teams. Alpha testing is the last testing done by the test teams at the development site after the acceptance testing and before releasing the software for the beta test.

Advantage of Alpha Testing

- Provides better view about the reliability of the software at an early stage
- Helps simulate real time user behavior and environment.
- Detect many showstopper or serious errors
- Ability to provide early detection of errors with respect to design and functionality

DISADVANTAGE OF ALPHA TESTING

- In depth, functionality cannot be tested as software is still under development stage. Sometimes developers and testers are dissatisfied with the results of alpha testing

BETA

- This is a testing stage followed by the internal full alpha test cycle. This is the final testing phase where the companies release the software to a few external user groups outside the company test teams or employees.

Advantages of Beta Testing

- Reduces product failure risk via customer validation.
- Beta Testing allows a company to test postlaunch infrastructure

- Improves product quality via customer feedback
- Cost effective compared to similar data gathering methods
- Creates goodwill with customers and increases customer satisfaction.

Disadvantages of Beta Testing

- Test Management is an issue. As compared to other testing types which are usually executed inside a company in a controlled environment, beta testing is executed out in the real world where you seldom have control
- Finding the right beta users and maintaining their participation could be a challenge

TEST SCRIPT

- is a set of instructions (written using a scripting/programming language) that is performed on a system under test to verify that the system performs as expected
- Test scripts are used in automated testing.

TEST CASES

- is a set of conditions or variables under which a tester will determine whether a system under test satisfies requirements or works correctly.
- The process of developing test cases can also help find problems in the requirements or design of an application.

TEST CASE TEMPLATE

Test Suite ID	The ID of the test suite to which this test case belongs.
Test Case ID	The ID of the test case.
Test Case Summary	The summary / objective of the test case.
Related Requirement	The ID of the requirement this test case relates/traces to.
Prerequisites	Any prerequisites or preconditions that must be fulfilled prior to executing the test.
Test Procedure	Step-by-step procedure to execute the test.
Test Data	The test data, or links to the test data, that are to be used while conducting the test.
Expected Result	The expected result of the test.
Actual Result	The actual result of the test; to be filled after executing the test.
Status	Pass or Fail. Other statuses can be 'Not Executed' if testing is not performed and 'Blocked' if testing is blocked.
Remarks	Any comments on the test case or test execution.
Created By	The name of the author of the test case.
Date of Creation	The date of creation of the test case.
Executed By	The name of the person who executed the test.
Date of Execution	The date of execution of the test.
Test Environment	The environment (Hardware/Software/Network) in which the test was executed.

EVALUATION ETHICS

Golden Rule: All those engaged in designing, conducting and managing evaluation activities should be guided by sound professional standards and strong ethical principles

EVALUATION/TESTING ETHICS

- Evaluators must have personal and professional integrity
- Evaluators must respect the right of institutions and individuals to provide information in confidence and ensure that sensitive data cannot be traced to its source. Evaluators must take care that those involved in evaluations have a chance to examine the statements attributed to them.
- Evaluators must be sensitive to beliefs, manners and customs of the social and cultural environments in which they work.
- Evaluators must be sensitive to and address issues of discrimination and gender inequality
- Evaluations sometimes uncover evidence of wrongdoing. Such cases must be reported discreetly to the appropriate investigative body.

Also, the evaluators are not expected to evaluate the personal performance of individuals and must balance an evaluation of management functions with due consideration for this principle.

LIKERT SCALE

- is a rating scale, often found on survey forms, that measures how people feel about something. It's named after Rensis Likert, the social psychologist who invented the use of scale points in this type of rating system
- is a five (or seven) point scale which is used to allow the individual to express how much they agree or disagree with a particular statement.

SET UP LIKERT SCALE

Step 1: Decide What to Measure

- This will serve as the foundation for all your questions and the response scale.
- Likert scale examples of things to measure like:
 - **Agreement:** Strongly agree to strongly disagree.
 - **Frequency:** Often to never.
 - **Quality:** Very good to very bad.
 - **Likelihood:** Definitely to never.
 - **Importance:** Very important to unimportant.

