Determining Demonstrable Competency Across Technical Laboratories in Tata Steel Port Talbot

A Group Project by Briony Morgan

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- Project Purpose and Objectives
- Team Working Methodologies
- Planning Methods and Time Management
- Problems Encountered and Solutions
- Project Outcomes and Successes
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- Reflection and Areas for Improvement



Project Purpose and Objectives

Why Carry out the Project?

- To determine and improve competency.
- Ensure adhesion to safe working practises.
- Standardise the companies approach to carrying out and recording training.
- Create a user-friendly database for mangers and workforce to monitor competency progress.
- Reduce the quantity accidents and near misses in the workplace.
- Work in accordance to company standards and aim to make innovative improvements.

“If there are challenges thrown across, then some interesting, innovative solutions are found. Without challenges, the tendency is to go on the same way.” - Ratan Tata

Project Purpose and Objectives

What Objectives need to be Met?

Locally..

- Update SWP's
- Create competency assessments for each task
- Assign modules to individuals based on minimum/ideal roles
- Carry out training, assessing and record documents against training profiles

While externally..

- A database is to be created to assign, manage and store training records
- The new database is to be backdated with current training arrangements so the information is recent

And Long-term..

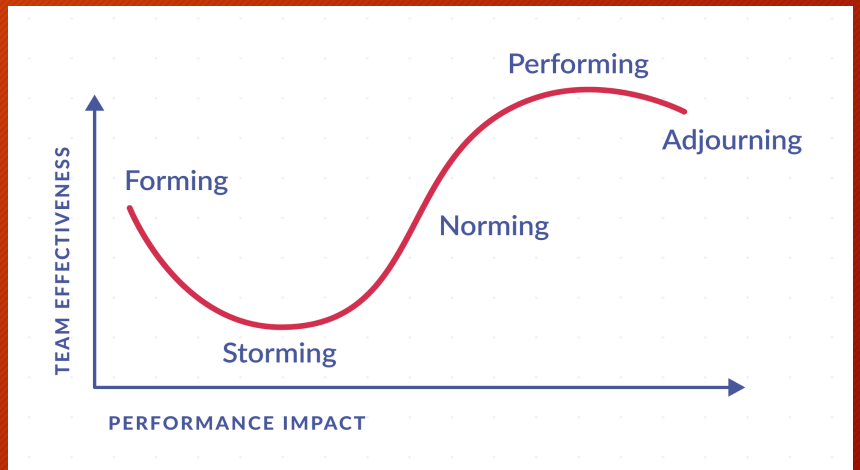
- New training plans are to be implemented for future refreshers and new employees

Team Working Methodologies

Applying Bruce Tuckman's Theory of Teamwork

1. Forming – Tasks were assigned according to Belbin's nine team roles
2. Storming - Regular team building sessions were carried out to avoid too much conflict
3. Norming – A Gantt chart was used to monitor and update progress and address problems
4. Performing - Frequent communication sessions were planned to ensure continuous development
5. Adjourning – Members reflected on events, identifying success and areas for improvement



