

[1988-1993]

A Brief Look at 5 years of Metamorphosis of Daewoo

*'The secret of success behind
the most efficient shipbuilder in the world'*

REBIRTH

2018

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My-Kor. Maritime,
Proper Mediation Inc.

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Part I of Daewoo Rebirth Program[1988-1993]

**‘The secret of success behind
the most efficient shipbuilder in the world’**

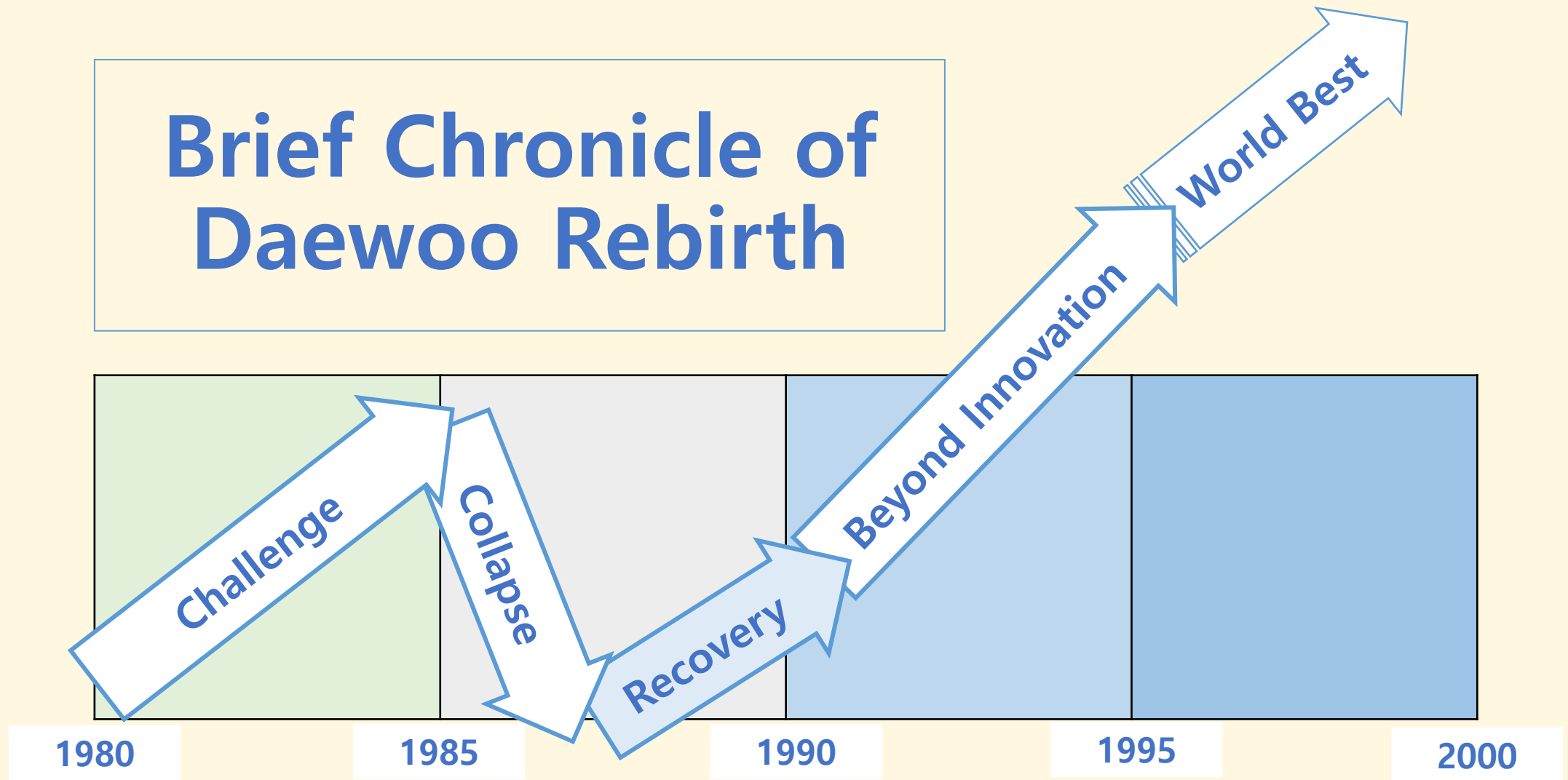
Miraculous Recovery

2018

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Brief Chronicle of Daewoo Rebirth



