

Bottom-up implementation of Multi-Project CCPM -Case study of Mazda, Japan-

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Introduction

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Here are Questions for everyone.

Let's assume that you are a Consultant or Champion who are trying to implement Multi-Project CCPM to a certain multi project environment company.

Q1 Do you always completely follow the logic of S&T tree in the implementation?

Yes

or

No

Q2 What do you do when you cannot completely follow the logic of S&T tree in the implementation?

Force them to do

or

Give up

or

Anything else?

Introduction

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- I believe in the validity of TOC solutions to dramatically help companies, and I also have a full confidence in it.
- I cannot ignore it!
- I want to proof the client the possibility of TOC solutions.



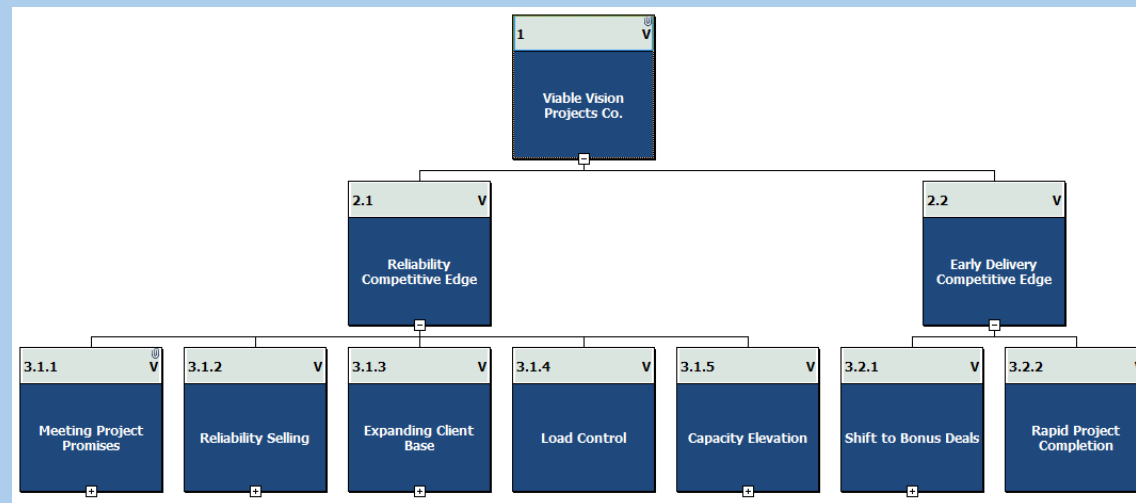
Do you agree with me?

Now, what should we do when it is difficult to completely follow the logic of S&T tree?

In Japan

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In the case where completely following the logic of S&T tree is possible, we naturally chose this approach, which brings you maximum results in the shortest period.



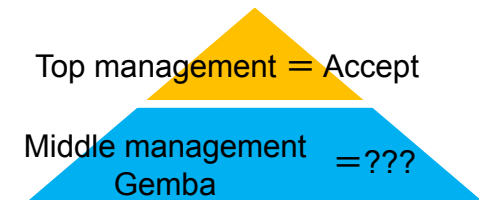
The challenge- Only Top management decision for whole organization enables us to completely follow the logic of S&T tree.

In Japan

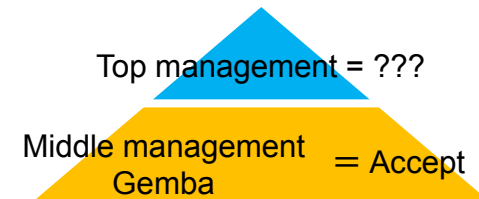
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- There are many cases that companies struggle for implementing Multi-Project CCPM with a Top-down approach.
- For Example..

Top management doesn't choose Top-down because they don't want to take any risks which might cause disharmony within Middle management and Gemba.



Middle management and Gemba desire KAIZEN activities by Multi-Project CCPM, however, Top management disagree with the concept.



Force them to do

or

Give up

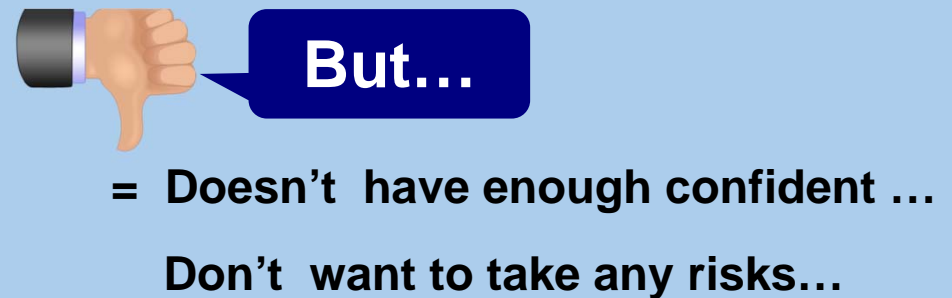
or

Anything else?

Why do Japanese companies not select the Top-down ?

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When you explain the concept of Multi-Project CCPM, and what results it can bring to their Top management...