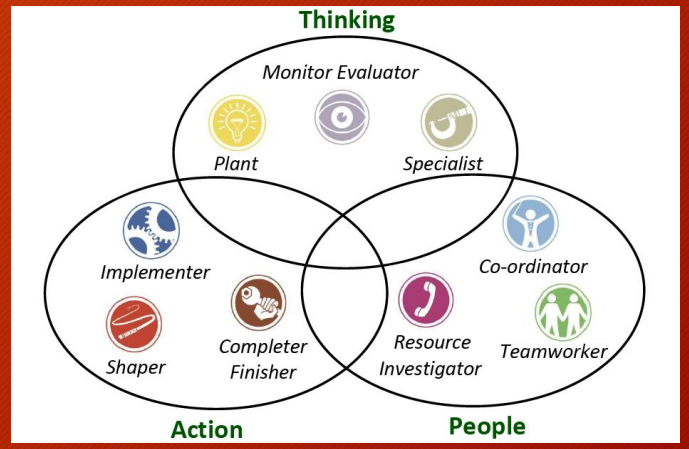


Team Working Methodologies

Assigned roles based on Belbin's nine team roles

Role	Code	Briony Morgan	Claire Hoskins	Adam Norris	Vicky Thomas	Susan Taylor	Jeremy Morgan	Voids	Surplus
Plant	PL	2	5	9	1	5	9	No	No
Monitor Evaluator	ME	6	2	8	3	4	4	No	No
Specialist	SP	7	9	5	2	2	5	No	No
Shaper	SH	5	1	6	6	9	3	No	No
Implementer	IMP	1	8	3	7	6	4	No	No
Completer Finisher	CF	9	3	7	9	7	2	No	No
Coordinator	CO	4	6	1	5	8	1	No	No
Team worker	TW	8	4	2	8	1	8	No	No
Resource Investigator	RI	3	7	4	4	3	7	No	No

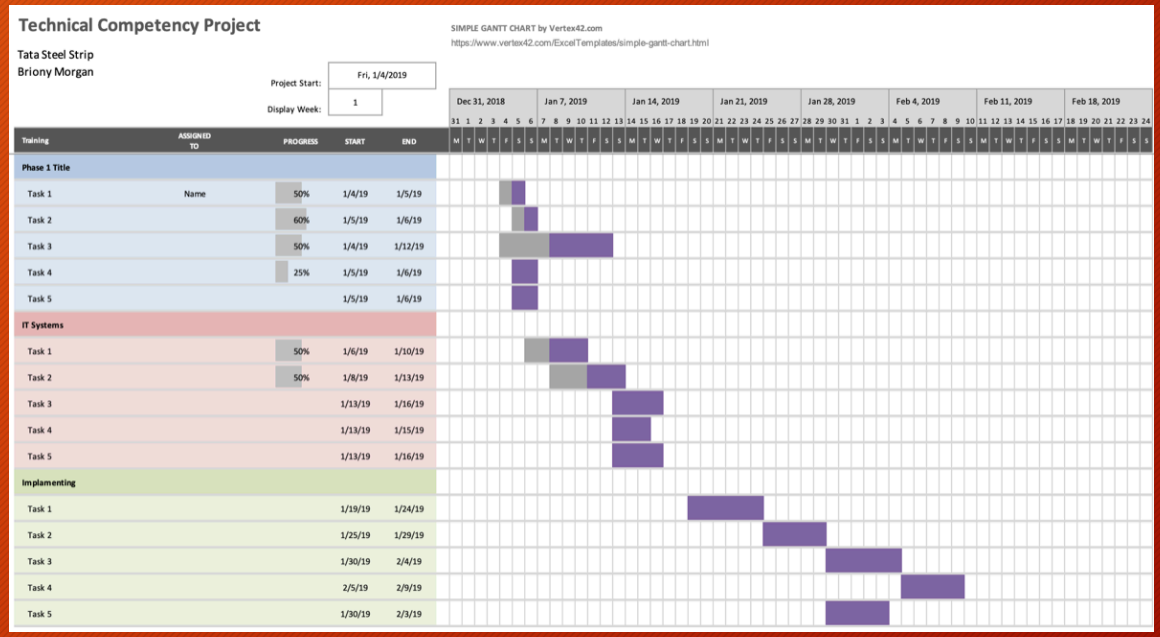
Role	Team Member Assigned
Plant	Vicky Thomas
Monitor Evaluator	Claire Hoskins
Specialist	Susan Taylor
Shaper	Claire Hoskins
Implementer	Briony Morgan
Completer Finisher	Jeremy Morgan
Coordinator	Adam Norris
Team worker	Susan Taylor
Resource Investigator	Briony Morgan



Planning Methods and Time Management

- Various planning methods were considered and discussed as team, a Gantt chart was selected as it provides a clear pictorial model of the project goals relative to time management.