Key words: [Recovery] Authentic Leadership, Renewed Trust,
Back-to-Basic, Learn-how-to-learn,
[Beyond Innovation] Paradigm change,
Speed & Productivity, Hit Product

Challenge

[1978] Took over Okpo Shipyard in Koje Island under construction[30% progress]

[1979] **2nd Oil Crisis, Economy Recession in 1980s**. 300 employees.

[1980] **Started building 1st project**
Sophisticated Chemical Tankers

[1982] Revenue: **485mil.** USD, Loss: 9mil. USD

[1983] Achieved **Export 100mil. USD.**



Collapse

[1984] **Revenue Growing, but deficit went up.**

- Lack of Technology & Experience
- Problem-solving ability not ready
- Lots of Mistakes, Reworks→ More & More workers up to 32,000 persons→ Catastrophe

[1985] **Launching Transformation program
Mass Dismissal[32,000p → 15,000p]**

[1986] **Heavy deficit went up.**

[1987] **Bitter Labor Dispute. Failed Reform.**
[National-wide Democracy Movement]
[Revenue: almost half of 1983, Big Loss]
→ **Near to bankruptcy, Seriously Critical**



The Story begins...

1 DSHM: Tragic End to Violent Labor

Demonstration: one man dead and 20 injured

The bitter labor dispute between DSHM workers and management reached new depths yesterday, when workers responded to management's decision to close the yard by laying siege to the plant and its president.

One worker died and 20 others were injured during the clash with riot police guarding the Okpo Hotel, where Daewoo President Yoon was staying. Twelve companies of riot police blocked the road to the hotel firing tear gas into the crowds of angry workers hurling stones. In the melee, Lee Suk-Kyu, an assembly worker, was hit in the chest by a teargas canister and was taken to hospital, where he died at 3.45PM yesterday afternoon.

Source: Chosun Ilbo. August 23, 1987.

2

The labor dispute hewed deep wounds in the isolated community on the island of Koje. DSHM came close to total collapse, and many were concerned that the vitriolic battle was destroying any future chance the fledgling shipyard might have had to compete in the world market. Kim Woo-Choong, Chairman of the Daewoo group, was determined that the plant be saved, and in 1987 flew onto Koje island to personally supervise DSHM's rebirth.

**Almost dead
in Critical Condition**

『Miraculous Recovery』

1. Authentic Leadership
2. Holistic Treatment for Real Change

1. Authentic Leadership



Chairman...

- Build 'Trust' again!
- Restructure Business

During the periods of 1987-1990, Kim Woo-Choong, Chairman of the Daewoo group, determined that the plant be saved, and flew onto shipyard to personally supervise DSHM's rebirth.

The 1987 dispute had been painful and divisive for everyone and both management... Yet resolution seemed difficult to find..... **Chairman Kim's personal action—to go and live with the plant**—sent a strong signal of Daewoo's commitment to the shipyard to both union workers and field managers. Kim's first step was to **heal the deep wounds in the relationship between management and union, and to begin to build renewed trust** among them. Kim started a 'unity movement' which played on traditional Korean values and encouraged both sides to begin to act like members of the same family.