- Common words of Top management
 - “You may do it if you want to do.”
 - “Why don't you try in your dept. for a start?”
 - “Why don't you try on a couple of limited projects?”
- There are many cases that clients eager to start with a limited sections and pilot projects.

Why not Top-down?

Not getting enough confidence about CCPM is a Big issue.

Bottom-up implementation of Multi-Project CCPM

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- If Top management could get a confidence and conclusive evidence about TOC/CCPM, then Implementation of Multi-Project CCPM by Top-down would be carried out.
- How to ?



Gaining Reliability of CCPM
= Bottom-up implementation process of Multi-Project CCPM

Case study 1 : Mazda

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MAZDA Motor Corporation

- Founded : January 30, 1920
- Headquarters : Hiroshima, Japan
- Main business lines :
 - Manufacture and sales of passenger cars and commercial vehicles
- Principal products
 - Four-wheeled vehicles, gasoline reciprocating engines, diesel engines,
 - rotary engines, automatic and manual transmissions for vehicles
- Capital : ¥258,957,096,762
- Employees : Unconsolidated 21,686 (Consolidated 37,617)
- Production sites
 - Japan: Hiroshima Plant, Hofu Plant, Miyoshi Plant
 - Overseas: China, Thailand, United States, Mexico, Colombia, Zimbabwe, South Africa, Ecuador, Taiwan, Malaysia, Russia, Vietnam



Case study 1 : Mazda

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Products



Mazda3



Mazda6



CX-5

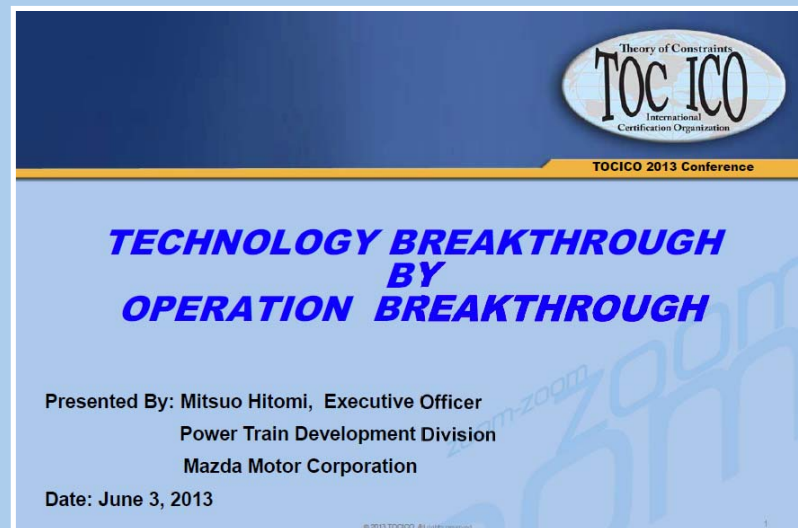
Implementation department

- Power train development headquarters
 - New product development projects
 - Example: Engine, Transmission



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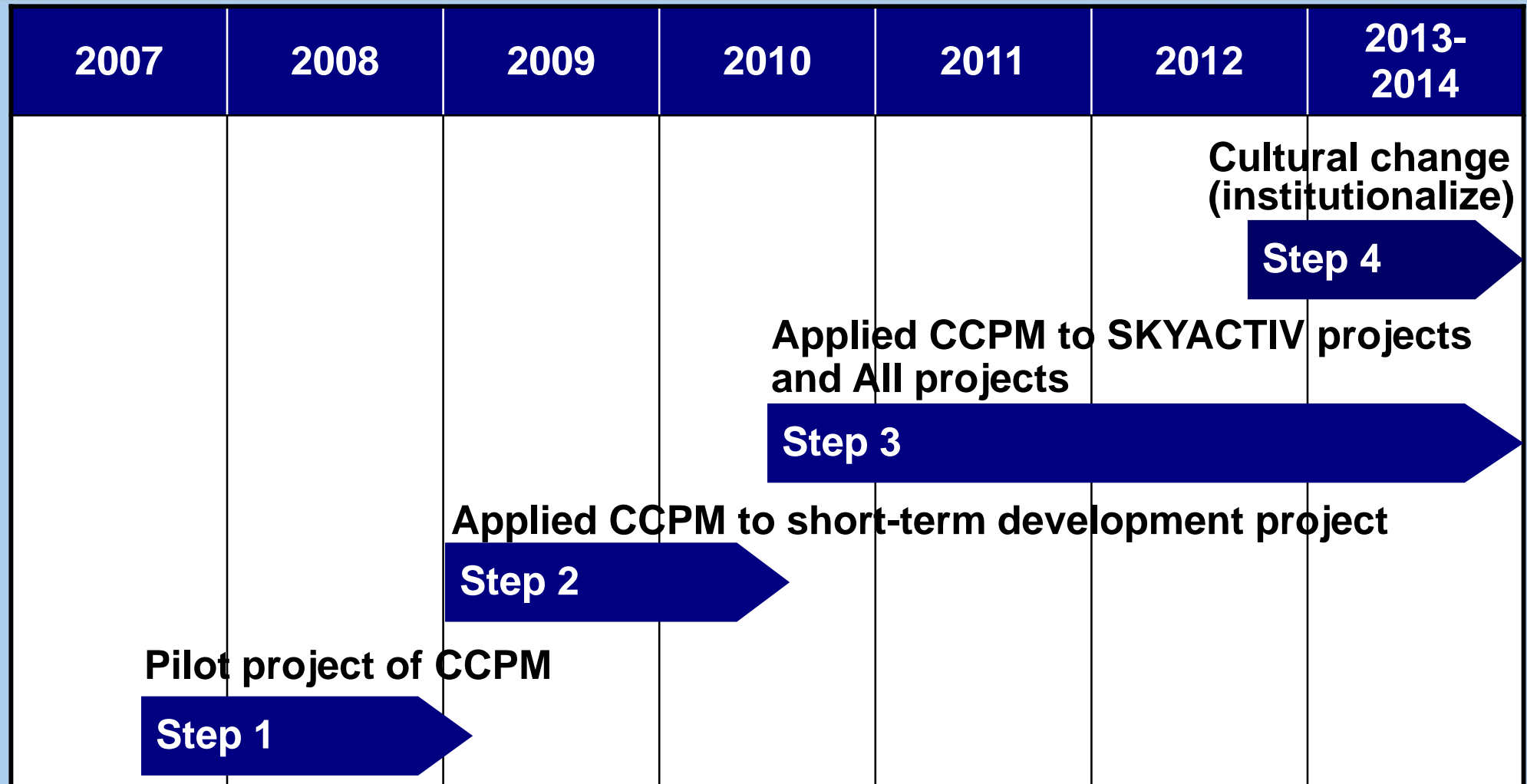
Opening Keynote in 2013