Step 2: Create Likert Scale Indicator Questions

How satisfied are you with *	Very Unsatisfied	Unsatisfied	Neutral	Satisfied	Very Satisfied
The quality of our brand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The prices we offer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The speed of service we provide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The customer support offered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- To get the best results, follow these survey question best practices:
 - Be specific when it comes to what you're asking
 - Cater to your target audience using

terms they'll understand

- Stay away from biased survey questions that can lead people to answer a certain way or force people to choose between extremes
- Avoid asking long, complicated questions or run the risk of actually **asking two questions in one**, leaving the customer not knowing how to answer

Step 3: Decide on Likert Scale Responses

- **Stay Odd** - Use an odd number of responses. Ideally, you should include 5 or 7. If you go below five options, people won't be able to answer how they truly feel. If you go above seven, people will feel overwhelmed and pick random options, which hurts your chances of receiving real results
- **Use Words** - If you use numbers to label responses, people may confuse which end is positive and which is negative and answer incorrectly
- **Use the Entire Range** - Make sure your responses span the entire scale range so people on both ends of the extreme can answer truthfully.

LIKERT SCALE EXAMPLES FOR SURVEY

Agreement	Frequency
Strongly Agree	Always
Agree	Often
Undecided	Sometimes
Disagree	Rarely
Strongly Disagree	Never

Importance	Quality
Very Important	Excellent
Important	Good
Moderately Important	Fair
Slightly Important	Poor
Unimportant	Very Poor

Likelihood	Likelihood
Almost Always True	Definitely
Usually True	Probably
Occasionally True	Possibly
Usually Not True	Probably Not
Almost Never True	Definitely Not

ANALYSIS OF DATA

- **Statistics you can use are:**
 - Summarize using a median or a mode (not a mean as it is ordinal scale data); the mode is probably the most suitable for easy interpretation.
 - Display the distribution of observations in a bar chart (it can't be a histogram, because the data is not continuous).

FORMATIVES

28/30

1. Its primary purpose is to track the overall perception of direct and indirect beneficiaries in relation to a project.

- **Beneficiary monitoring**

2. Gantt charts are incredibly useful in project management because they allow you to track the status of project tasks. They also help keep track of deadlines. Milestone, and hours worked.

- **True**

3. The purpose of compliance monitoring is to ensure compliance with donor regulations, grant, contract requirements, local governmental regulations and laws, ethical standards, and most importantly compliance with the expected results of the project.

- **True**

4. One of the advantages of project management is to manage of external suppliers.

- **True**

5. KPIs are usually developed following the wellknown S.M.A.R.T criteria.

- **True**

6. Project Manager works with control agencies to comply with state administrative requirements.

- **True**

7. Project management KPIs are generally agreed upon middle in the project.

- **False**

8. Project evaluation is focused on tracking project performance indicators (KPIs) agreed during project development.

- **False**

9. Arrange the following steps of project monitoring : (in order)

___ Selection of the frequency of reporting and its format.

___ Review of the presented data by the management for decision making.

___ Collection of data for the parameters being monitored.

___ Study of the project, its schedule, and costs.

___ Presentation of the analyzed data and reporting it to the management.

___ Selection of the parameters to be monitored.

Analysis of the data by using appropriate monitoring technique.

- **3,7,4,1,6,2,5**

10. S.M.A.R.T criteria was originally developed by _____.(complete name)

- **GEORGE T. DORAN**

11. Availability sampling occurs when the researcher selects the sample based on the availability of a sample.

- **True**

12. Non-probability sampling is the sampling technique in which some elements of the population have a probability of getting selected into a sample.

- **False**

13. _____ is a percentage that tells you how much you can expect your survey results to reflect the views of the overall population.