The company sponsored a **family training program** which also included members of the community as a whole as well as its own workers' families. It also sponsored cultural events, and a variety of education programs. **Many employees were single men so Daewoo sponsored opportunities for the single men to meet single women from other Daewoo affiliated companies (for example, in electronics and textiles).**

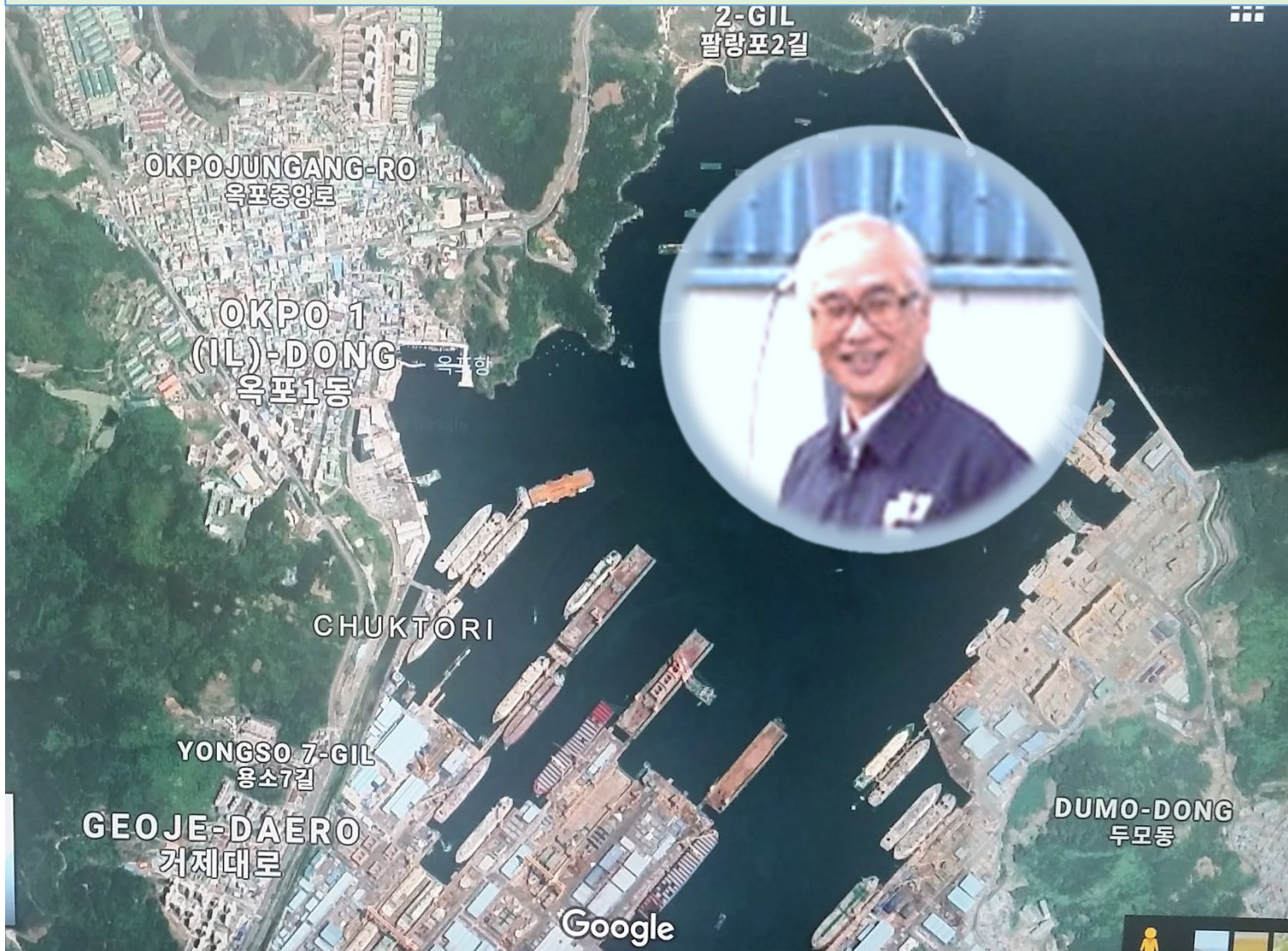
How to recover consciousness from coma?

1-1. Build 'Trust' again!

- Family Bonding
- Save our yard!