Mr. Mitsuo Hitomi, Executive officer



Case study 1 : Mazda - Implementation History -

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Case study 1 : Mazda - Starting Point -

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Step 1 Pilot project of CCPM

- October in 2007, Started implementing CCPM to Powertrain development headquarters
 - Working with Champions who promote CCPM activities
 - Powertrain Planning Dept. General Manager : Mr. Akihiro Kidani
(Currently : Director of R&D technical management division)
 - Chief Manager : Mr. Yoshimichi Tanaka (Currently : Tanaka Coaching Office)
 - Assistant Manager : Mr. Mitsuo Mimura
 - Top management of Powertrain development headquarters worried about their future
 - CCPM promoting members started investigating the possibilities of CCPM
- December in 2007, Held CCPM workshop with mainly key persons by Being Co.,Ltd.
 - Over 150 attendees
 - Many of them felt a sense of expectation for the direction with CCPM

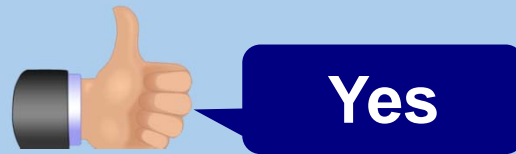


Mr. Tanaka

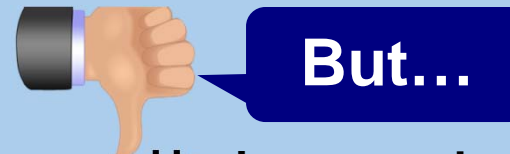
Case study 1 : Mazda - Starting Point -

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Top management of Powertrain development headquarters agreed to the concept of CCPM.



= Good!



≡ Having many bad experiences of
KAIZEN activities in the past...

- In the past, experienced a number of KAIZEN activities by Top-down but most of them ended with half way or became mere facade.
- Didn't want to repeat the same mistake they have made in the past!
- Desire to make it success and make it a part of their culture.

Decided to go by Bottom-up activities by Volunteers, instead of Top-down

Case study 1 : Mazda - Bottom-up Activity -

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- February in 2008, Being Co., Ltd. started providing consulting services for introducing CCPM by Bottom-up.
- Launched with Single project bases until the Middle management and Gemba got a confidence of CCPM
- In limited area, in pilot project, the volunteers had activities.
- Expanding the member of volunteers by continuing seminars several times a month.
 - Outstanding performance by promoting members
- Bottom-up implementation = 12months - 18months

Continue to Bottom-up Activity



Case study 1 : Mazda - Turning Point -

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Step 2 Applied CCPM to short-term development project

- January in 2009,
- The savior project for CCPM activity appeared,
 - Initial plan for the project was 2 years
- Top management requested to make it 1 year.
- Plan : Be conscious of Project Flow.
- Execution: Management understanding progress
by a short cycle.

Speedy actions for recovery by management.



Challenge!