- **Margin of error**

14. Which is not true about disadvantages of survey methods?

- A. differences in understanding
- B. surveys can be conducted faster and cheaper compared to other methods of primary data collection such as observation and experiments
- C. Human bias of respondents
- D. unwillingness or inability of respondents to provide information
- E. Primary data gathered through surveys are relatively easy to analyse

- **B and E only**

15. This method is also known as judgement sampling. In this method, a researcher collects the samples by taking interviews from a panel of individuals known to be experts in a field.

- **Cluster sampling**

16. _____ is the process of selecting units from a population of interest.

- **SAMPLING**

17. In business studies _____ of primary data collection is used in order to test concepts, reflect attitude of people, establish the level of customer satisfaction, conduct segmentation research and a set of other purposes.

- **SURVEY METHOD**

18. The types of surveys according to the span of time used to conduct the survey interview.

- **False**

19. One of the disadvantages of survey method is unwillingness or inability of respondents to provides information.

- **True**

20. In random sampling significance is the percent of chance that a relation may be found in sample data due to luck.

- **True**

21. Arrange in order how to setup likert scale.

___ Create Likert Scale Indicaotr

Questions

___ Decide on Likert Scale Responses

___ Decide What to Measure

- **3,2,1**

22. Which of the following statements below is/are the dis advantages of beta testing?

- A. Reduce product failure risk via customer validation.
- B. Finding the right beta users and maintaining their participation could be a challenge
- C. Creates goodwill with customers and increases customer satisfaction.

- **B and C only**

23. Decide What to Measure in set up liker scale serve as the foundation for all your questions and the response scale.

- **True**

24. In creating a Likert Scale Indicator Questions you should stay away from biased survey questions that can lead people to answer a

certain way or force people to choose between extremes

- **True**

25. Beta Testing allows a company to test postlaunch infrastructure.

- **True**

26. Test scripts are used in manual testing.

- **True**

27. Waterfall model consists of the following sequential phases through which the development life cycle progresses. Which is not included?

- **Project initiation**

28. All are following 5 keys components of testing methodologies except/s ____:

- **Analyzing**

29. The _____ development model breaks the project into small parts. Each parts is subjected to multiple iterations of the waterfall model.

- **Incremental or iterative**

30. Identify the term/concept: This plan includes the overall goals of an organization that are projected be achieved within three (3) to five (5) years' time. This is usually encapsulated in the strategic plan.

- **Long term planning**

26/30

1. _____ It tracks the real expenditure involved in a project in comparison to the allocated budget and helps the project team to form strategies to maximize outputs with minimal inputs.

- **Financial Monitoring**

2. Collection of data for the project monitoring can even require meetings with different players involved with project implementation.

- **True**

3. _____ consist of various specific measurement tools for indicating how well teams are achieving specific goals.

- **Key Performance Indicators**

4. The main purpose of _____ monitoring is to measure financial efficiency within a project.

• **Financial Monitoring**

5. The effects of change can be monitored reliably, repeatedly and accurately by KPIs.

• **True**

6. Gantt Chart helps to view the start and end dates of a project in one simple view.

• **True**

7. _____ communication is probably the most reliable mode of communication. Among its advantages is that it provides clear data and removes the possibility of any misunderstandings.

• **Written Communication**

8. Result monitoring entwines with project development.

• **False**

9. It tracks the overall setting in which the project operates.

• **Context Monitoring**

10. Project evaluation is focused on tracking project performance and progress using key performance indicators (KPIs) agreed during project development.

• **False**

11. In random sampling, there should be a pattern when drawing a sample.

• **False**

12. Which of the following below is not types of random sampling? A. Simple Random Sampling
B. Quota sampling
C. Equal probability systematic sampling
D. Stratified simple random sampling
E. Expert sampling
F. Cluster sampling

• **B and E only**

13. The advantage of interview is to provide better understand of the answers of the respondents.

• **True**

14. The following is/ are advantages of survey methods except/s____: A. Human bias of respondents
B. Surveys can be conducted faster and cheaper compared to other methods of primary data collection such as observation and experiments
C. Differences in understanding
D. Primary data gathered through surveys and relatively easy to analyze.

