

# THE TWI ENGINE OF IMPROVEMENT: FRONT-LINE EMPLOYEE IDEAS

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***TWI Summit***  
***Orlando, May 7, 2008***

## THE PROBLEM

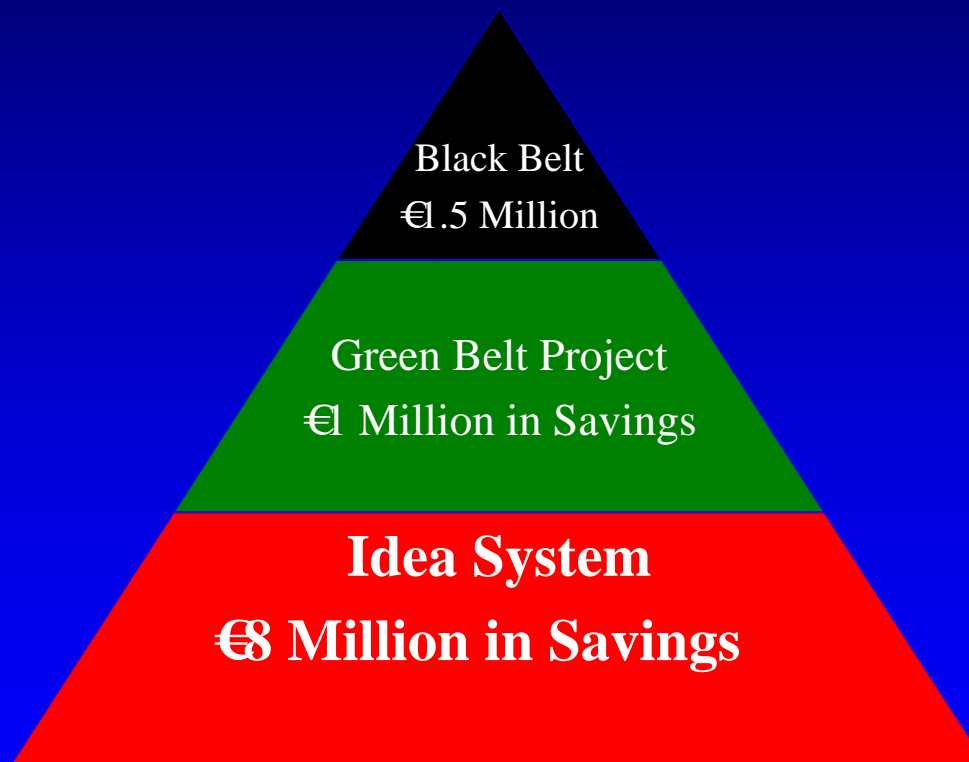
*Some things never change...*

Front-line workers see a great many **problems** and **opportunities** that their managers don't.

Today, just like sixty years ago, most managers either don't realize the full **power** of employee ideas or have never learned how to tap them **effectively**.

To be truly **excellent, lean, and good at execution**, you have to be able to capture and implement large numbers of employee ideas.

# THE TIP OF THE ICEBERG



# EXAMPLES OF GOOD IDEA SYSTEMS

*Boardroom Inc.*

104 ideas per person per year

*Wainwright Industries*

65 ideas per person per year

90 percent implemented

*Clarion Hotels – Sweden*

46 ideas per employee per year

*Richer Sounds*

20 ideas per employee per year

*Milliken Corporation*

115 ideas per employee per year

*Toyota*

100 (?) ideas per employee per year

# WHY IS CREATIVITY IMPORTANT?

The greatest source of competitive advantage is not really **cost** or **quality**, but **creativity**.

*John Micklethwait and Adrian Wooldridge*  
Business editors of the *Economist*

# WHY EXCELLENCE?



# QUESTION

What does all this have to do with TWI?