Case study 1 : Mazda - Turning Point -

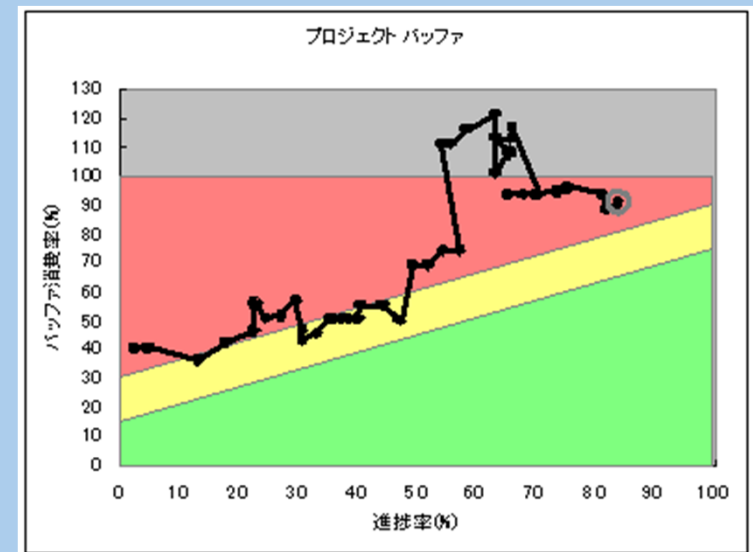
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Results

- Shortened the Development Duration from 2 years to 1 year!
- The project ended in a big success!
- Experienced a successful project which they had never done before.

Success Factors

- Communication across the organization.
- Think together, and Manager's initiative.



Gained a Reliability of CCPM

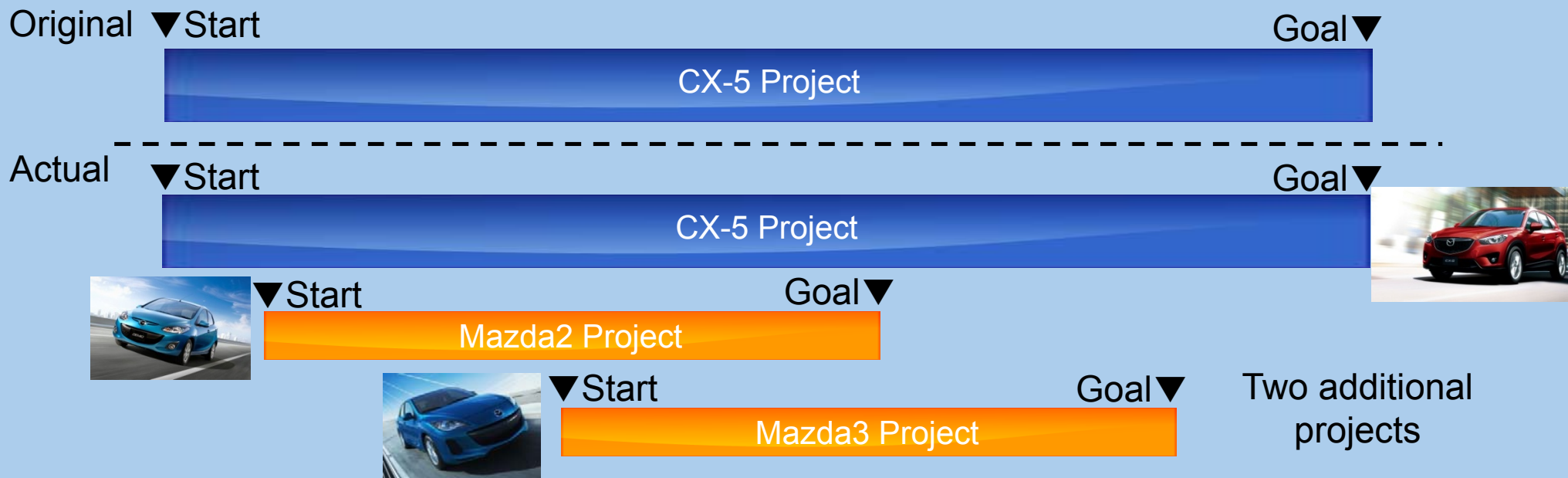
Case study 1 : Mazda - Top-down Activity -

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Step 3 Applied CCPM to SKYACTIV projects and All projects

- Pressure from the market
- Pressure from Top management: Release earlier!!