Project Planning Method	Advantages	Disadvantages	Research References
Gantt Chart	Provides a clear pictorial model of the project. Simple to create. Requires little training to use and understand. Displays progress.	Can't show critical paths. Can't show inter-relationships. Limited size so little detail can be shown.	(Mind tools content teams, 2019)
Node Network Analysis	Identifies critical path method. Separates 'doing' and 'idle' activities. Activities can be done simultaneously. Displays shortest possible completion time.	Relatively complicated analysis. Training required to create and understand matrix.	(Rai, 2016)
Priority Category Matrix	Differentiates between urgent and important tasks. Allows proactive behaviour when possible. Priorities most important tasks.	No concept of time is considered. No visual aid.	(Mind tools team, 2019)
PERT Analysis	Provides a realistic completion date.	No visual aid. No progress monitor.	(Kopp, 2019)
Milestone Chart	Marks significant stages of the project. Estimates when events will occur to schedule review dates.	Does not consider smaller project details.	(Harned, 2018)



Planning Methods and Time Management

Objectives are identified and assigned according to priority and categorised into; *have* to, *want* to, *should* do, *nice* to do

Task	Owner	Priority	Start Date	End Date	Duration (months)
Determine the current level of demonstrable competency.	Briony Morgan	should do	01 April 2019	01 May 2019	1
Create a training plan for each individual laboratory based on functionality and purpose.	Briony Morgan	have to	01 May 2019	01 July 2019	2
Produce a reliable database to manage, assign and record demonstrable competency, incorporating laboratory training plans.	Vicky Thomas	have to	01 April 2019	01 December 2019	8
Ensure all controlled documents are live and up to date relating to training and procedural tasks.	Claire Hoskins	want to	01 May 2019	01 July 2019	2
Decide on a standard format to verify demonstrable competency.	Adam Norris	should do	01 May 2019	01 July 2019	2
Produce verification documents applying to specific job roles for each laboratory and assign to applicable personnel.	Claire Hoskins	have to	01 May 2019	01 September 2019	4
Carry out physical training and verification with employees based on the standard format determined at an earlier stage.	Briony Morgan	have to	01 July 2019	01 April 2020	9
Upload and backdate demonstrable verifications to employee profiles using the created database.	Susan Taylor	have to	01 December 2019	01 April 2020	4
Implement a reoccurring training plan using the database for continuous training within the department for current and new employees.	Vicky Thomas	Nice to do	01 December 2019	01 April 2020	4

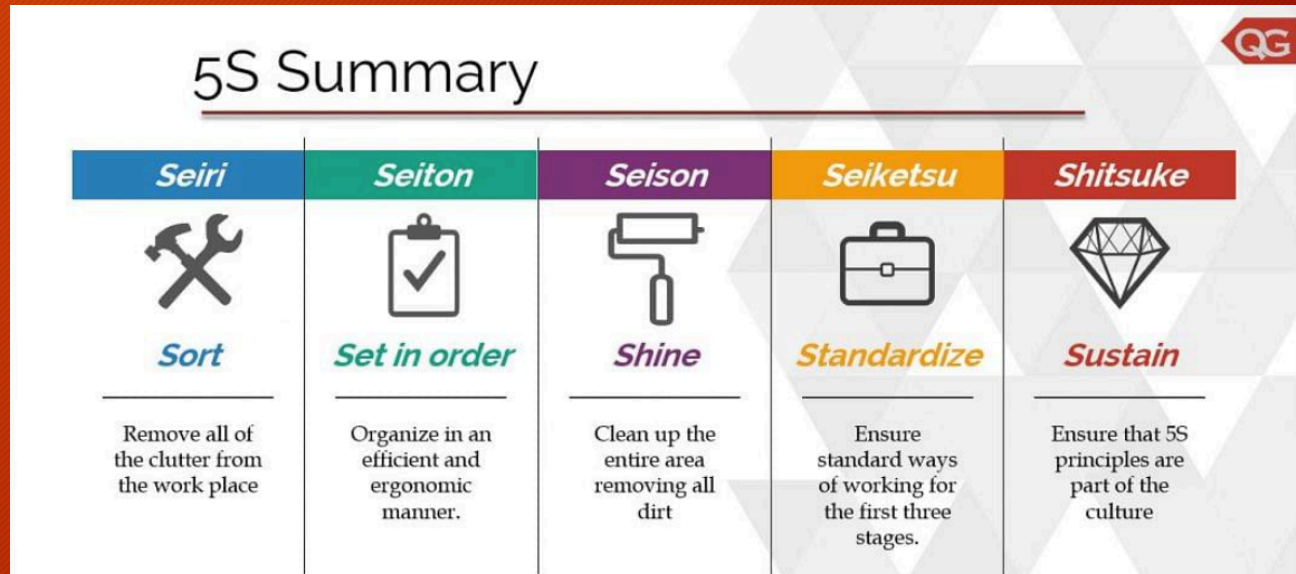
"Every minute you spend in planning saves 10 minutes in execution; this gives you a 1,000 percent Return on Energy."
- Brian Tracy