# STANDARDIZATION AND CREATIVITY

**Standardization** and **ideas** should go **hand-in-hand**:

- Standardization without ideas is **Taylorism**  
*“Those who think and those who do”*
- Ideas without standardization are not **sustainable**

Need standardization, but you also need to put improvement  
*into the hands of the people doing the work!*

## WHAT TWI IS ABOUT

TWI was and still is **ahead of its time**:

*It is a superbly designed set of training programs aimed at the nexus of kaizen – the “sweet spot” of **standardization** and **employee ideas** that is the **engine of improvement**.*

## THE CONNECTION WITH LEAN

- Shigeo Shingo:

*My teacher was Tsuneo Ono, my teacher's teacher was Mr. Kenichi Horigome, and my teacher's teacher's teacher was Frank B. Gilbreth.*

## STEP 1: STANDARDIZED WORK

- Tsuneo Ono:

*It all begins with standardization. Only when you standardize do you have a base to improve upon.*

- The New Jersey connection:

*If you haven't read every word written by Frank and Lillian Gilbreth, you cannot call yourself a production manager.*

## STANDARDIZATION PROMOTES IDEAS

*It is seldom appreciated by the layman that the only inventions and improvements that are not wanted are those that are offered by the employee before he has first qualified on the standard method of procedure in accordance with the much tried out instruction card.*

*The condition precedent to an audience for offering a suggestion for improvement is to have proved that the suggestor knows the standard method, and can do the work in the standard way of standard quality in the standard time. Having thus qualified, he is in a position to know whether or not his new suggestion is a real improvement .*

Frank Gilbreth

***Primer on Scientific Management***

## ONE MORE THING...

*The greater detail into which the regular process charts are divided, the more suggestions for improvement will come in.*

Frank and Lillian Gilbreth

# YOUR GOAL

Learn how to set up and run a good idea system, to enable your employees to act all on the **problems** and **opportunities** they see.

**Goal:** 24 implemented ideas per employee per year by end of first year.

# HOW TO RUN A GOOD IDEA SYSTEM

# POINT 1: GO AFTER SMALL IDEAS

*Look for all the small things you can do...*

- It is impossible to improve performance past a certain point without getting the little things right.
- Unlike major innovations, most small ideas stay **proprietary** and create **sustainable** competitive advantage.
- Small ideas are much **easier to implement** than big ideas:
  - Much less **resistance**
  - **Easier** to do
  - Lower **risk**
  - Better for **learning**
  - If you could choose between 1 **big** idea and 10 **small** ideas to do the same thing, which would you choose?

## POINT 2: MAKE IDEAS PART OF EVERYONE'S JOB

- **Document** ideas and **track** them.
- Require or expect ideas from your **front-line employees:**

