

Productivity Improvement Forum 2019

Pilot Project Working Group: PC/CII Tools Implementation Journey

Presented by:

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(Pilot Project WG Leader)

Jointly Organised by

EDB
singapore

SCIC
SINGAPORE CHEMICAL
INDUSTRY COUNCIL

ASPRI
Connect • Engage • Grow



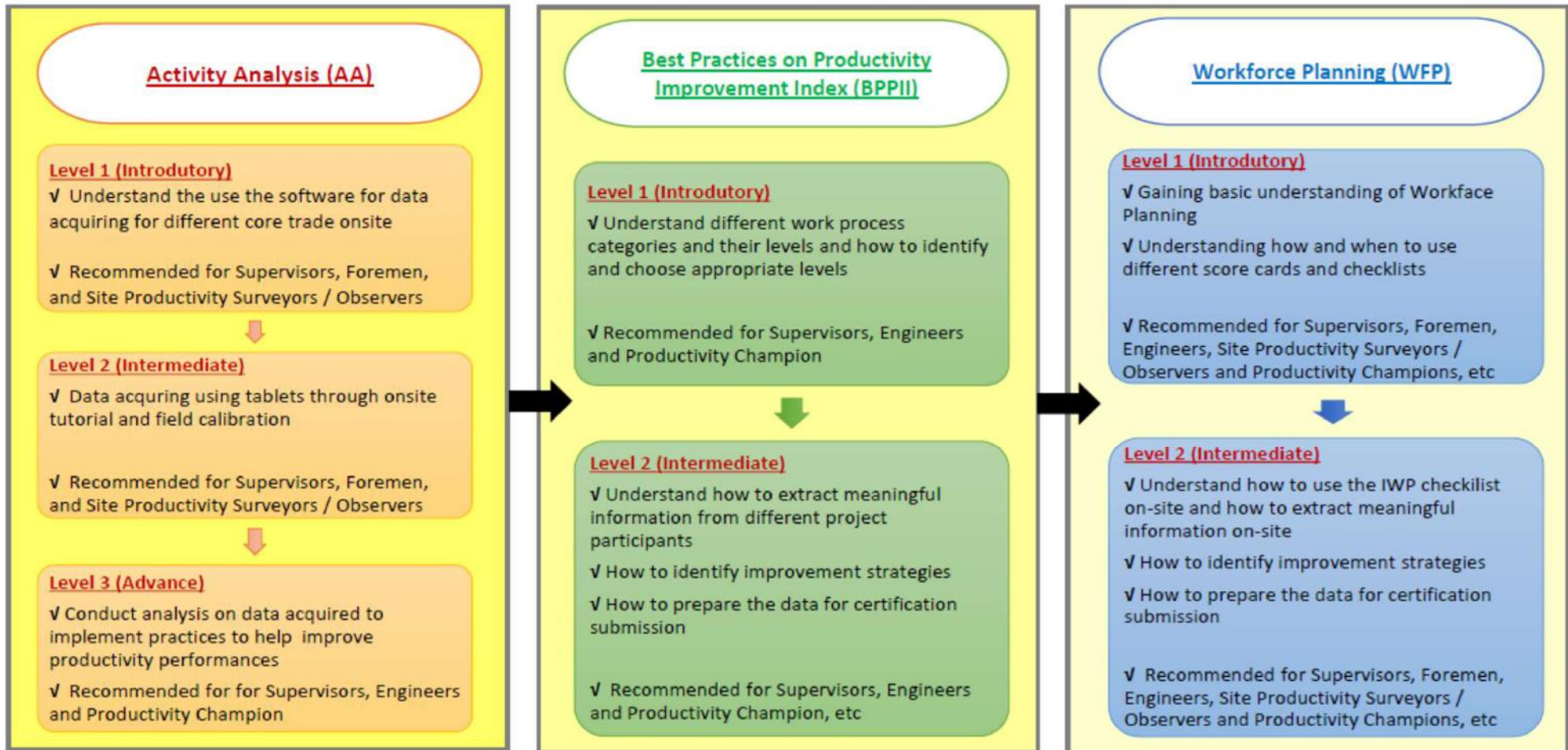
Background

1. Establish an Implementation roadmap for PC/CII Tools
 - Deeper and higher quality Deployment of Activity Analysis and BPPII tools
2. Further Deployment and Implementation of Workface Planning
3. Development of Craft-based Productivity Standards (CPS)

