Working Group 2

Summary of the Activities of the first half of the year 2022 for AKAC 2022

4th October 2022

Chair of WG 2
Mr. Walid Ayed, CETTEX, Tunisia

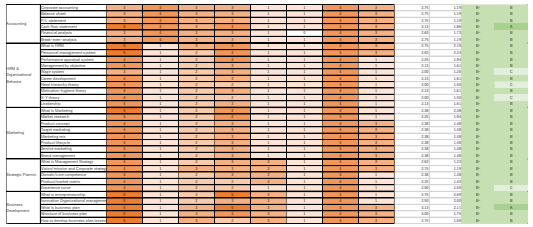
Outputs of WG2

Kaizen Handbook

Module I & II
Traditional Kaizen

Module III & IV
Business Management

Gap analysis in WG2 (2021)



[Issues]
The depth of learning varies by country and by institution to institution

[Issues]
Module III & IV is not learned in some Kaizen implementing countries or learning level of is lower than Module I & II.

Output

Through discussing and working in WG2
Develop “Detailed Curriculum”

Theme	Unit 3 5S	Purpose	・Understand the concept of 5S ・Understand the importance of 5S ・Understand the introduction process of 5S ・Understand the position of 5S in Kaizen	Time	3 Hour
Structure		Key Goals		Points	
・Realization of waste from the GENBA where 5S is not completed ・Understand what is 5S and ・Objectives and Benefits of 5S ・Impact to PQCDSM ・PDCA of 5S ・Implementation & training ・Guidelines for practicing 5S ・Basic methods of 5S (incl. visualization) ・5S Kaizen cases		・Acquire knowledge and skills that can explain the significance and importance of 5S to the CEO and employees of clients. ・He/She can point out the problems of 5S by observing the site. ・It is possible to make a 5S introduction schedule and make it into a project. ・It is possible to propose and introduce a system construction and milestones to maintain 5S.		・To convince even negative clients, acquire a patient explanation of the effects of introducing 5S and a method to realize early changes. ・Management's conviction is the key to successful introduction ・The introduction method is not uniform. It is important in practice to acquire many patterns. ・Cases have a great impact. Keep as many cases as possible in many industries.	
Reference Exercise	・Group discussion of 5S improvement plans using video from bad sites ・Group discussion on the effects of 5S using good examples (Nisyou Motor)				
Other Points					

…

Through implementing pilot program
Develop “Material & Curriculum”

Power Point style textbook will be developed by Japanese Kaizen expert

- Basic of management skill
- Accounting
- HRM & Organizational Behavior
- Marketing
- …

Standardization for Knowledge sharing

Module I & II

Table 3.3-1 Skills for Basic Trainers

Classification	No	Title	Contents	Category	Time
Module I (Basic *Kaizen*)	1	Productivity and Quality	Concept of productivity, How to measure productivity, Measures to improve productivity, Roles of productivity, Productivity movement of Japan, What is quality, View of QC concept, Quality of service, QC, How to promote QC, Quality improvement in Japan	A+	6
	2	Introduction of *Kaizen*	Basic concept of *Kaizen*, Basic concept of QC, Steps for *Kaizen*, 5S implementation, Idea creation technique, Problem solving techniques, QCC, Suggestion scheme, *Muda-dori*, Measures to eliminate Seven Wastes, *Kaizen* management	A+	6
	3	5S	Accumulation of unnecessary items, Concept of 5S, Benefits of 5S, Steps of 5S implementation (basic and detail), 5S and *Kaizen*, Evaluation of 5S, How to maintain 5S activity	A+	3
	4	Visual Control	Overview of visual control, Visual 5S control, Visual management for production *gemba*, Visual Management for Sales, R&D, and Marketing	A+	3
	5	*Muda-dori*	What is *Muda-dori*, Seven wastes, Measures to eliminate seven wastes, Reduction of *Muda, Muri, Mura*, ECRS (Eliminate, Combine, .Rearrange, and Simplify) +3S	A+	3
	6	QCC	QCC fundamentals, Workplace and QCC activities, Implementing QCC activities, QCC meeting, Team leadership, Role of top management	A	3
	7	7QC Tools (Basic)	Checklist, Pareto diagram, Cause-effect diagram, Stratification	A	3
	8	Standardization	Objectives of standardization, Implementation of standardization, Remarks on standardization	A	3
	9	*Kaizen* Consulting	Management consulting, Who is a *Kaizen* consultant, How to proceed *Kaizen* consulting, QCC & *Kaizen* Leader, Themes selection, Problem solving techniques (QC story)	A	6
	10	Production Planning	What is production management, Types of production, Work-in-process, Production planning, Progress control, Part purchasing plan and control , Supplier management	B	6
	11	Inventory Control	Supply chain management, Inventory control in production plant, Function of warehouse, Warehouse control, Reduction of inventory in manufacturing process	B	3
	12	Method Study	Work management, IE, Work improvement, Method study, Process analysis, Motion analysis, Principles of motion economy, Learning curve	B	6