SKYACTIV
TECHNOLOGY

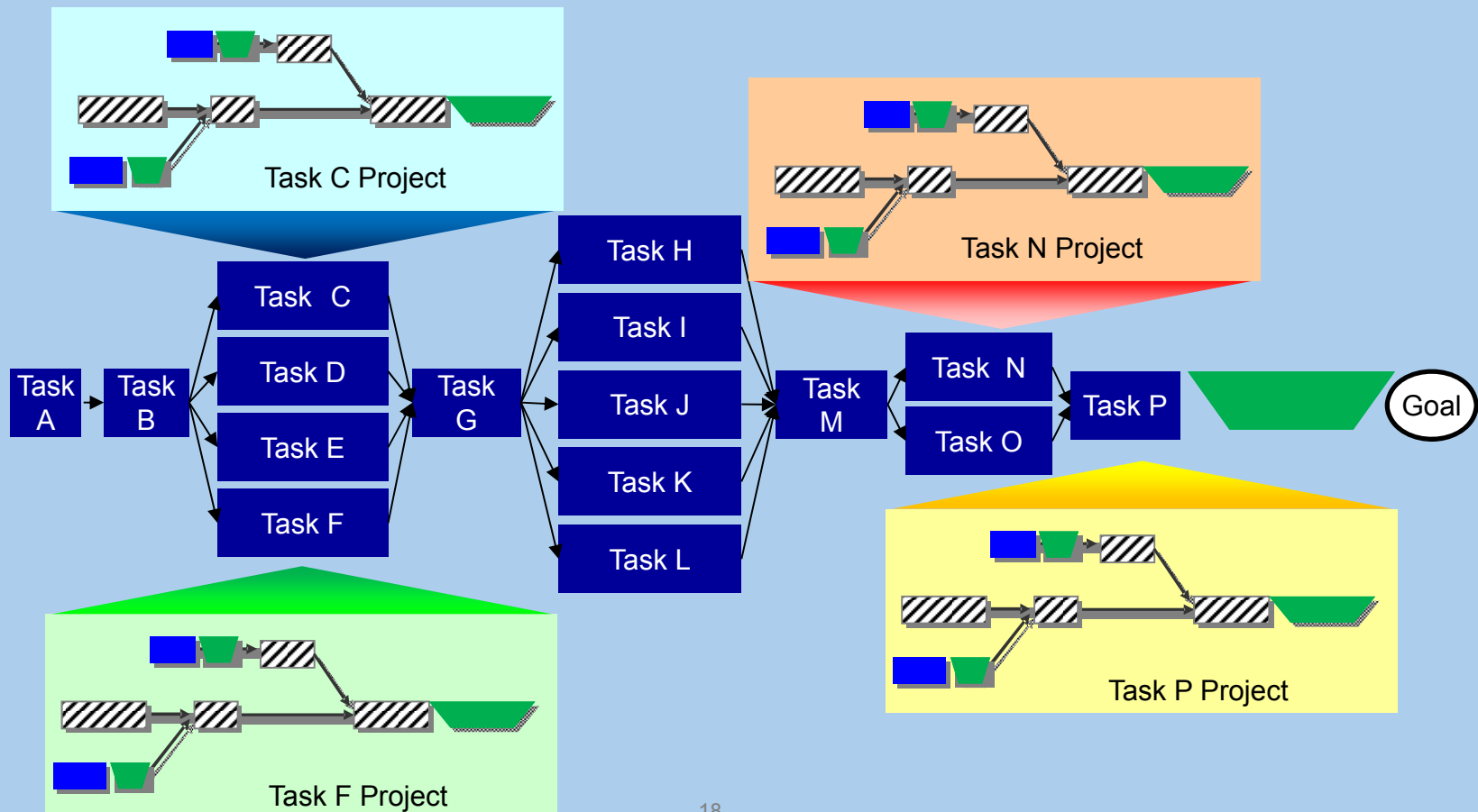


Big Challenge, Huge Success !!

Case study 1 : Mazda - Manage Big Project -

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- Management to incorporate the idea of project nesting.
- Management in a separate Medium-sized projects and Large-sized project.



Case study 1 : Mazda - Big Results -

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- All the projects were delivered on time or even earlier to the market.
- CX-5 was successfully released to the market earlier than the initial plan.
- SKYACTIV Winning various awards around the World.
- Bottom line profits were turned into black in 2013 after 4 years continuous loss.
- Increase Development capacity and productivity.



CX-5

For more information...

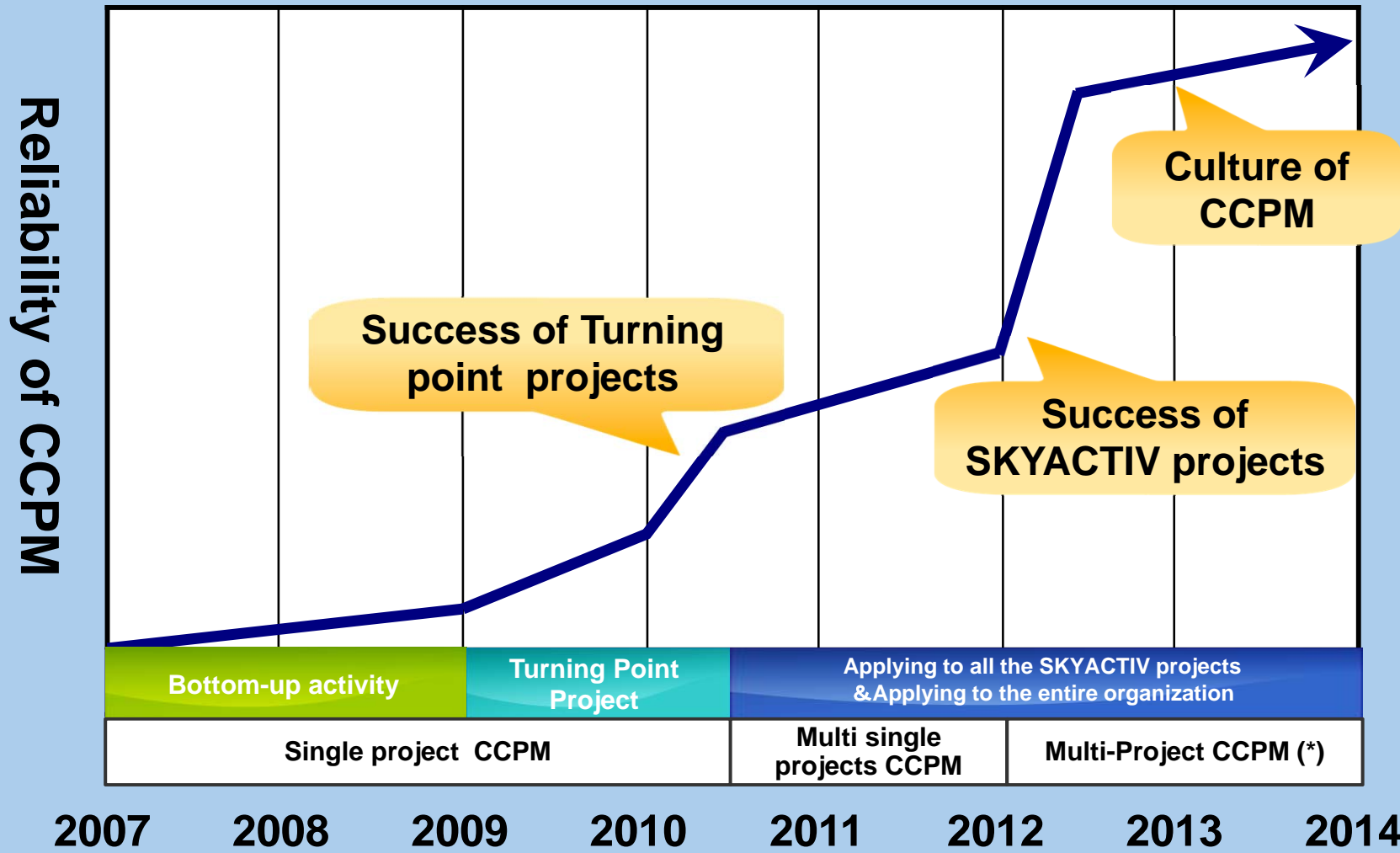
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Case study 1 : Mazda - Reliability of CCPM -

