Toyota Kata Student Project

STANDARD FORMAT & ROADMAP for the students of Bainbridge Graduate Institute

MGT 564 Sustainable Operations
Bill Costantino

Guidelines for Student Project Selection to Maximize Practice & Learning

- Simple / compact scope
- Easy Access you can get to it when you wish
- Frequent exposure for experimentation
- Short(ish) process cycle time shorter = more practice = better
- Relevant / important / meaningful enough for student to engage.
- Real-World actual process / activity that is taking place today.
- **Challenging** don't yet see how you can achieve it.
- Ideally, includes some element of Sustainability

STEPS OF THE TK PROCESS ANALYSIS

Keep this sheet handy

Step

Assess customer demand and determine line pace

- **①**
- · Customer takt
- Planned cycle time

Step

First impressions of the process

- · Get to know the process by sketching a block diagram of it.
- · How much does process output fluctuate? (Time 20 output cycles)
- Is there a 1x1 flow?
- Other observations?

Step

Is machine capacity sufficient?

- Can the equipment support the planned cycle time?
- · What is current capacity?
- · How many shifts?

No Yes

Step

Is the process stable within desired limits?

- · Time 20-40 full cycles of each operator's work
- Are each operator's work steps the same from cycle to cycle?

No Yes

Step (5)

What is the necessary number of operators if the process is stable?

· Calculate number of operators

Step 6, 1-Page Summary: Key points captured in bullet form and Run Chart of current data vs. Target Line.

- Step 7, Target Condition: Key points captured in bullet form."Current Condition → Target Condition" format
- Step 8, Obstacles: Obstacles identified from the first PDCA / Coaching cycle captured as a bulleted list. Can be expanded as new obstacles are identified.
- Step 9a, PDCA Cycles: All PDCA cycles should be recorded on the "Record of PDCA Cycles" standard format.
- Step 9b, Supporting Data: Please be sure to include key supporting data / run charts generated during your PDCA cycles..
- **Step 10**, **1 Page Summary**: Brief synopsis of your project and the progress you made from your Initial Current Condition til the end of the project. Include as much data as possible. Bullet comments are also welcome.

Step 11, Reflection: Bullet list of...

- > Your key learnings from using the Toyota Kata method on this project.
- ➤ How you might improve to be even more effective on your next project
- > Implications for business if it were to apply TK approach methodically.



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