Daewoo Shipbuilding & Heavy Machinery, Prof. David Upton, Harvard Business School 9-695-001 October 1, 1994, pp.4-5

[Family Bonding①] Chairman's Authentic & Careful Nursing!



- Bicycling-around-Management to every corner of the shipyard
- Careful Listening to all people. Sincere answer to them with hope & vision
- **Call at Employees' Apartment** before 7am without prior notice
- Visited Canteen and **took a midnight meal** with night shift workers
- **Diligent Personal example:** 7days Business trip to 11 cities of 9 countries

[Family Bonding②] Cultivation of 'Family spirit'

- Family Bonding Activities:
4 day journey for bonding
- Shipyard open to All citizen
on Children's day....
- Cultural Event for Employees
& their family
- Joint Wedding ceremony
- Sponsoring the opportunities
for single men to meet single
women

All members of the community
joined as a whole as well as
own employees' family.



Save our yard!

During 3 days visit to 'World-Best Shipyard', chairman made a careful investigation and shocked into silence about its Remarkable Advancement.

'Bad productivity is **CRIME!** Innovation is not enough. **Beyond Innovation**
<Chairman Kim>

[1] 4 days' Trip to World-Best shipyard: All employees

- ① Lesson on-the-way: **Public ethics**. Good citizenship. Clean Environment.
- ② Lesson in Japanese yard: Technology, Skill, Discipline, Morale, Behavior, Working culture... **They feel shame.** → **Recovery of consciousness**
- ③ On the way back: **They are determined to save the yard.**

[2] Trip to Labor-centered East European Country: Members of Labor Union
Observation of poor shipyards afforded an excellent lesson to them having union-shifted thinking.

How to create Job place?
How to make shipyard sustainable?

1-2. Restructure Business!

- Cut the Fat!
- Create New Business!
- Develop 'Hit' Product

Shock to blind mind on Cost

Cut the Fat!

	Resources!	Cut by half, by one tenth or Eliminate!
1	Gates	5 gates → 2 gates [1 for People, 1 for Material]
2	Security Guard	174 persons → 35persons+10 watching dogs.
3	Company Bus/Car	221 in Number →126 [Cut by 50%]
4	for Directors	No separate room, Business Car → Small compact car
5	Warehouse	90% of Storage area utilized for Production purpose. Cost ↓
6	Workshop	20% allotted for New diversified Business. Production ↑
7	Organization	Silo to Flat: Manager-COO-Chairman[CEO]
8	Office Floor	90,000→60,000m ² . 30,000m ² leased to College, No partition
9	19 Canteens	Removal of Directors' restaurant. Reduced to 9 [Cut by 50%]

Turn Cost factor into Productive capacity.
Cut all physical Fat. Cut Fat in thinking: from Silos to Sharing

Create New Business and Develop 'HIT' Product

Main Products in 4 Business Units

- Commercial Shipbuilding: VLCC, Product Carrier, Chemical Tanker, Container ship, Bulk Carrier, Car Carrier
- Special Shipbuilding: Destroyer, Frigate, Patrol Vessel
- Oil & Gas: Offshore Platform, Drilling rig
- Industrial Plant: Petrochemical Plant, Power Plant



1) New Business to utilize Idle Facilities and to provide Workplace for Excessive Manpower

- ① #2 Dry Dock[for Two year]
: New Building → Ship Repairing
- ② Excessive Assembly shop
: Fabrication of Steel structure for Building & Bridge
: Car Parking Facilities



③ Excessive Warehouse

- : Excavator/Forklift Production
- : Manufacture of Welding machine
- : Environment-friendly Bio-Toilet



From 300m long VLCC to Small Portable Bio-Toilet

2) Hit product development for Commercial ship market



- LNG Carrier
In-house R&D

▪ VLCC: Product Innovation

- ① Sincere Benchmarking
Best Practice by all level of employees
- ② Learning by Doing
New Building Concept
Optimal Design
from world-best yard



3) 'COMPACT CAR': Model, Suzuki Alto

- 100 shipyard workers dispatched to Japan for 6 months
→ They have finally achieved far better productivity than the experienced workers in old habit of car manufacturing line.