Training Series on Productivity Improvements for the Process Construction & Maintenance Industry

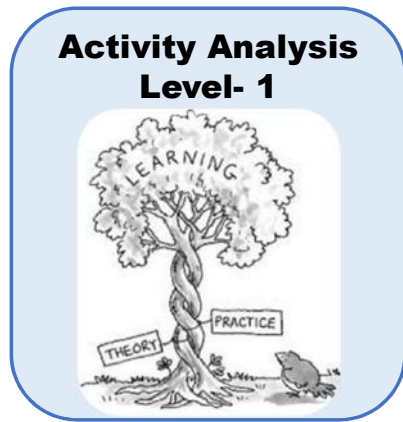
An Industry Initiative by the Productivity Council

Measurement Matrix on Productivity Improvements



Training Track-record

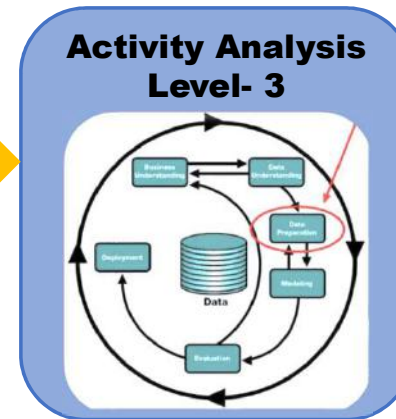
(March to October 2019)



Number of Sessions	8
Participants	194
Certified	194



Number of Sessions	3
Participants	57
Certified	31



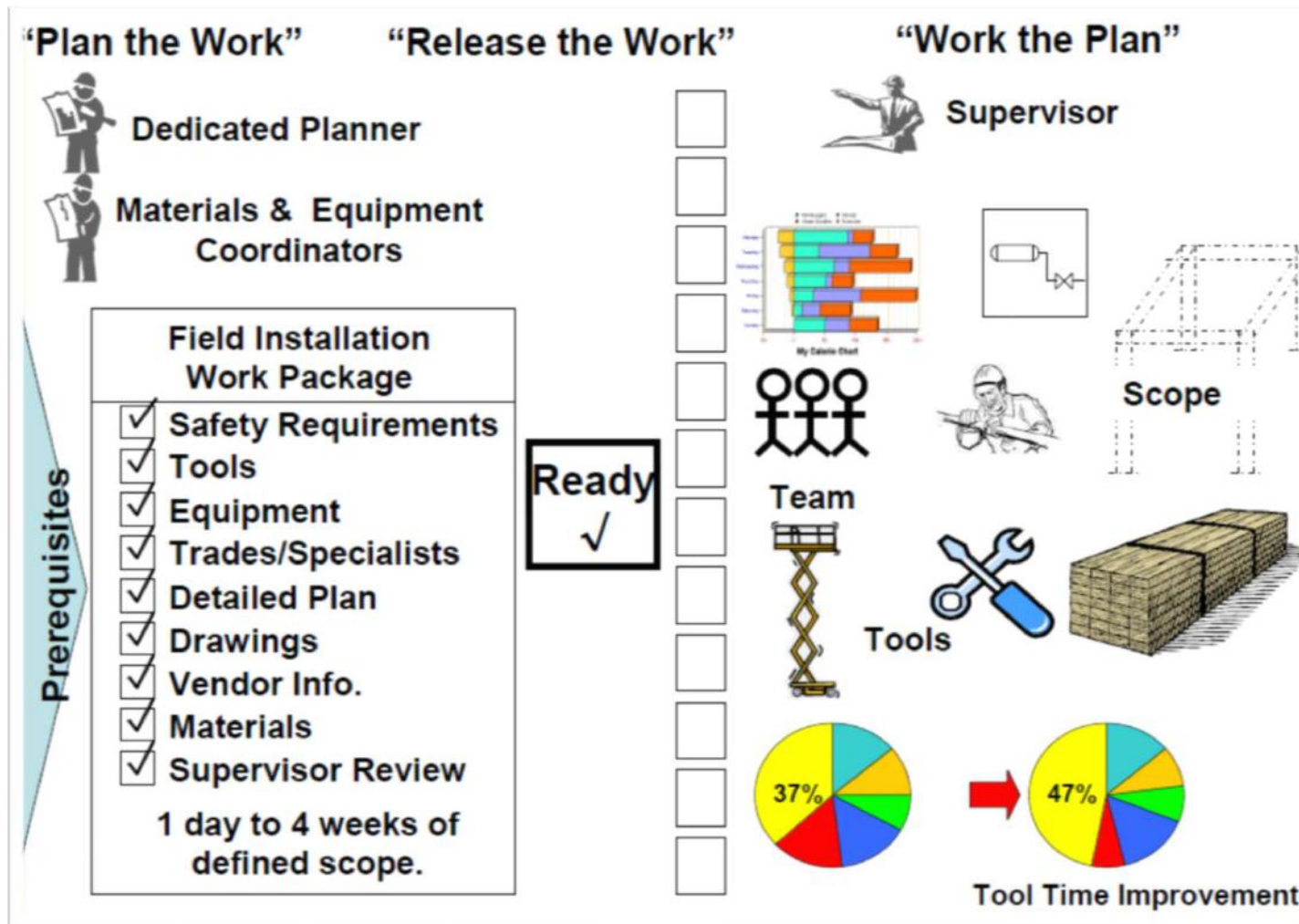
Number of Sessions	1
Participants	25
Certified	-