• **A and C only**

15. In random sampling significance is the percent of chance that a relationship may be found in sample data due to luck.

• **True**

16. Which is not true about disadvantages of survey methods? A. Differences of understanding
B. Surveys can be conducted faster and cheaper compared to other methods of primary data collection such as observation and experiments
C. Human bias of respondents
D. Unwillingness or inability of respondents to provide information
E. Primary data gathered through surveys are relatively easy to analyze

• **B and E only**

17. In Business studies _____ of primary data collection is used in order to test concepts, reflect attitude of people, establish the level of customer satisfaction, conduct segmentation research and set of other purposes.

• **SURVEY METHOD**

18. Which type of random sampling where by using the random number generator technique, the researcher draws a sample from the population?

• **Simple random sampling**

19. Availability sampling occurs when the researcher selects the sample based on the availability of a sample.

• **True**

20. Cluster sampling occurs when a researcher draws a random sample from the smaller unit of an aggregational group.

• **False**

21. Regression testing: A test conducted to determine if the requirements of a specification or contract are met.

• **False**

22. In _____ testing where hardware and/or software components are combined and tested to confirm that they work together.

• **Integration**

23. Arrange in order how to set up Likert scale.
____ Create Likert scale indicator questions
____ Decide Likert scale responses

_____Decide what to measure

• 2,3,1

24. _____ testing is the use of testing software to control the test execution and reporting,

• Automated testing

25. The process of developing test cases can also help find problems in the requirements or design of an application

• True

26. Beta testing is not cost effective compared to similar data gathering methods

• False

27. Beta testing allows a company to test post launch infrastructure.

• True

28. Iterative methodology is a collection of values, principles, and practices that incorporates iterative development, testing, and feedback into a new style of development.

• False

29. Test scripts are used in manual testing

• True

30. Manual test tools include: written test plan, test script/ scenarios to follow and method(s) of recording results.

• True

27/30

1). The purpose of compliance monitoring is to ensure compliance with donor regulations, grant, contract requirements, local governmental regulations and laws, ethical standards, and most importantly compliance with the expected results of the project.

[TRUE]

2. Project management KPIs are generally agreed upon middle in the project [FALSE]

3. The monitoring reports are not important since they are an essential part of project monitoring

[FALSE]

4. Which is/are not part of the responsibilities of a project manager?

A. Leading the development of the company's short and long term strategy

B. Ensures deliverables and functionality are achieved as defined in the Project Charter and subsequent plans.

C. Plans, guides, and oversees the day-to-day interval activities that support the Project Office.

D. Plans the project

[A ONLY]

5. Compliance monitoring is implemented during the initial stages of a project as its sole purpose is to track the use of inputs and resources, along with examining how activities and outputs are delivered. [FALSE]

6. _____ is implemented during the initial stages of a project as its sole purpose is to track the use of inputs and resources, along with examining how activities and outputs are delivered.

[PROCESS MONITORING]

7. Project Manager makes policy recommendations to management on sensitive or complex issues [TRUE]

8. Analogy:

Verbal Communication – reliable mode of communication

Written Communication – effective mode of communication

[FALSE]

9. Its primary purpose is to track the overall perceptions of direct and indirect beneficiaries in relation to a project. [BENEFICIARY MONITORING]

10. All are project management tools except/s

A. Meetings

B. Verbal and Written Communications

C. Reports

D. Diary Notes

[NONE! All are Project Management Tools]

11. The advantage of interview is to provide better understanding of the answers of the respondents [TRUE]

12. Which is not true about disadvantages of survey methods?

- A. differences in understanding
- B. surveys can be conducted faster and cheaper compared to other methods of primary data collection such as observation and experiments
- C. Human bias of respondents
- D. unwillingness or inability of respondents to provide information
- E. Primary data gathered through surveys are relatively easy to analyze

[B AND E ONLY]