Table 3.3-2 Skills for Advanced Trainers

Classification	No	Title	Contents	Category	Time
Module II (Advanced *Kaizen*)	1	7QC Tools (Advanced)	Histogram, Scatter diagram, Control chart, How to use 7QC tools in problem solving	A	3
	2	New 7QC Tools	Affinity diagram method, Relation diagram method, Tree diagram method, Matrix diagram method, Arrow diagram method, PDPC (Process decision program chart) method, Matrix data analysis method	A	6
	3	SMED	Concept of SMED (Reduction of setup time), Setup time, Process of setup, Problems in setup, Improvement of external setup, Improvement of internal setup, Example of mechanical improvement	A	3
	4	Time Study	Standard time, Direct time study, Rating, allowance, Working analysis	A	3
	5	Work Sampling	Features of work sampling, Classification of work, Procedures of work sampling, Analysis of result, Practice of work sampling	A	3
	6	Line Balance	What is line balance, Purpose of line balance, Method of line balance improvement, Effect of line balance improvement	A	3
	7	Layout	What is layout improvement, Method of layout improvement, Layout to reduce transportation cost, Effect of layout improvement	A	3
	8	TQM (Total Quality Management)	TQM concept, Daily management, Policy management, Cross functional management, Leadership, Advanced problem solving, Six sigma, Management quality (MBNQA, JQA, Deming criteria), New product/process development, IT utilization	A	6
	9	SQC	What is SQC, Basics of statistical data, Control chart for variables, Control chart for attributes, Process capability, Acceptance sampling, Statistical testing and estimation	B	6
	10	Cost Management	Basic understanding for (BS + P&L+ Cash Flow), Control accounting (*Kaizen* view points from accounting) Cost analysis & *Kaizen*	B	6
	11	TPM (Total Productive Maintenance)	Concept of TPM, TPM outline, TPM structure, 5S and TPM, Autonomous maintenance, Planned maintenance, Education and training, Overall equipment effectiveness (OEE), Quality maintenance, Steps for TPM implementation	B	6
	12	TPS (Toyota Production System)	Concept of TPS, Elimination of wastes, JIT (Continuous flow production, Production leveling, Standardized work, Multi-skill workers, SMED), *Kanban* system, Autonomation (*Jidoka*), *Poka-yoke*, Built-in quality, Application of JIT TPS lean principles	B	6