Total Number of Training Sessions	13
Total number of Participants	300



Number of Sessions	1
Participants	24
Certified	24

Workface Planning (WFP)



The Need for Craft Productivity Standards

1. **Gold standard** to adequately assess field productivity
2. Measurable and **Benchmarked against international standards**
3. **Local relevance with Global perspective**
4. Enhance the capability to **compete and win** in the international arena
5. Key enabler for **measuring deep-skilling and assessing** the capability of Skilled workers



Worker 4.0: *“Smart, Efficient,
Superior quality, and Strong
Technique”*

CPS FOR SCAFFOLDING: DEVELOPMENT PROCESS (TIME-LINE)

Step 1: Formation of a **core group** (with contractors in the WG)

Step 2: Reviewing **relevant literature** and existing norms

Step 3: Developing **templates for site trials**

Step 4: Pilot Site Trials

Step 5: Comparison and analysis of Results

Step 6: Gathering Pilot WG & PC Suggestions

Step 7: Standardization

Step 8: Review and approval from the PC

Step 9: Launch of the Craft Productivity Standard



**Research &
Development**

Location Trials

Introduced

Time Line

2 months
(Mar – Apr 2019)

2 months
(May – Jun 2019)

August 2019

Tube and Fitting Scaffolds

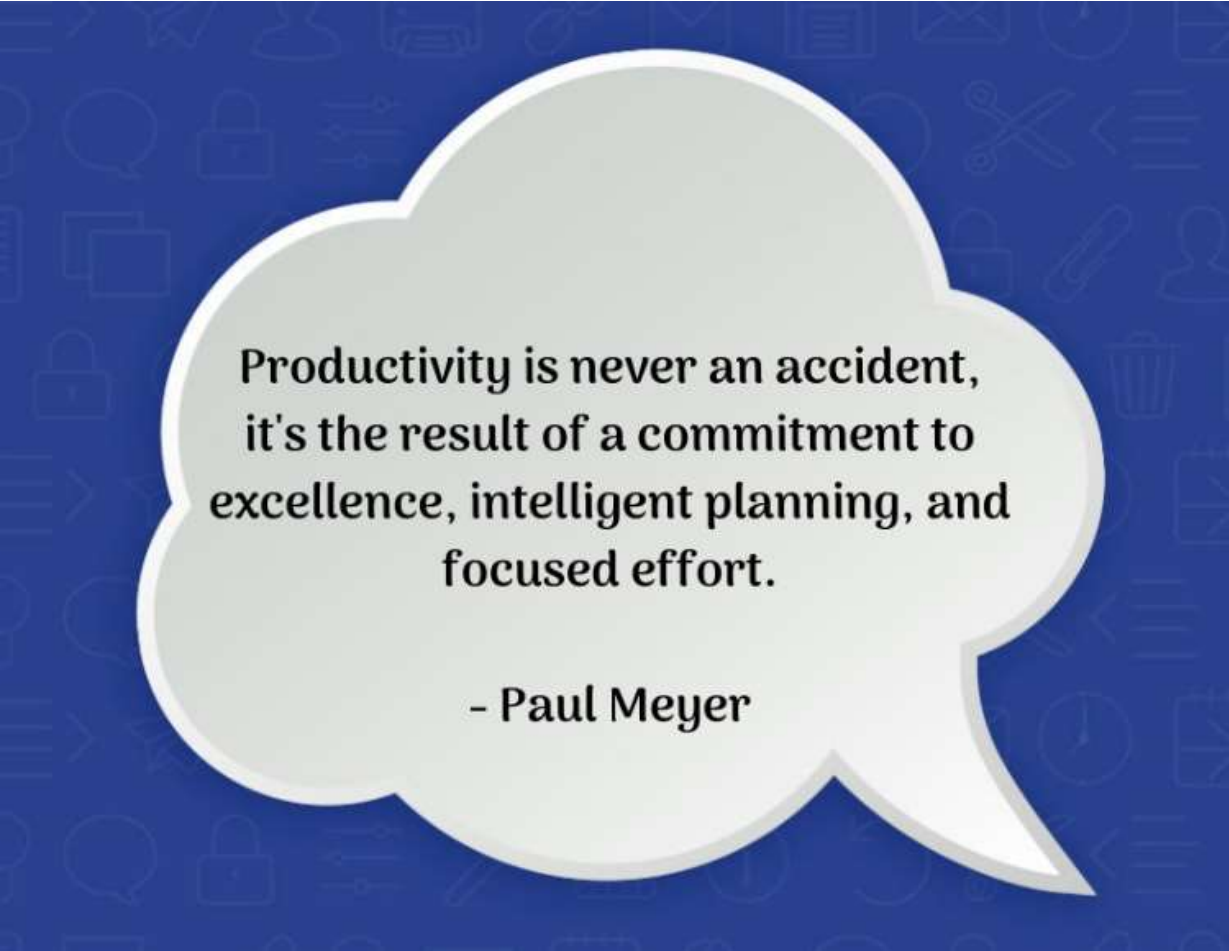
(Installing and Dismantling)

RATING	TUBE AND FITTING SCAFFOLDS		Quintiles	SYSTEM SCAFFOLDS	