- 13. ____ sampling occurs when a random sample is drawn from certain aggregational geographical groups. **[CLUSTER SAMPLING]**
- 14. Survey methods is a statistical procedure that is concerned with the selection of the individual observation; it helps us to make statistical inferences about the population. **[FALSE]**
- 15. ____ is the number of completed responses your survey receives. It's called a sample because it only represents part of the group of people (or target population) whose opinions or behavior you care about **[SAMPLING SIZE]**
- 16. Surveys can be conducted slower and expensive compared to other methods of primary data collection such as observation and experiments **[FALSE]**
- 17. Which type of random sampling where a proportion of strata is selected from a homogenous group using simple random sampling? **[MULTISTAGE STRATIFIED RANDOM SAMPLING]**
- 18. The following is/are advantages of survey methods except/s ____:
 - A. Human bias of respondents
 - B. Surveys can be conducted faster and cheaper compared to other methods of primary data collection such as observation and experiments
 - C. Differences in understanding
 - D. Primary data gathered through surveys are relatively easy to analyze

[A and C ONLY]

- 19. Quota sampling method is similar to the expert sampling method, but with the constraint that the sample is drawn proportionally by strata. **[FALSE]**

- 20. The total number of people in the group you are trying to study is called ____.

[POPULATION SIZE]

- 21. Arrange in order how to set up Likert scale.
 - ____ Create Likert scale indicator questions
 - ____ Decide Likert scale responses
 - ____ Decide what to measure **[2,3,1]**

- 22. ____ testing is the use of testing software to control the text execution and reporting

[AUTOMATED TESTING]

- 23. Arrange the 5 keys components of testing methodologies (in order)

____ Execution

____ Development

____ Evaluation

____ Reporting

____ Planning

[3,2,5,4,1]

- 24. Which of the following is not part of the template of test cases?

- **Project manager ID**
- Related requirement
- Test case summary
- Expected result

- 25. ____ testing is involves direct human interaction with the system under test.

[MANUAL TESTING]

- 26. ____ testing is the last testing done by the test teams at the development site after the acceptance testing and before releasing the software for the beta test **[ALPHA]**

- 27. Which of the following is not part of the template of test cases?

- **Co requisite**
- Date of creation
- Test environment
- Executed by
- Test procedure
- Status

28. ____ methodology was developed to respond to changes quickly and smoothly **[AGILE]**
29. In evaluation and testing ethics, Evaluators must respect the right of institutions and individuals to provide information in confidence and ensure that sensitive data cannot be traced to its source **[TRUE]**
30. In creating a Likert Scale Indicator Questions you should stay away from biased survey questions that can lead people to answer a certain way or force people to choose between extremes. **[TRUE]**

30/30

1. ____ is responsible for managing or overseeing all aspects of a project applying the Office of Systems Integration (OSI) Best Practices, industry standards, principles, methods, and techniques to deliver an information technology product, service, or system

• **PROJECT MANAGER**

2. The following reasons why uses KPIs:

- a. The effects of a change can be monitored reliably, repeatedly and accurately by KPI.
- b. For the accuracy, actual reflection of the process, efficacy in delivering the outcome
- c. Performance effectiveness

• **A, B, and C**

3. All are project management tool except/s ____:

- a. Meetings
- b. Verbal and Written Communications
- c. Reports
- d. Diary Notes

• **NONE! All are Project Management Tools**

4. Analogy:

Verbal communication – reliable mode of communication

Written Communication – effective mode of communication

• **False**

5. ____ is probably the most effective mode of communication. Among its advantages is that it is quick, and its presentation can be adapted to concerns and questions of the audience.

• **Verbal Communication**

6. FURPS comprises of: Functional, Usability, Reliability, Performance, and Supportability

• **True**

7. Stratified Simple Random Sampling is a proportion from strata of the population is selected using simple random sampling

• **True**

8. An interview includes two persons - the researcher as the _____, and the respondent as the _____.

• **Interviewer-interviewee**

9. Likert scale examples of things measure, which is not included?

• **Status**

10. Alpha testing is a form of internal acceptance testing performed mainly by the in-house software QA and testing teams.