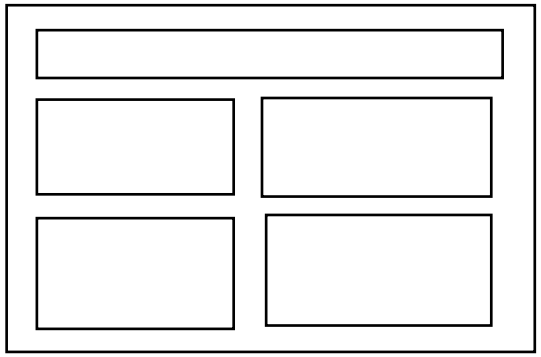
Module I & II

Process of developing “Detailed curriculum” for Module I & II

Decide
- Process
- Timeline

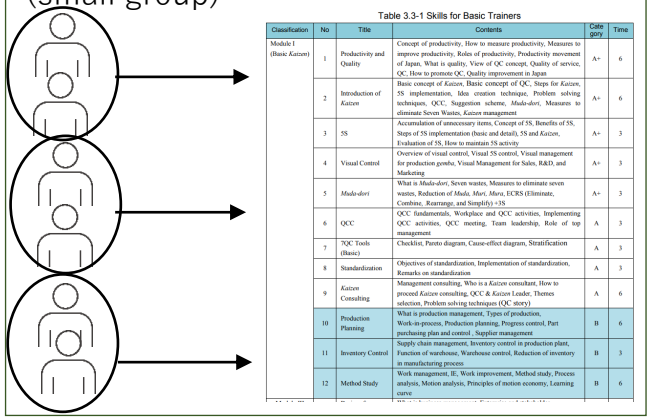
By May, 2022

Decide the **format** of “Detailed curriculum” for Module I & II



By May, 2022

Assign each subject for each members (small group)



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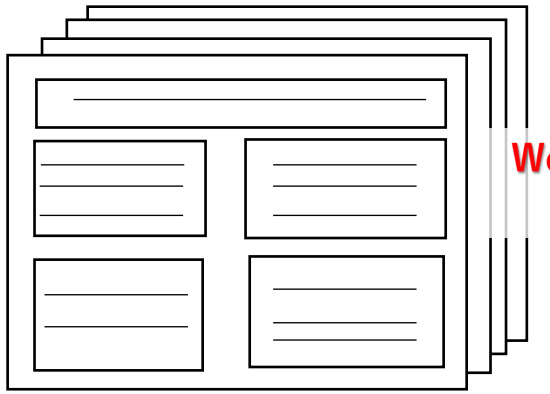
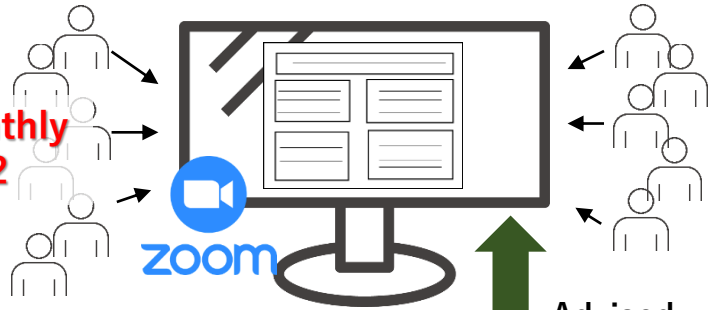
By May, 2022

Make draft for each subject



Work monthly in WG2

Review and Discuss subject by subject based on the draft of “Detailed Curriculum”
Monthly

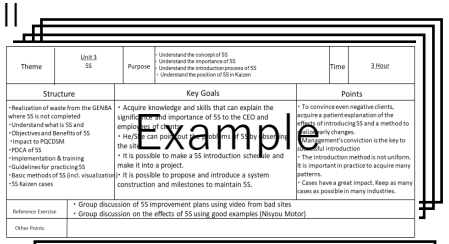


Advised
The Japanese Kaizen expert

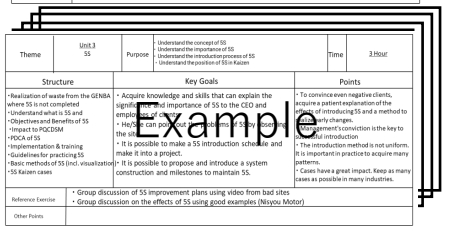
(First output) June, 2022- (Final output) June, 2023