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2007

2008

2009

2010

2011

2012

2013

2014

Case study 1 : Mazda

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Summary -

- Huge organization has changed through Bottom-up activities.
- The way of management was changed.



Gaining Reliability of CCPM
= Bottom-up implementation process of Multi-Project CCPM

Case study 2 : Alpine Information System

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Alpine Information System, Inc.

- Founded : April 1991
- Headquarters : Iwaki, Fukushima
- Capital : JPY125,000,000
- Sales : JPY1,071,000,000 (FY2013)
- Employees : 81 (January 2014)
- Alpine Group

Alpine Electronics, Inc.

(<http://www.alpine.com/>)

ALPS ELECTRIC CO., LTD

ALPINE ELECTRONICS MARKETING, INC.

ALPINE ELECTRONICS OF AMERICA, INC.

ALPINE ELECTRONICS (EUROPE) GmbH

ALPINE ELECTRONICS(CHINA) CO., LTD. etc.



Implementing department

- System designing division
 - In-house system development
 - Customer system development

Case study 2 : Alpine Information System

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Background

- In the automotive industry, business environment is changing fast year by year, and the organizational capabilities are required to be grown in order to meet the customer demands.
- In order to strengthen the organizational capability of speed, the demand for the introduction of new systems in a shorter period of time was getting bigger.



However, in reality,

Projects have never delivered on time as initially planned, there are common actions for project delay such as, adding resources, reducing scopes and extending project period.



**For executing faster and reliable projects,
new system was required**

Case study 2 : Alpine Information System

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Starting Point

Pilot project: January to March in 2013



Yes

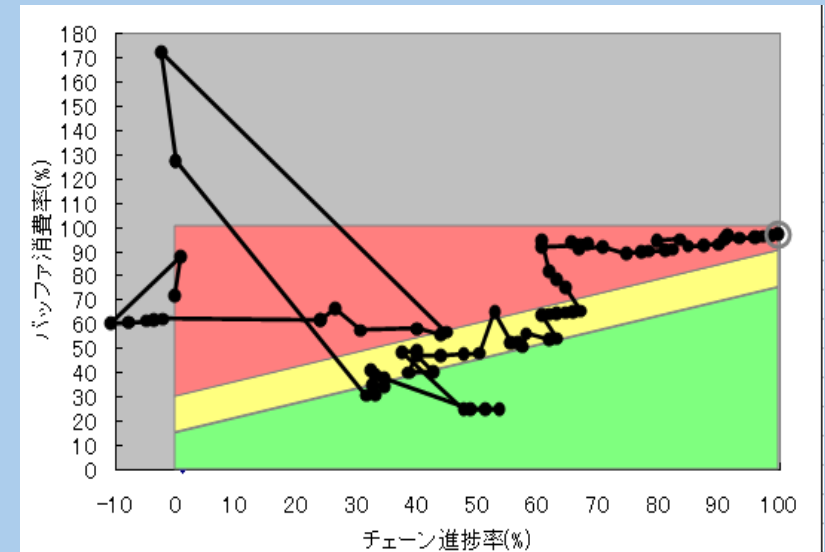
= Good !

- Full scale start : April in 2013



But...