*Evaluate them on the quantity and quality of their ideas.*

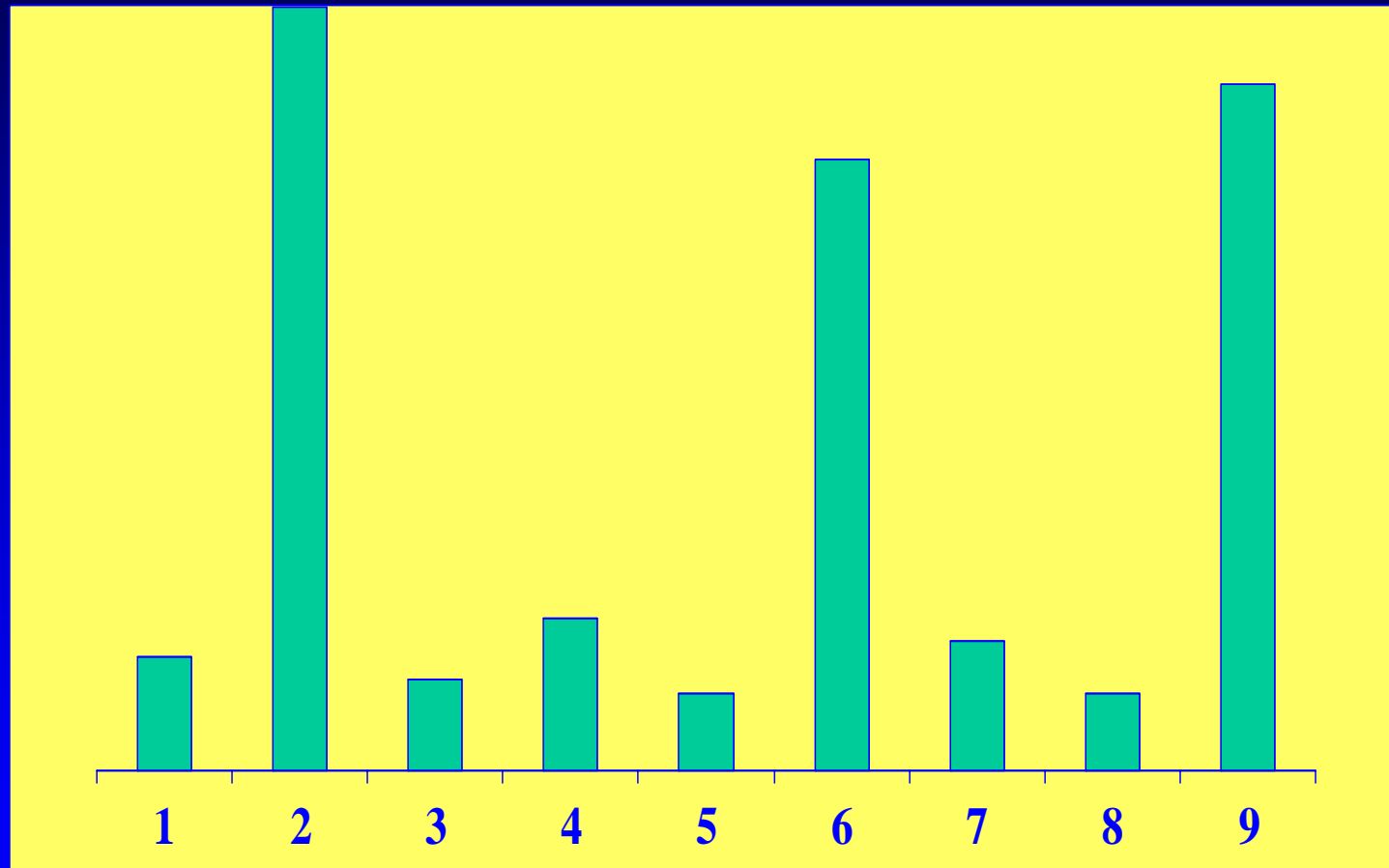
- Teach your **supervisors** the value of ideas and their own four roles: **encouraging, mentoring, championing** and **looking for larger implications** of ideas.

*Evaluate them on how well they promote ideas.*

- **Important principle:** There is no such thing as a bad idea.