4) New Challenge in Navy Ship Div.

- Submarine: German Technology, HDW

EXPORT now.



5) People Transfer to another Business Unit

- All employees of shipyard are welcome to Electronics, Insurance, Cosmetics, Motors, Heavy Machinery, Construction Company

2. Holistic Treatment for Real Change

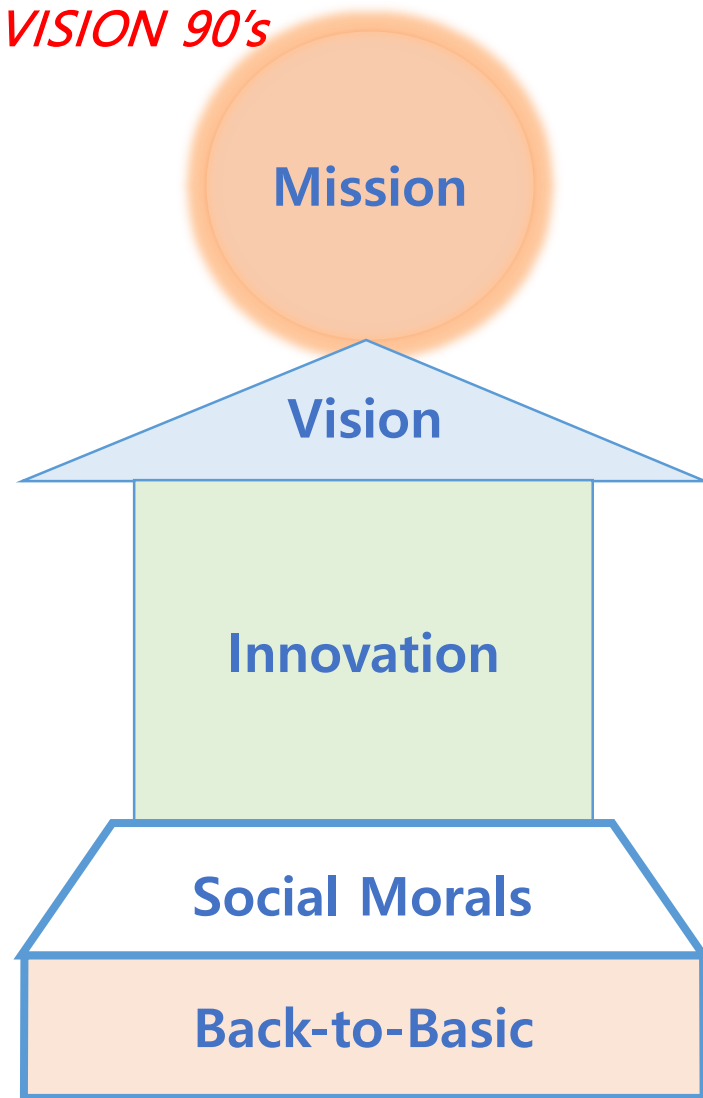


- Behavior Change
- Culture Change

Vision 90s[1989-1993]

Architecture of Holistic Treatment for Real Change

VISION 90's



Mission*

- Sweet Home!
- Great workplace!
- Wonderful Community

Vision*

- World #1 Shipbuilder

**5
Action
Agenda**

- ① Labor-Management Harmony
- ② Safety in routine
- ③ Technology Innovation
- ④ Productivity Innovation
- ⑤ Cost Reduction

**5
Respect**

- | | |
|----------------------|-------------------|
| ① Respect Others | ② Respect Basics |
| ③ Respect Customer | ④ Respect Quality |
| ⑤ Respect Technology | |

**6
Basics**

- | | |
|---------------------|---------------------|
| ① Be punctual! | ② Keep clean! |
| ③ Keep Safety rule! | ④ Don't hang around |
| ⑤ Greet with smile | ⑥ Use refined words |

Behavior Change

2-1. We cannot transcend Basic!