[Goal image]
Finalize the “Detailed Curriculum” for Module I & II

Module I
12 subjects



Module II
12 subjects



By July, 2023

Share with all the stakeholders in Africa for further mutual learning

Module I & II –example of the “detailed curriculum”

Detailed Curriculum for Module I & II of JICA Kaizen Handbook — Creation Date: 06 / 09 / 2022

Theme	Unit : 6 : Quality Control Circle :	Purpose	Understanding, Implementing and Monitoring QCC: • QCC fundamentals • Workplace and QCC activities • Implementing QCC activities • QCC meeting • Team leadership • Role of top management	Time	3 Hours : A detailed plan should be prepared for each 50 min with a suitable number of limited slides by the available time with customized manufacturing cases studies.

Contents	Competency (Level of Skill, evidence of mastery, etc.)	Key points and methodology to teach (included best practice)
1. Introduction **2. QCC fundamentals:** **3. Workplace and QCC activities** **4. Implementing QCC activities** **5. QCC meeting** **6. Team leadership** **7. Role of top management**	**1. Introduction** 1.1 Introduce the QC story with general steps of problem solving usually used by QC Circle activities for quality improvements. 1.2 Explain the value added ofthe management of ‘People Resources’ as a n usual solving problems activities focusing the customer satisfaction. 1.3 QCC is one of the managerial responses which have been deve loped as a down-up continuous improvement in a pleasant working environment. 1.4 Services or goods produced must be good enough to satisfy durable custom er’s requirements and employees must participate to the QCC movement as a high level of quality guarantee. 1.5 The QCC can transform the wisdom of workers into a useful proposals and actual devices. 1.6 Highlight the particular characteristics of Japanese companies’ management (members of one large	**1. Introducing** that workers are the greatest assets of an organization, because, through them all other resources will be converted into utilities and value added. • By being directly involved in the delivery of products and services, they realized that they have a very important role in satisfying the needs of their customers: that the quality provided depends on how they interact together. • Showing YouTube videos related to QCC activities and success’s stories.

