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PROJECT MANAGEMENT DEPARTMENT UNVEILED: DECODING THE OBSERVANCE TO ELEVATE COMPETENCY THROUGH CAMERA SURVEILLANCE- A CASE STUDY

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Introduction:
In the ever-evolving of project management, the need for efficient and effective supervision has led to innovative methods of observation. One such method, often met with curiosity and skepticism is camera surveillance. Camera surveillance involves discreetly monitoring activities, not to invade the privacy, but gain the insights into their non-verbal communication and how it correlates with project hurdles.This unique approach offers a fresh perspective on understanding the project dynamics and uncovering challenges that may remain hidden through conventional means. In this article, we will delve into the world of camera surveillance; decode the gesture, posture and behavioral pattern of project managers with the aim of improving project management practices and outcomes.

Importanceof understanding the observance:
Decodingthe observanceof project managers is important to understand for several reasons like effective communication, conflict resolution, team dynamics, decision making, risk management, adaptability.Incorporating the understanding of project managers' observance can lead to more effective leadership, better team dynamics, and ultimately successful project outcomes.

The goal of identifying common hurdles in project department:
It is to enhance the success of project, improve decision making, optimize resource allocation, enhance risk management, and promote continuous improvement. Inessence, the goal of identifying common hurdles is to make project management a smoother and more predictable process, resulting into more successful project outcomes.

A case Study:
A case study was conducted on a project team of 20, involved in handling turn-key projects of ethanol plant starting from 30klpd to 250 klpd capacities. The team's mainresponsibility is to execute various activities smoothly within stipulated time period within targeted estimated project cost by satisfying the agreement, tangible and intangible requirements of the clients. Also the project team must satisfy some of the requirements of inter departments within the company.

Objective of study:
The objective was to assess the individual's performance and the hurdles coming in across while performing the task, so that those hurdles can be removed to elevate the performance of the individuals and the team as a whole.

Method of study:
We avoided direct observation method, because direct observation would disturb and mislead the employees. Also authentication was difficult to guarantee.
Cameraswere strategically placed where they do not intrude on personal privacy but capture important interaction and activities. .Unlike direct observation, camera surveillance does not involve physical presence making it less obtrusive. Project managers can work naturally without feeling constantly monitored.
Statistical sampling method is used to collect the elements of observanceby camera surveillance, at random interval of time during the shift hours (9:00 am to 5:30 pm).The tea break ,Lunch break time is omitted from the random time chart but the near about time after the break time was considered.

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Also, the recorded footage is used toanalyze the time duration; pattern and trends, helping project managers to identify the need for real-time supervision.

Step-I:

First, we calculate the sample size for 95% confidence level. This is done by using formula

$$\sigma\rho = \sqrt{pq}/\sqrt{n}$$

Considering p=25 and q= 75 and +/- 5 % error, where n is sample size.

At 95% CL, $\sigma\rho$=2.5 (Approx.)

n= $\frac{25x75}{2.5x2.5}$

= 300 no of observations

Step-II:

We use random observation number table to collect the work samples.

Figure No.1: table of Random numbers to get the sequence of time for random observation as shown in below table.

Random no.	Time of observation	Random no.	Time of observation
05	9:50	38	3:30
11	10:50	45	4:40
14	11:20	47	4:50
15	11:30	49	5:10
20	12:20		
22	12:40		
33	2:30		

Multiplying each number by 10 minutes and start from 9:00 am.

Step-III:

Commonly observed elements are identified for which the sampling is done.

Figure No.2 Elements identified for sampling

OBSERVATIONS								
In the seat					**Not In the seat**			
Typing on key board	Staring at screen	Interacting on mobile	Handling documents	Interacting with subordinates	Moved to other department	For meeting in conference room	Meeting in HOD cabin	Out with client

We are interested to find the percentage of time the project manager is engaged in different activities when he is “in his seat” or “Not in his seat”.

Step-IV:

Designing record sheets:

Figure no: 3 Work sampling sheet

	Date:Project Manager Name:			Study no.
	Number of observations = 300			
Present in the seat	Elements of work	Expected pattern	Total	Percent
	Typing on key board | | |	Promptly typing | |	4	
	Staring at screen	Short while of time		

	Interacting on mobile	Promptly finishes conversation		
	Handling documents	Easy and fast		
	Interacting with subordinates	Positive body language		
Not Present in the seat	Moved to other department	Positive interaction		
	For meeting in conference room	Positive body language		
	Meeting in HOD cabin	Positive body language		
	Out with client			
	Attending personal needs			

Figure No: 4 Time distribution of all managers for all elements of work

Date:	Observer:								Study no:	
No of observations										
	Elements of work									
	1	2	3	4	5	6	7	8	9	…20
Project manager1										
Project manager25										

