

Productivity Step-up for Construction Industry Sector Programme (2023)

Project Management using Power Bi Construction

<p>Day 1 (Online Class)</p>	<p><u>Diagnostics lesson</u></p> <ul style="list-style-type: none"> • Productivity assessment is introduced for companies to identify the overall company performance and readiness to adopt technology. The companies will understand their strengths, weaknesses, and potential areas for improvement. <p><u>Process Analysis lesson</u></p> <ul style="list-style-type: none"> • The second phase of the programme examines the current processes of companies. Participating companies will be guided to analyses their key processes and understand their points and problem statements. Furthermore, it can help the companies determine the best solution and intervention. <p><u>1) Introduction to Power BI:</u></p> <ul style="list-style-type: none"> • Provide an overview of Power BI as a powerful business intelligence and data visualization tool. • Explain how Power BI can be utilized to create a dynamic project tracker. • Highlight the benefits of using Power BI for real-time project monitoring and reporting. <p><u>2) Data Integration and Preparation:</u></p> <ul style="list-style-type: none"> • Discuss the process of importing project data into Power BI from various sources like Excel, databases, or cloud platforms. • Explain how to clean, transform, and model the data for effective analysis. • Emphasize the importance of data accuracy and consistency for reliable project tracking. <p><u>3) Creating the Project Tracker Dashboard:</u></p> <ul style="list-style-type: none"> • Walk through the steps of designing an interactive project tracker dashboard in Power BI. • Showcase different visuals like project status cards, timeline charts, and key performance indicators (KPIs). • Explain how the dashboard provides a real-time view of project progress. <p><u>4) Task and Resource Management:</u></p> <ul style="list-style-type: none"> • Demonstrate how to use Power BI visuals to track task assignments, deadlines, and completion status. • Showcase the use of resource allocation visuals to manage team workloads. • Explain how Power BI enables effective task and resource management.
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<p style="text-align: center;">Day 2 (Online Class)</p>	<p><u>1) Project Health and Performance:</u></p> <ul style="list-style-type: none"> • Introduce the concept of project health and performance metrics in Power BI. • Show how to create visuals that indicate project health, delays, and potential risks. • Explain how to measure project performance using relevant KPIs. <p><u>2) Project Insights and Analysis:</u></p> <ul style="list-style-type: none"> • Discuss how to utilize Power BI's reporting capabilities to gain project insights. • Showcase how to create custom reports and use drill-down functionalities for deeper analysis. • Explain how to identify trends and make data-driven decisions. <p><u>3) Automating Data Refresh and Alerts:</u></p> <ul style="list-style-type: none"> • Demonstrate how to schedule data refresh in Power BI to keep the project tracker up to date. • Showcase how to set up alerts and notifications for critical project events. • Explain how automated refresh and alerts enhance project monitoring efficiency. <p><u>4) Data Security and Sharing:</u></p> <ul style="list-style-type: none"> • Highlight Power BI's data security features to protect project information. • Explain how to securely share the project tracker dashboard with stakeholders. • Emphasize the importance of maintaining data privacy and confidentiality.
<p style="text-align: center;">Day 3 (Physical Class)</p>	<p><u>Intervention / Implementation Lesson.</u></p> <ul style="list-style-type: none"> - Introduces a solution through process intervention and the use of technology within the identified indicators (Cost, waste, time, capital, etc..). - Companies come out with a project report on solution proposed, either through digitalization in Construction. <p><u>1) Fill up Report & follow the format</u></p> <p><u>2) Industrial grade Proof-of-Concept for MPC</u></p>

Required hardware:

<i>MacOS or Microsoft Windows 8/10/11 (64- bit).</i>
<i>i3/ Ryzen 3 minimum CPU processor unit, i7/Ryzen 7 above recommended.</i>
<i>2GB RAM minimum, 8gb recommended.</i>
<i>1GB of available disk space available, 2GB above recommended.</i>

Training location:

-(Seminar Room) or (Training Room I&II), Blok B, UPM-MTDC Technology Centre III, Universiti Putra Malaysia, 43300 Serdang, Selangor Darul Ehsan.