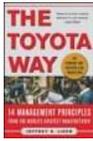


The Toyota Way

14 Management Principles

Pascal Van Cauwenberghe - NAYIMA
Marc Evers - Piecemeal Growth

The Toyota Way session



- 1. The Toyota Way by the book
 - « The Toyota Way » by Jeffrey K. Liker
 - 14 Management principles
 - Our experience with the principles
- Break
- 2. My Toyota Way
 - Workshop: Your experience with the principles
 - Present and discuss application

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Why Toyota? We don't make cars !

- Let's look at somebody completely different...
- ...and very succesful
- but not perfect...

- The Toyota Way == Management techniques
- We are all managers

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14 Principles in 4 Categories

- Philosophy
- Process
- People & Partners
- Problemsolving & Learning

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2. Process: Flow

- Create continuous process flow to bring problems to the surface
- Eliminate idle time and other waste ("Muda")

- Z.b. Continuous build, small releases

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3. Process: Pull

- Use Pull systems to avoid overproduction
- Minimize inventory and work in process by stocking small amounts and restocking regularly
- Consumption => Production
- Respond to shifts in customer demand, not on computer systems to track schedule and inventory

- Z.b. Stories in planning game, small releases, developers "pull" stories.

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4. Process: Heijunka

- Level out the load
 - Avoid overburdening: "Muri"
 - Avoid unevenness: "Mura"
-
- Z.b. Muri: Sustainable pace,
 - Z.b. Mura: small releases, small stories

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5. Process: Stop the production line

- Build a culture of stopping or slowing down to fix problems
 - Automate problem detection ("Jidoka")
 - Notify leaders of problems ("Andon")
-
- To get quality right the first time
-
- Z.b. Automated build with unit and acceptance tests: job #1 is fixing problems

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6. Process: Standardized Tasks

- Standardized tasks are the foundation for continuous improvement and employee empowerment
 - Stable & repeatable methods are the basis of flow and pull
-
- Z.b. (Coding) conventions, automation

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7. Process: Visual Control

- Use simple visual control to help people determine if they are in normal conditions
- Reduce reports to 1 piece of paper, if possible

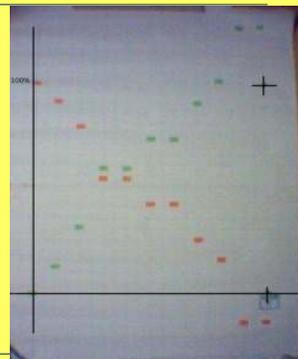
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7. Process: Visual Control

- Burn up/down
 - Red = work TODO
 - Green = value created
-
- Watch the flatlines



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8. Process: Reliable technology

- Use only reliable, thoroughly tested technology that serves your people and process
 - Use technology to support people, not replace them
 - A proven process is better than new technology
-
- Encourage people to consider new technology. Quickly adopt if the technology has proven itself.
-
- Z.b. Story cards vs planning software

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9. People: Grow Leaders

- Grow leaders who thoroughly understand the work, live the philosophy and teach it to others
 - Grow leaders rather than "buy" them from outside
 - Leaders must be role models
 - A good leader understands the daily work
- Z.b. Coaching, promote from within the team

10. People: Develop Exceptional People

- Develop exceptional people and teams who follow your company's philosophy
 - Use cross-functional teams
 - Continuously teach people how to work together. Teamwork must be learned
 - Reinforce the culture continually
- Z.b. pair programming + rotation, standup

11. Partners: Respect, Challenge and Help

- Respect your extended network of partners and suppliers by challenging them and helping them improve
 - Treat partners as an extension of your team
 - Challenge partners to grow and develop.
 - Set challenging targets and assist in meeting them
- Z.b. Collaboration with users, customers, other teams (DBA, administrator...)

12. Problemsolving: Genchi Genbutsu

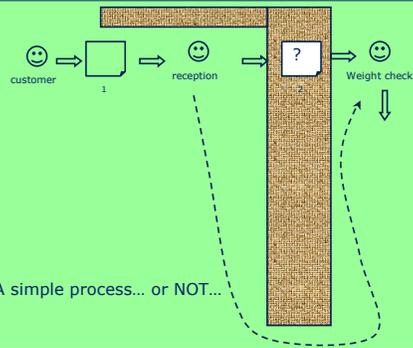
- Go and see for yourself to thoroughly understand the situation
- Go to the source to observe and verify data
- Don't theorize on the basis of what people and computers tell you
- Even high-level managers should do this

12. Problemsolving: Genchi Genbutsu



A simple process...

12. Problemsolving: Genchi Genbutsu



A simple process... or NOT...

13. Problemsolving: Consensus decisions

- Make decisions slowly by consensus, thoroughly considering all options.
- Implement decisions rapidly
- Discuss problems and potential solutions with all involved ("Nemawashi")

- Z.b.

14. Learning: Reflection & Improvement

- Become a learning organization through
 - Relentless reflection "Hansei"
 - Continuous improvement "Kaizen"

- When a problem occurs, ask the "5 WHYS"

- Stable personnel, slow promotion, careful succession

- Z.b. Retrospectives, Systems Thinking, Theory of Constraints

1. Philosophy: Long Term

- Base your management decisions on a long term philosophy, even at the expense of short-term financial goals.
- Generate value for the customer, society and the economy.
- Align the organisation toward a common goal that is bigger than making money.
- Be responsible.
- Strive to determine your own fate.
- Accept responsibility for your conduct.

Are we really so different?

The Toyota Way

Remarks & Questions

<http://www.nayima.be>
<http://www.piecemealgrowth.org>

Book list: <http://wiki.systemsthinking.net/>