Planning Methods and Time Management

Time Management Methods used

- Setting SMART objectives (Specific, Measurable, Agreed, Realistic, Time Bound)
- Effective and regular communication between team members
- Applying the 5S strategy for maximum efficiency (Sort, Set in order, Shine, Standardize, Sustain)

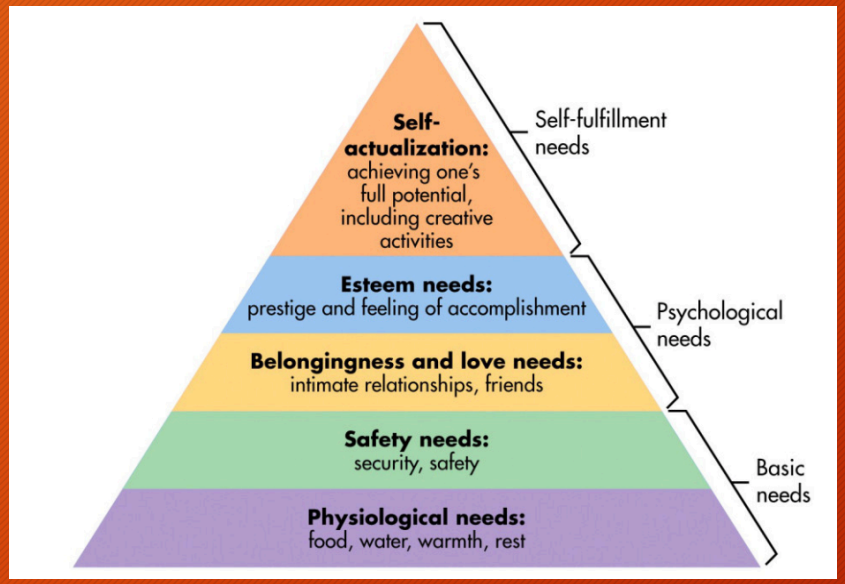




Planning Methods and Time Management

Team Motivation Methods

- A Methodology developed by Vroom was considered throughout, favorable performance resulted in reward.
- Stress was reduced according to Maslow's motivational theory.
- Motivators and hygiene factors was managed, taking into account Herzberg's two factor theory.