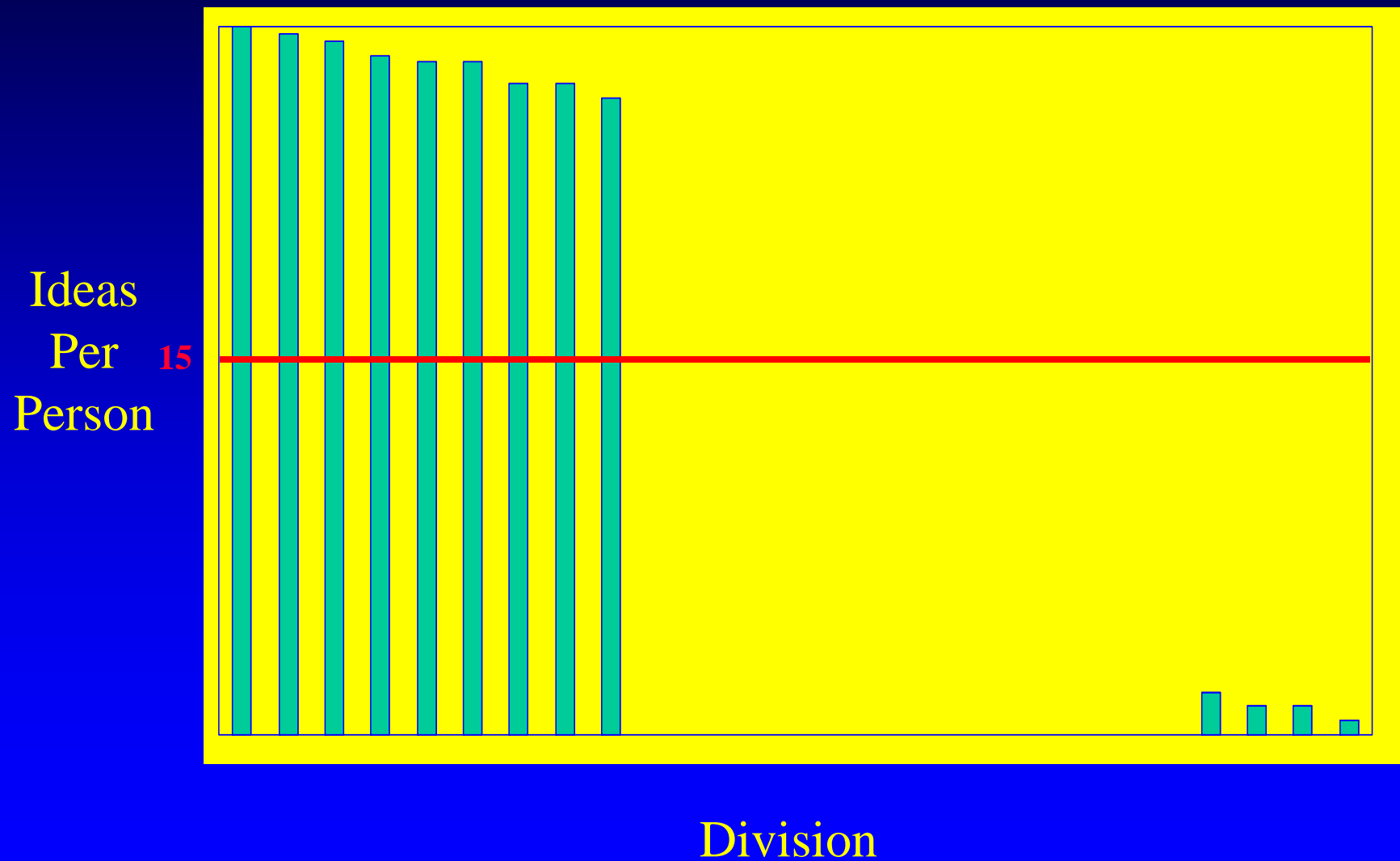
# AT ONE LARGE COMPANY....