• **True**

11. All those engaged in designing, conducting and managing evaluation activities should be guided by sound professional standards and strong ethical principles.

• **True**

12. At the end of each iteration, a new module is completed or an existing one is improved on, the module is integrated into the structure, and the structure is then tested as a whole.

• **True**

13. ____ testing is the use of testing software to control the text execution and reporting,

• **AUTOMATED**

_____ is a project management tool assisting in the planning and scheduling of projects of all sizes and they are a useful way of showing what work is scheduled to be done on a specific day. **Gantt Chart**

Project evaluation is focused on tracking project performance and progress using key performance indicators (KPIs) agreed during project development. **False**

_____ consist of various specific measurement tools for indicating how well teams are achieving specific goals. **KEY PERFORMANCE INDICATORS**

Project evaluators oversees and manages all aspects and phases of a project. **FALSE**

_____ it tracks institutional development, communication, collaboration, sustainability and capacity building within an organization and with its partners and stakeholders in relation to project implementation. **Organizational monitoring**

Availability sampling occurs when the researcher selects the sample based on the availability of a sample. **True**

_____ sampling is the sampling technique in which every individual unit of the population has greater than zero probability of getting selected into a sample.

PROBABILITY

Sampling confidence level is a percentage that reveals how confident you can be that the population would select an answer within a certain range. **True**

The advantage of using questionnaires is to limit the researcher's understanding of the respondent's answers; requires budget for reproduction of survey questionnaires. **False**

Quota sampling method is similar to the expert sampling method, but with the constraint that the sample is drawn proportionally by strata. **True**

_____ is a rating scale, often found on survey forms, that measures how people feel about something. **LIKERT SCALE**

Evaluators must have personal and professional integrity according to the evaluation and testing ethics. **True**

_____ is a set of instructions (written using a scripting/programming language) that is performed on a system under test to verify that the system performs as expected. **TEST SCRIPT**

All are test execution methods except _____. **Project monitoring and controlling**

Which of the following statements below is/are the disadvantage of beta testing?

- A. Reduces product failure risk via customer validation.
- B. Finding the right beta users and maintaining their participation could be a challenge
- C. Test Management is an issue.
- D. Creates goodwill with customers and increases customer satisfaction.

B and C only

In 5 keys components of testing methodologies _____ always follows implementation of a new release. **Evaluation**

F.1 29/30 (Wrong choices in #24)

1. The very nature of project management makes it inevitable that certain meetings are convened to communicate and share project information.
 - **True**
 - False
2. Project management KPIs are generally agreed upon middle in the project.
 - True
 - **False**
3. All are steps in project monitoring except/s _____.
 1. Study of the project, its schedule, and costs.
 2. Selection of the parameters to be monitored.
 3. Implement training.

4. Install the production solution.

- **Both 3 and 4**
- Both 1 and 2
- 2 only
- 4 only

4. _____ it tracks the real expenditure involved in a project in comparison to the allocated budget and helps the project team to form strategies to maximize outputs with minimal inputs.

- **Financial monitoring**
- Organizational monitoring
- Results monitoring
- Context monitoring
- Beneficiary monitoring
- Process monitoring

5. Project Manager works with control agencies to comply with state administrative requirements.

- **True**
- False

6. Project Manager makes policy recommendations to management on sensitive or complex issues.

- **True**
- False

7. _____ is a project management tool assisting in the planning and scheduling of projects of all sizes and they are a useful way of showing what work is scheduled to be done on a specific day.

- **Gantt Chart**
- Ishikawa Diagram
- Context Diagram
- Activity Diagram

8. S.M.A.R.T. criteria was originally developed by _____. (complete name)

- **GEORGE T. DORAN**

9. Gantt charts are incredibly useful in project management because they allow you to track the

status of project tasks. They also help keep track of deadlines, milestones, and hours worked.

- **True**
- False

10. Result monitoring entwines with project development.

- True
- **False**

11. Stratified simple random sampling is a proportion from strata of the population is selected using simple random sampling.