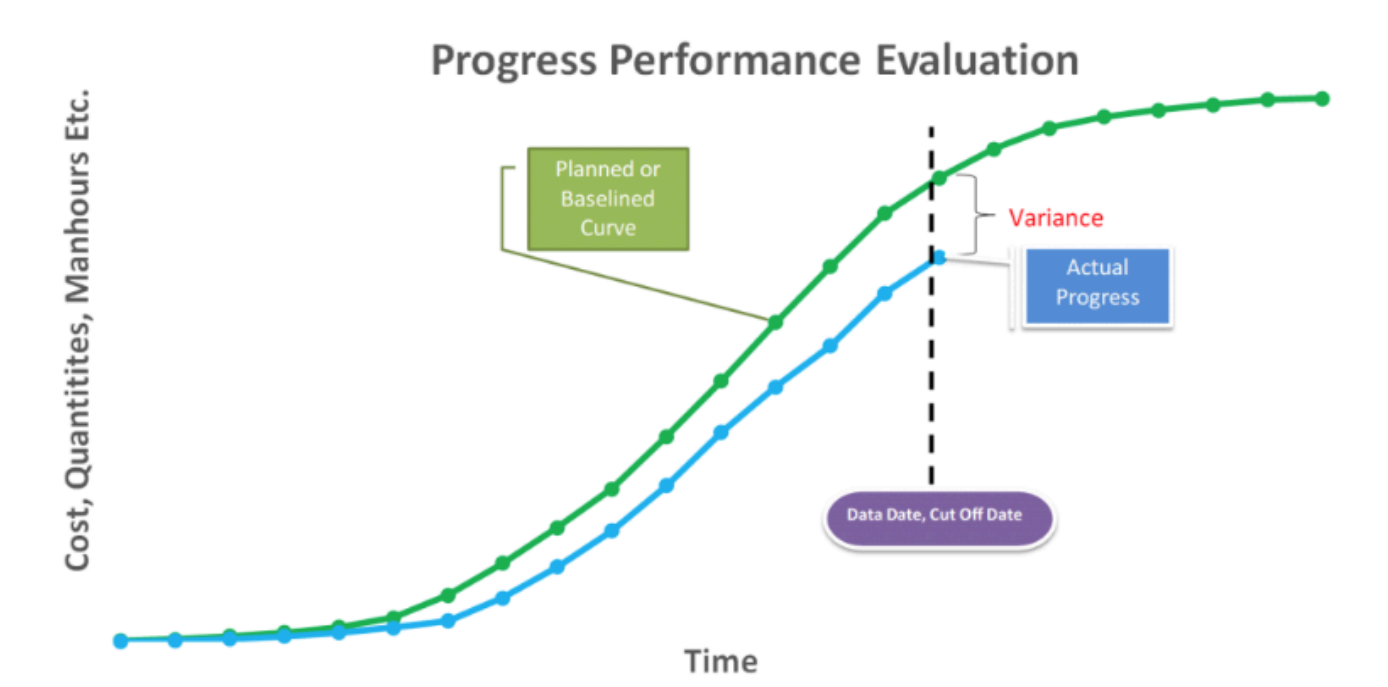




"Workplace stress is one of the biggest causes of employee absence - and also one of the more difficult issues to manage." - Charted Institute of Personnel and Development

Planning Methods and Time Management

Managing Costs using S-Curves



Problems Encountered and Solutions

Problem	Resolution
Unexpected absence of staff meant that not all personnel were available for training according to schedule	The training plans were amended to schedule training upon individuals return - this resulted in the delay of physical training completion
The IT system malfunctioned 21/01/2020 meaning that no evidence could be uploaded	Evidence was recorded manually and the documents were uploaded and backdated after IT fixes had been put in place
Not all required individuals were able to essential meeting due to other commitments	Some attendees used skype as a way to communicate in meetings when required
One task in the project flow was being neglected	A meeting was held to clearly communicate task objectives and respective owners
Into the project, it was noticed that team morale was low	From that point on, regular team building session were held to maintain motivation

Project Outcomes and Successes

- Updated training plans have been completed and stored on a new training system which is now live and in use by all personnel in the department for training progression. This has become the blueprint for all document reviewing processes.
- Training complies with all safe working practices in a standardised format and relevant documents are traceable for auditing purposes.



Influences From New Technology

- Advancements allowed a new diverse training database to be created in order to meet various criteria
- Investigate issues and develop solutions
- Better communication
- Leading to more developed steel products







Reflection and Areas for Improvement

- Whist establishing timeframes, better prepare contingency plan for unexpected leave and absences to reduce delays.
- When implementing new IT systems, conduct user acceptance testing sessions to certify that it’s reliable prior to going live.
- Rather than allowing team motivation to fade and reactively carry out team building sessions, proactively schedule regular team engagement activities.



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