Ideas  
Per  
Person



Department

# AT ANOTHER



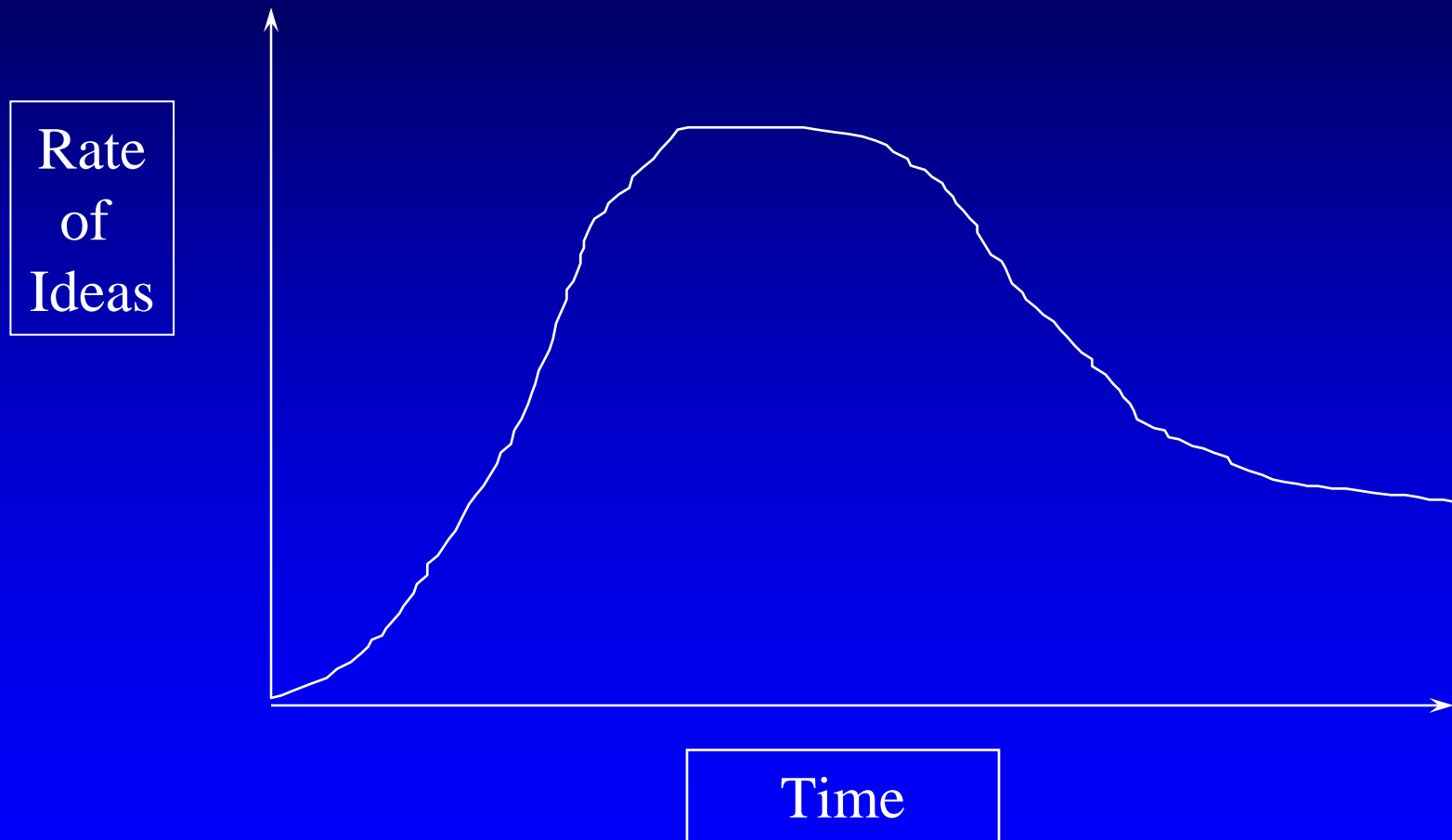
# MONEY & RESOURCEFULNESS OFFSET EACH OTHER

Problems and Opportunities



Raw Ideas

# THE SURGE OF IDEAS



## POINT 3: FOCUS EMPLOYEES ON THE IDEAS YOU WANT

- **Align** their goals with the **organization's goals** and give them **clear metrics**.
- **Ask** your people directly for the kinds of ideas you need.
- **Articulate** and **legitimize** what wasn't on the radar before.
- Surprisingly, focusing people on particular topics leads to **more** ideas.

# Key (Strategic) Performance Metrics



Front Line Metrics  
*(Actionable by team members)*

## POINT 6: HELP PEOPLE COME UP WITH MORE AND BETTER IDEAS (The Basics)

- Try to expose your people to **new experiences** that will broaden their **perspectives** on, and deepen their **knowledge** of the company.
  - ➔ Job rotation, benchmarking, contact with internal/external customers, reading groups, ongoing learning and development.
- Use **idea activators**, and **hone their technique**, both in “hard skills” and “soft skills” -- such as speaking, persuasion, negotiation, running meetings, and confrontation.
- Show them how to improve their **powers of observation**.
- Teach and value **problem-solving** skills (AAR).

# EXAMPLES OF IDEA ACTIVATORS

- 5S
- Poka-Yoke
- Quick Changeover or SMED
- Total Productive Maintenance (TPM)
- Process Smoothing
- Cycle Time Reduction
- Process Charting & Analysis
- Value-Stream Mapping
- Reduce, Reuse, Recycle: Green Lean