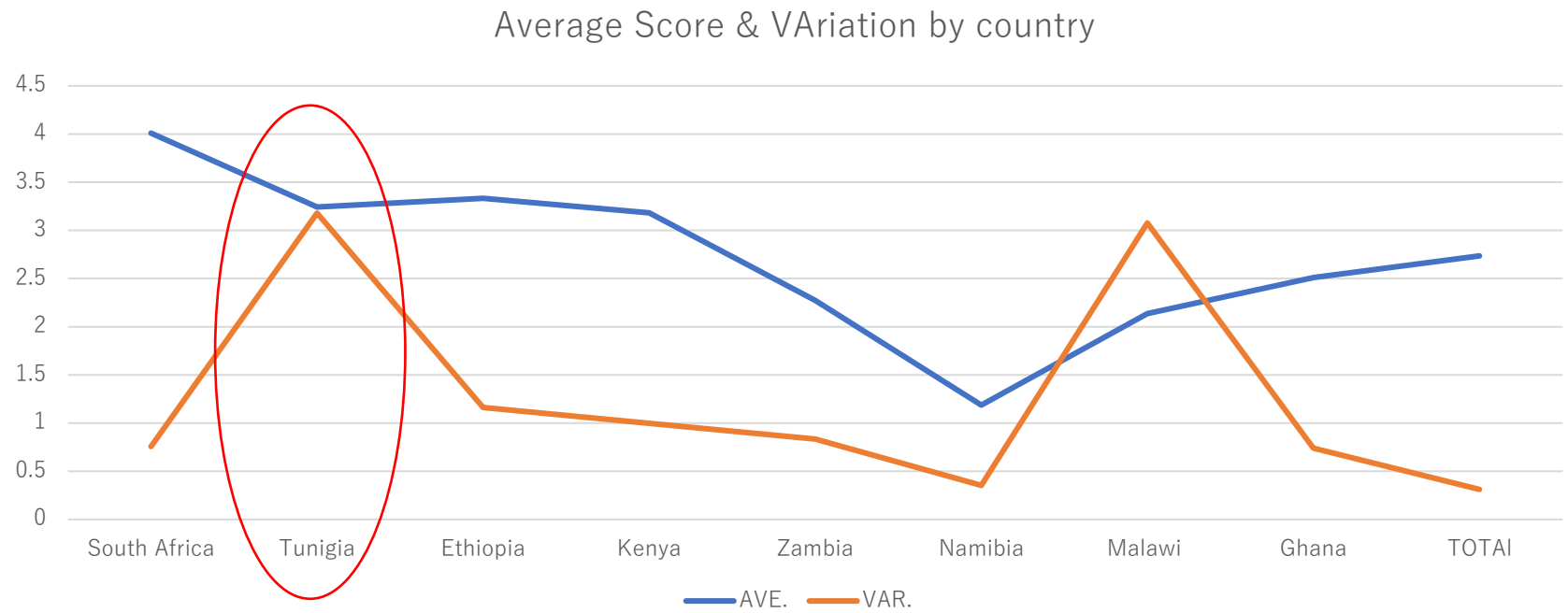
Module III & IV

Criteria for selecting a pilot country

- Existing variety between curriculum.
- Not well covered Module III and IV.
- Willingness to share the progress, findings and outputs (developed curriculums and materials of module III & IV).

Module III & IV

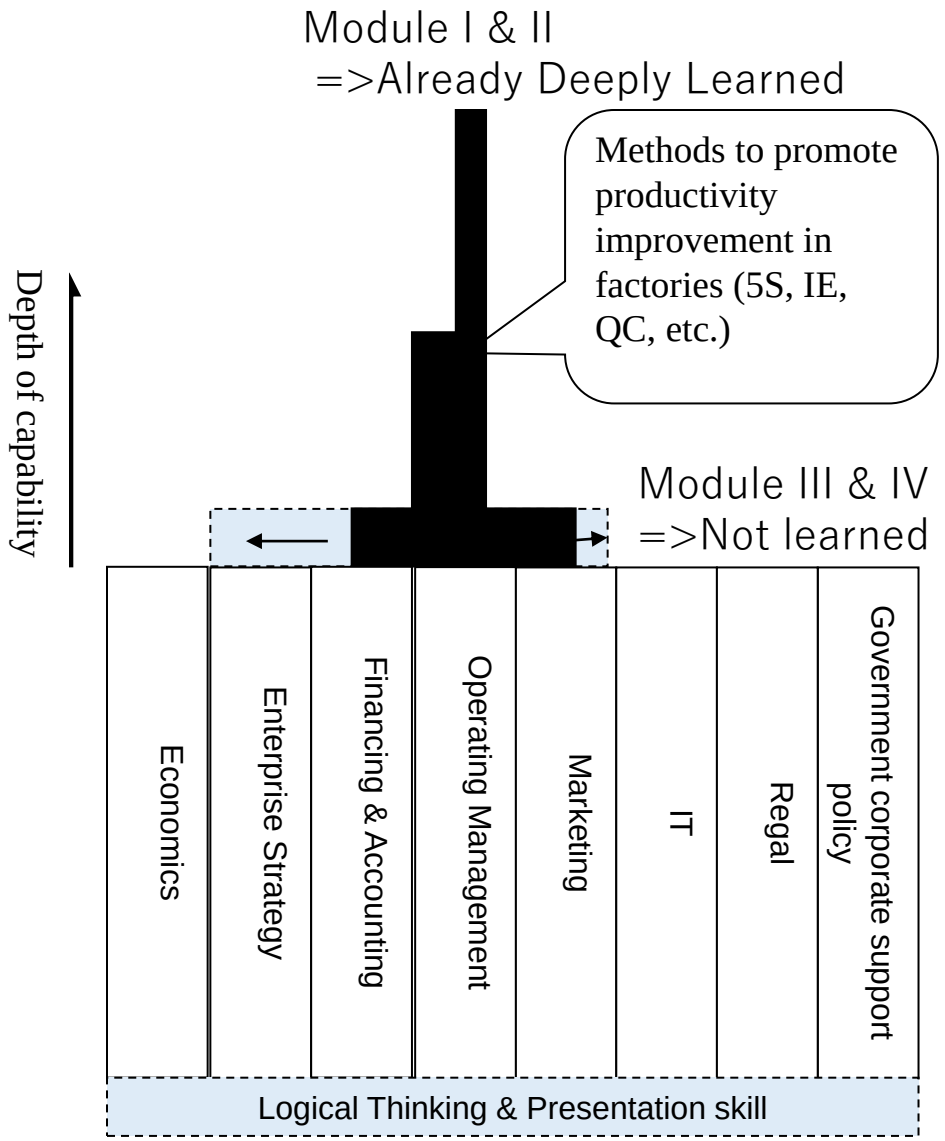
Tunisia has High Average score and **High variability**