	Index Range (per 1 Mhr) Installing	Index Range (per 1 Mhr) Dismantling		Index Range (per 1 Mhr) Installing	Index Range (per 1 Mhr) Dismantling
PLATINUM	4.60 to 5.00 m ³	5.60 to 6.00 m ³	1 st Q	6.20 to 6.50 m ³	9.50 to 10.00 m ³
GOLD	3.90 to 4.60 m ³	5.30 to 5.60 m ³	2 nd Q	5.80 to 6.20 m ³	8.70 to 9.50 m ³
SILVER	3.30 to 3.90 m ³	5.00 to 5.30 m ³	3 rd Q	5.00 to 5.80 m ³	7.50 to 8.70 m ³
BRONZE	2.80 to 3.30 m ³	4.40 to 5.00 m ³	4 th Q	4.50 to 5.00 m ³	6.20 to 7.50 m ³
MERIT	2.50 to 2.80 m ³	3.90 to 4.40 m ³	5 th Q	3.50 to 4.50 m ³	5.50 to 6.20 m ³

NOTE: The above number Includes: Transporting scaffolding and materials from storage, Erect of scaffolding including leveling and securing, Installation of planking, Dismantling of scaffolding, Transporting scaffolding and materials to storage.

Path Forward

- Target to conduct 10 training sessions in 2020, focusing more on Activity Analysis
Level -2, Level -3, BPPII and WFP
- Prepare for the **Launch of Craft Productivity Standards Version-1**
- To Pilot the WFP Checklist with **CPS for Scaffolding in the 2nd Pilot Certification Exercise**
- Continue to identify factors affecting productivity in the field and identify improvement strategies



Productivity is never an accident,
it's the result of a commitment to
excellence, intelligent planning, and
focused effort.

- Paul Meyer

THANK YOU!