= Still, do not yet have a trust, and confirmation for a full CCPM implementation...
Difficult to execute “Freezing” and “Staggering”...



**Bottom-up implementation started in order to gain a confidence.
Started from “Visualizing all their projects”**

Case study 2 : Alpine Information System

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Turning point

- Daily activities led to reliability
 - Progress daily meeting, Planning
- After 4 months, all the project buffer and the load of resources were visualized.
- Too many projects and too many bad multi taskings were revealed.
- The feeling that Top management and Middle management were proven as correct.
- They had a confidence to maximize the flow if they solve their issues.



Visualizing projects made Top management and Middle management gain the Reliability and confidence to CCPM

Case study 2 : Alpine Information System

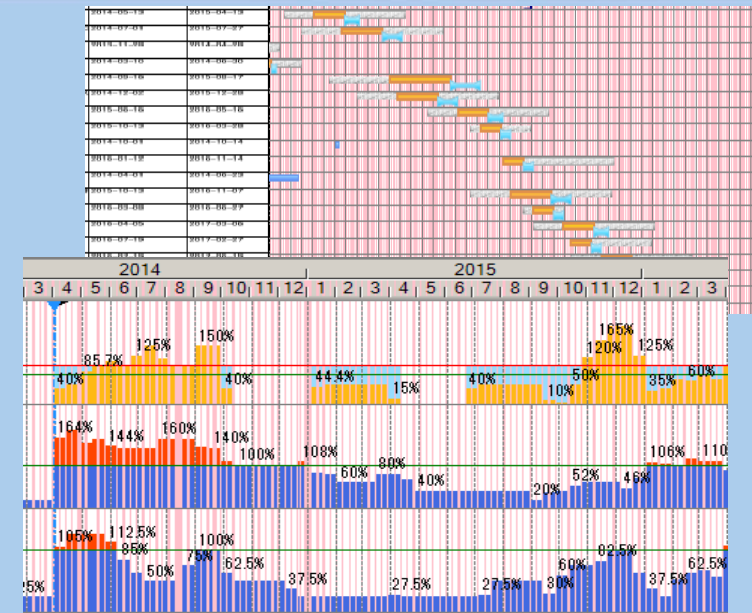
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Challenge

- Top management and Middle management agreed, and made a decision to do Freezing 4 projects out of 11 projects.
- “All projects might have delayed if we didn’t decide to freeze”. As a result, projects were completed on time!”

To the next stage

- Full scale pipeline management has started
 - September to December in 2013, Pipeline management for FY 2014.
 - February to March in 2014, preparation for Full-kitting was completed.
- The Goal of FY 2014
 - More than doubled / The number of completed projects and initial time delivery rate.