- Back-to-Basic! → Basic makes Best.
- Set the Spirit in order!
- Create the Higher Values

Back-to-Basic! 'Morning Cleaning'

- One day in 1988, Japanese consultant shouted to all directors, 'Clean the yard.'
- **Morning cleaning**→Public Ethics, Discipline
: **Shock and Surprise to Everybody**
- **Small routine in Consistency & sincerity**
: Something **very Powerful!**
"Cleaning was suffering at the beginning,
and turned into Joy in 100 days.
Now it is **Contemplative exercise.**"
: **Clean up bad habit!**
→ **We cannot transcend what is basic!**



COO at Morning cleaning
Good personal example
Action speaks louder than thousand words.

Small & Simple Routine triggers Behavior Change.
Complete revolution of the mental attitude and the habits

Create the Higher Values



■ Voluntary Action

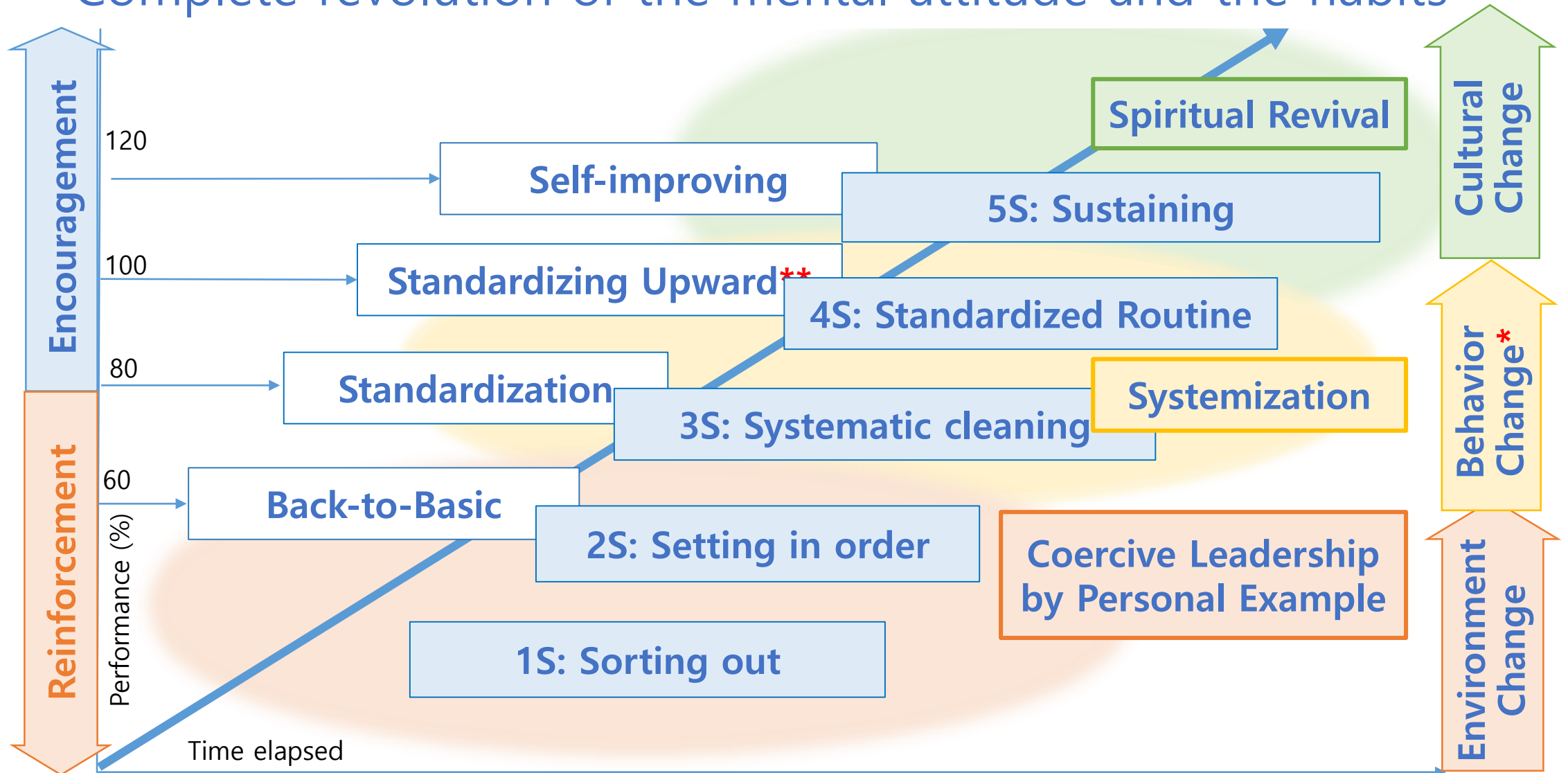
- ① Morning cleaning: Earlier than 08:00
- ② Time-keeping:
Work start 1 min. before 08:00
- ③ Shipyard Gardening: after work
- ④ Garbage disposal: Separate collection
→ Clean & Green Shipyard, 'No cigarette butt': **Pride of Employee**