Step V: Draw Parato diagram of the data collected as per Fig no.3,

Fig No.5: Project Manager 1 is 40% of times were not in his seat

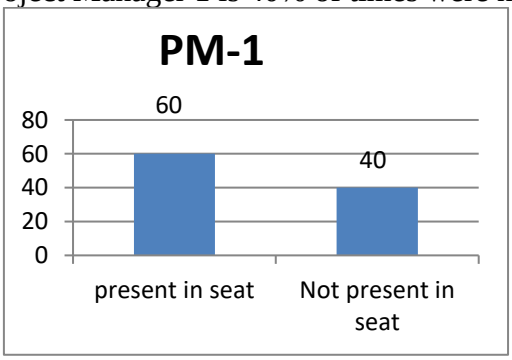

Fig No.6: Further analysis of "Not in Seat" of PM 1

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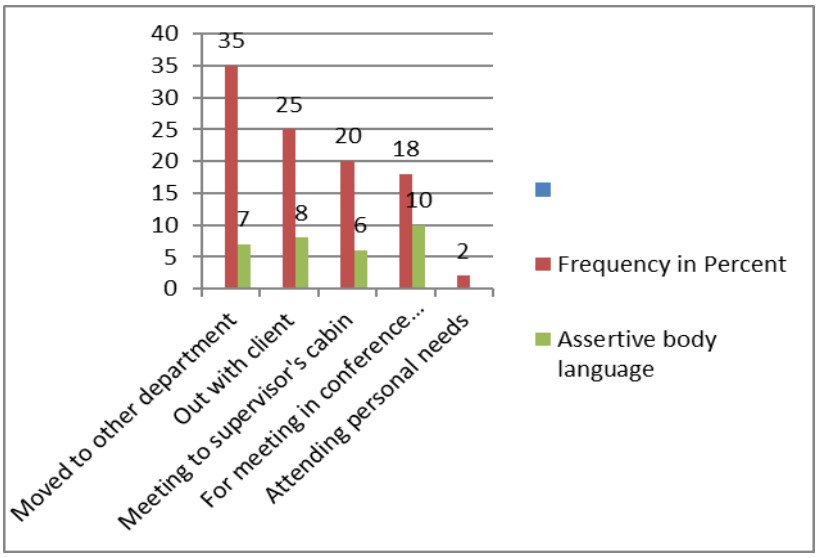
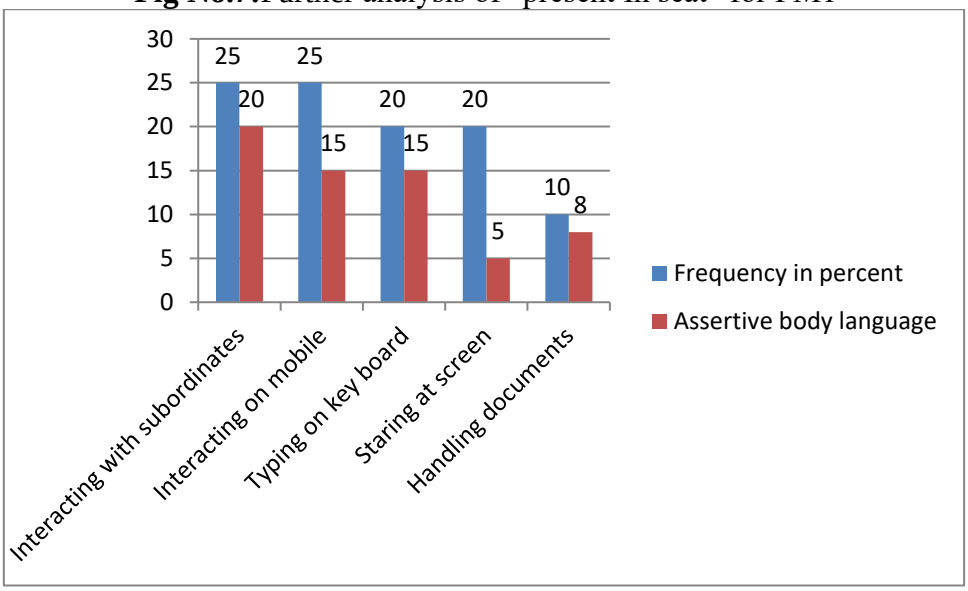


Fig No.7: Further analysis of "present In seat" for PM1



Step VI:

The work elements which are repeated frequently or for long duration with poor gesture are considered abnormal. The project managers showingone or more than one of the following mentioned abnormalities are identified and face to face interviewed in an open and supportive environment. Following were some examples of abnormalities found in some managers with poor gesture.

Elements (abnormal)	Apparent reason
Frequently moving to other departments	Challenges in coordination or communication, possibly due to work dependencies, or issues that require their attention.
Frequent interaction on mobile	Shows need of quick decision making or the presence of urgent matter that demand immediate attention.
Long time staring at screen	Finding complex task needing focus or heavy load,, confusion,procrastination in work.
Long time spent in attending the clients	Challenges in meeting client's expectations.
Long time interacting with subordinates	Challenges in managing team

Frequently attending personal needs	Stress, burnout or need for mental and physical well-being.
Long time meeting with HOD	Challenges in execution at site.

The project managers were open up with the problems or gaps they were facing during the execution of project work. Some examples are as follows:

1) Technical knowledge gap due to which some don't find clarity of work or they had to revise the data sheet,requisitions,drawings,frequently and also have to rely on seniors
2) Continuous follow up of materials and drawings for which they have to move personally to different depts.
3) Poor communication like email writing, forwhich they have to spend more time in front of computer
4) Some managers have to do more of clerical work than the Engineering work
5) No preparation for sudden scope change by client
6) Site work planning and execution difficulty

Those gaps were removed by arranging In-house training programs on:

1) Soft-skill development including verbal communication, report writing, E-mail writing, listening skill
2) Technical knowledge programs on Pump selection, understanding P & ID, PHE finalization, breather valve calculation, etc.
3) Decision making skill
4) Yoga for stress relieving
5) Effective site work planning and smooth execution
6) Supervision skill

Conclusion:

When approached ethically, the camera surveillance of project managers' team can offer advantages such as: upholding high standard of accountability,adhering to professional conduct, helping to identify the areas of improvement, recognize effective strategy, preventing unauthorized access to sensitive information and safeguarding project related assets. Monitoring can also help to balance the work load among the team members, identifying trainingopportunities, and prevention of unethical behavior.

However, camera surveillance may seem like a way to enhance performance, it raises significant ethical concerns. Respect for privacy is crucial in fostering a healthy work environment. Instead, promoting open communication, using good supervision skills, building trust, setting clear expectations, and providing constructive feedback can be more effective in improving performance and maintaining a sustainable positive workplace atmosphere.