- **True**
- False

12. In random sampling significance is the percent of chance that a relationship may be found in sample data due to luck.

- **True**
- False

13. Availability sampling occurs when the researcher selects the sample based on the availability of a sample.

- **True**
- False

14. In random sampling, there should be a pattern when drawing a sample.

- True
- **False**

15. In business studies _____ of primary data collection is used in order to test concepts, reflect attitude of people, establish the level of customer satisfaction, conduct segmentation research and a set of other purposes.

- **SURVEY METHOD**

16. Non-probability sampling is the sampling technique in which some elements of the population have a probability of getting selected into a sample.

- True
- **False**

17. Survey methods is a statistical procedure that is concerned with the selection of the individual observation; it helps us to make statistical inferences about the population.

- True
- **False**

18. Sampling confidence level is a percentage that tells you how much you can expect your survey results to reflect the views of the overall population.

- True
- **False**

19. The advantage of using questionnaires is to limit the researcher's understanding of the respondent's answers; requires budget for reproduction of survey questionnaires.

- True
- **False**

20. The types of surveys according to the span of time involved include the questionnaire and the interview.

- True
- **False**

21. Test scripts are used in manual testing.

- **True**
- False

22. In analyzing data a statistics median and mode can be use.

- **True**
- False

23. In 5 keys components of testing methodologies _____ always follows implementation of a new release.

- **Evaluation**
- Reporting

- Execution
- Development
- Planning

24. Arrange the 5 keys components of testing methodologies. (In order) **(Mali choices)**

_____ Execution

_____ Development

_____ Evaluation

_____ Reporting

_____ Planning

- **3, 2, 5, 4, 1**
- 4, 2, 1, 5, 3
- 2, 3, 1, 5, 4
- 1, 2, 3, 5, 4

25. In evaluation and testing ethics, Evaluators must respect the right of institutions and individuals to provide information in confidence and ensure that sensitive data cannot be traced to its source.

- **True**
- False

26. Which of the following statements is the dis advantage of alpha testing?

- **In depth, functionality cannot be tested as software is still under development stage Sometimes developers and testers are dissatisfied with the results of alpha testing**
- Provides better view about the reliability of the software at an early stage
- Helps simulate real time user behavior and environment.
- Detect many showstopper or serious errors

27. In _____ testing where hardware and/or software components are combined and tested to confirm that they work together.

- **Integration**
- Unit
- Acceptance
- Regression

28. In 5 keys components of testing methodologies _____ includes effectiveness, status and defect reporting and determining if the system or SW is ready for the next level of testing or release.

- **Reporting**
- Planning
- Development
- Execution
- Evaluation

29. All are test execution methods except _____:

- **Project monitoring and controlling**
- Unit testing
- Acceptance testing
- Regression testing

30. _____ is a set of instructions (written using a scripting/programming language) that is performed on a system under test to verify that the system performs as expected.

- **TEST SCRIPT**

F1. 27/30

1. _____ refers to the process of keeping track of all project-related metrics including team performance and task duration, identifying potential problems and taking corrective actions necessary to ensure that the project is within scope, on budget and meets the specified deadlines. **Project Monitoring**
2. _____ is probably the most effective mode of communication. Among its advantages is that it is quick, and its presentation can be adapted to concerns and questions of the audience. **Verbal communication**
3. Which is/are not part of the responsibilities of a project manager? **A only**

A. Leading the development of the company's short- and long-term strategy

B. Ensures deliverables and functionality are achieved as defined in the Project Charter and subsequent plans.

C. Plans, guides, and oversees the day-today internal activities that support the Project Office.

D. Plans the project.

4. _____ is a project management tool assisting in the planning and scheduling of projects of all sizes and they are a useful way of showing what work is scheduled to be done on a specific day. **Gantt Chart**

5. Project evaluation is focused on tracking project performance and progress using key performance indicators (KPIs) agreed during project development. **False**

6. Project evaluators oversees and manages all aspects and phases of a project. **FALSE**