

APPENDICES

Appendix (1)

- QUESTIONNAIRE

Sudan University of Science and Technology

QUESTIONNAIRE

GENERAL INFORMATION

Name:.....

-Type of work: (Select only one.)

☐ Common

☐ Privet

☐ other: State.

-Age:.....

-How long have you served the construction industry?

(Select only one.)

☐ ☐ ☐ ☐ ☐ Below 5 years

☐ ☐ ☐ ☐ ☐ 5 – 10 years

☐ ☐ ☐ ☐ ☐ 11 – 15 years

☐ ☐ ☐ ☐ ☐ 16 – 20 years

☐ ☐ ☐ ☐ ☐ Above 20 years

- Degree Honor:

(Select only one.)

☐☐☐☐☐ High diploma

☐☐☐☐☐ Bachelor

☐☐☐☐☐ Master Degree

☐☐☐☐☐ Dr. Degree

SECTION A

1. Which organization do you represent?

(Select only one.)

☐☐☐ Developer/Client

☐☐☐ Architectural firm

☐☐☐ General Building Contractor

☐☐☐ Consultant Firm

☐☐☐ Government Agency

☐☐☐ Others: _____ (state)

2. What is the type of project your company usually deals with?

(Select only one.)

☐☐☐☐☐ Government sector

☐☐☐☐☐ Private sector

☐☐☐☐☐ Both

3. *What is the size of your company ?*

(Select only one.)

- ☐ ☐ ☐ ☐ Small (5 million SDG)
- ☐ ☐ ☐ ☐ Medium (15 million SDG)
- ☐ ☐ ☐ ☐ Large (50 - 200 million SDG)
- ☐ ☐ ☐ ☐ Mega (more than 200 million SDG)

4. *Who is involved in planning and monitoring projects in your organization?*

(Select only one.)

- ☐ ☐ ☐ ☐ Planner engineer
- ☐ ☐ ☐ ☐ General Manager
- ☐ ☐ ☐ ☐ Project manager
- ☐ ☐ ☐ ☐ Site engineer

5. *What is your profession in construction industry?*

(Select only one.)

- ☐ ☐ ☐ ☐ Architect
- ☐ ☐ ☐ ☐ Project Manager
- ☐ ☐ ☐ ☐ Engineer
- ☐ ☐ ☐ ☐ Quantity Surveyor
- ☐ ☐ ☐ Others: _____ (state)

SECTION B

6. In your opinion, rank the following elements that were considered in developing the success of a construction projects.

The Elements	strongly agree	agree	uncertain/ not applicable	disagree	strongly disagree
1. Within the allocated time period	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Within the budgeted cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. At the proper performance or specification level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. With acceptance by the customer or user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. With minimum or mutually agreed upon scope changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Without disturbing the main work flow of the organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Effective communication process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Without changing the company culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION C

EVM (Earned Value Management)

7. *Using the options provided below, please assess your knowledge about EVM techniques:*

(Select only one.)

☐ ☐ ☐ ☐ ☐ Poor

☐ ☐ ☐ ☐ ☐ Fair

☐ ☐ ☐ ☐ ☐ Good

☐ ☐ ☐ ☐ ☐ Very good

☐ ☐ ☐ ☐ ☐ Excellent

8. *In your opinion, the (EVM) could be considered as:-*

(Select only one.)

☐ ☐ ☐ ☐ ☐ Reporting Tool Only

☐ ☐ ☐ ☐ ☐ Reporting Tool with (some) Management Uses

☐ ☐ ☐ ☐ ☐ Equal Parts Reporting and Management Tool

☐ ☐ ☐ ☐ ☐ Management Tool with (some) reporting Uses

☐ ☐ ☐ ☐ ☐ Management Tool Only

9. How do you implement EVM in your projects?

(Select only one.)

☐ ☐ ☐ ☐ ☐ Least frequent

☐ ☐ ☐ ☐ ☐ less frequent

☐ ☐ ☐ ☐ ☐ Moderate

☐ ☐ ☐ ☐ ☐ Frequent

☐ ☐ ☐ ☐ ☐ Most frequent

10. In your opinion, rank the following concepts that were considered in developing EVM.

The concepts	strongly agree	agree	uncertain/ not applicable	disagree	strongly disagree
1. EVM provides early warning of performance problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. EVM assists the project team to achieve cost objective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. EVM improves communication among team members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. EVM assists the project team to achieve schedule objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. EVM improves project scope management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. EVM is a cost –effective tool for performance management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. In your company, the most used tools and technique that used in implementing project is:

(Select only one.)

☐ ☐ ☐ ☐ Primavera p6

☐ ☐ ☐ ☐ Microsoft project

☐ ☐ ☐ ☐ Others: -----(-state).

12. Throughout your experience can you rank the use of (EVM)in the construction industry in Sudan.

(Select only one.)

☐ ☐ ☐ ☐ Never

☐ ☐ ☐ ☐ Rarely

☐ ☐ ☐ ☐ Sometimes

☐ ☐ ☐ ☐ Most of the time

☐ ☐ ☐ ☐ Always

13. In your opinion what is the best way to apply EVM in construction industry (Select only one.)

☐ ☐ ☐ ☐ assign planner engineer to each project.

☐ ☐ ☐ ☐ Develop the management skills of project managers.

☐ ☐ ☐ ☐ Others: -----(state)

14. In your opinion, rank the following advantages behind analyzing and controlling the performance of construction project

Advantages	strongly agree	agree	uncertain/ not applicable	disagree	strongly disagree
1. Reduce overall project costs, usually well in excess of their fees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Enhance quality control to reduce potential for defects and poor workmanship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Provides an early warning of performance problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Uncover any time and cost deviations from the plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Forecasting project cost at completion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Support decision making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>