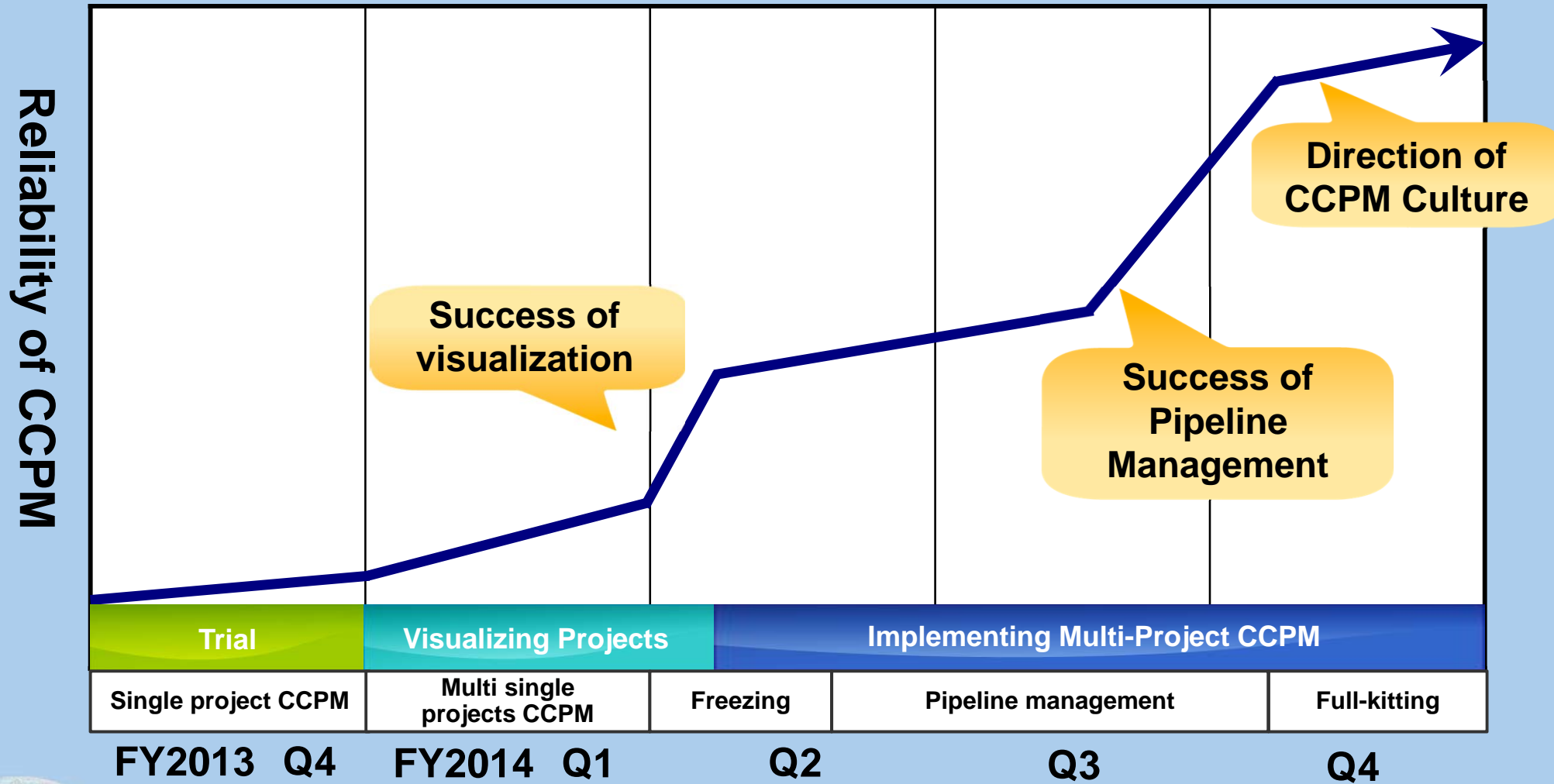


To maximize flow by Multi-Project CCPM



Case study 1 : Alpine Information System

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Case study 1 : Alpine Information System

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Summary -

- **Bottom-up activities changed their organization**
- **The way of management was changed**

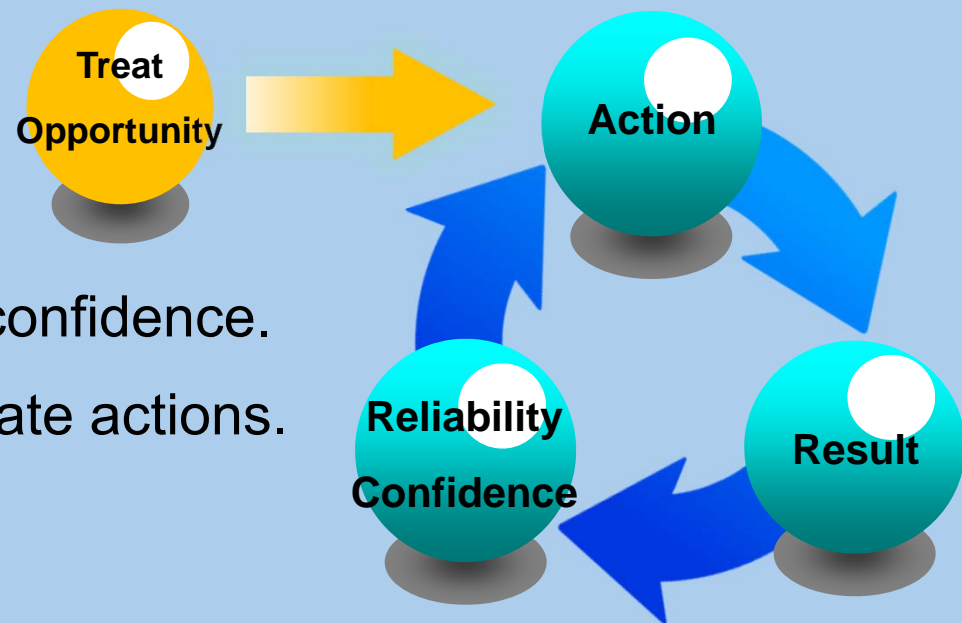


Gaining Reliability of CCPM
= Bottom-up implementation process of Multi-Project CCPM

Conclusion

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- People can understand the logic of TOC and CCPM.
- People and organization don't move only understanding the logic.
- People and organization start making actions once they get a confidence to get results by TOC and CCPM.



- Action brings results.
- Results brings reliability and confidence.
- Reliability and confidence create actions.

**“Logic & Results” creates positive action cycle
= Reliability-driven**

Conclusion

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**Bottom-up implementation process
of Multi-Project CCPM (or any other TOC solution) is
“Reliability-driven implementation”**

Conclusion

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- Our purpose is building KAIZEN culture in the organization to be an ever flourishing company.
- Top-down and Bottom-up are the methods to reach the Goal.
- What was learned from the case here is that everything starts from Reliability and Confidence to Multi-Project CCPM.
- This is not only about Multi-Project CCPM but also about all other TOC solutions.
- This is not only for Japan but also for the Universe.



I believe in Reliability-driven implementation should contribute to solve your challenges.

About Tomohiro Goto

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Since 2005, he has been introducing CCPM, and providing professional consulting service and CCPM application support to a number of Japanese companies. His clients are from various kinds of industries as manufacturing, IT, Game software development, and Entertainment industry. The size of companies he has been involved was from small organizations with less than 10 employees to the large with several thousands of employees. He has also involved in introducing S&T tree to the company, Being Co., Ltd. where he is working for and also many other companies.