SOUTH AFRICA: Overall, scores are high without variation.
Tunisia; high average score but high variability
Ethiopia and Kenya: high average score and low variability
Zambia: Variation is low, but the average is middle. Maybe, Introduction stage focusing on CRT
Namibia: early stages of implementation?
Malawi Introduction stage focusing on CRT-, but selected curriculum are biased from the early stages?
Ghana: Average score (CRT cover most of curriculum, bur ICT is not started, yet)and low variation

Module III & IV

Tunisia's situation



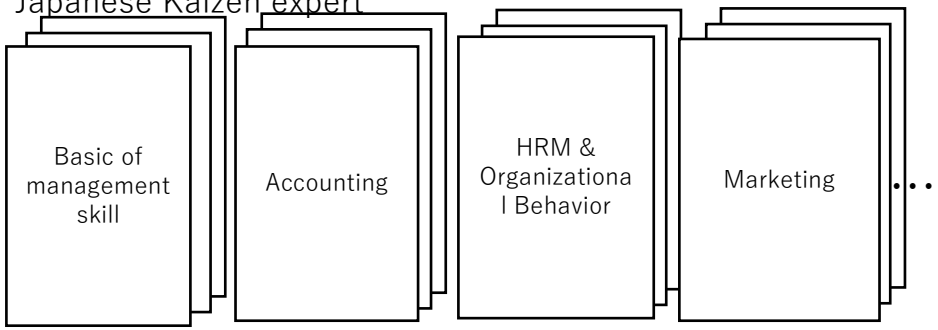
Pilot Program for the standardization of Module III and IV which started from June in Tunisia

Class Room Training (CRT)

Japanese Kaizen expert

Participants
(Master Trainers)

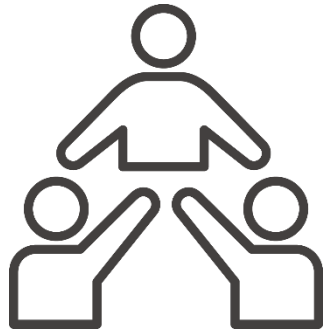
Textbook (Power Point) will be developed by the Japanese Kaizen expert



Output
Standard curriculum and material for Module III & IV

In-Company Training (ICT)

Visiting a company
& getting information



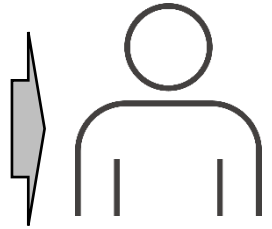
Making Kaizen Proposal

Showing the Kaizen proposal to the company and getting the comments
(Collect the questioner)

Presentation of the result of corporate diagnosis in UGPQP for sharing the experience

Expected outcome

Participants
(Master trainers)



Traditional Kaizen
(Module I & II)

+ ***Added***

Business Management (Module III & IV)

+ ***Improved***

Corporate Diagnosis Skill

Thank you so much for your attention !!