■ Service to the Community in Weekend

- ① Cleaning Downtown & Beach
- ② Repair of Houses in Rural village
- ③ Helping farmers in busy season
- ④ Maintenance of Playground
: 38 primary schools in Koje island
→ **Good Citizenship**

To the Higher Values!

Behavior Change*, Complete revolution of the mental attitude and the habits



✓ **Standardization means nothing unless it means standardizing UPWARD**.**

Culture Change

2-2. Towards Real Learning Culture

- 'All' Employees learn how to learn.
- Let them empowered.
- Let them aligned with Mission

'All' employees visited to Japanese shipyard to learn the World-best practice of their own job.

“We sent our employees, both field workers and managers at all ranks, to the most efficient Japanese manufacturers for benchmarking as well as education and training.....

We sent all employees, not just managers or a particular group of workers. The reason was that we believed workers could do the best job of benchmarking when they saw their best competitors doing their own jobs.

For instance, a welder on the line is the best person to benchmark welding. He can compare his skill against that of the best welder in the world. Likewise, the welder himself is the one who can derive most benefit from observing the benchmarked welding process. By 1994, more than half of the workforce had been through the education and training program.”

Suh Wan-Chul, Executive Managing Director

Towards Real Learning Culture

- 'All' Employees
- Learn how to learn.
- Let them empowered.
- Let them aligned with Mission

**“Making things is all
about making people.”**
Daiichi Ohno, TOYOTA

Daewoo Shipbuilding and Heavy Machinery,
Prof. David Upton, Harvard Business School
9-695-001 October 1, 1994, p.5

Basic & Essential Course [Classical, Orthodox]	7 Principles for Real Learning
<ul style="list-style-type: none"> ① 5S, Safety Routine ② Problem-solving tools: PDCA, 5W1H, Basic tools of Quality, ECRS ③ Industrial Engineering ④ Management Technique & Tools ⑤ Leadership, Workmanship, Communication, Teambuilding, ⑥ Vision, Target & Business Plan 	<ul style="list-style-type: none"> ① Compulsory for All employees ② Outstanding people first! ③ Practice-centered ④ Prominent teachers in long-term basis ⑤ Train In-house Trainer ⑥ First-class Permanent In-house Education & Training
<p>‘Real’* Learning gets to the heart of what it is to be human.</p>	
<p>Education and training is a long term investment</p>	
<p>Don't see education & training as a stand-alone operation issue, a tactical, rather than a strategic interconnected system that includes vision, strategy & business plan.</p>	



Professional Course

- ① **Foreman[Lead of small group] School**
: 700 persons, 3 months
- ② **Profit-making IE → Efficiency, TAKT**
: All Production Engineers & Vendors'
: 6,000 Workers-Frontier of CI
- ③ **Value Engineering → Optimal Design**
: All design engineers
: Vendors join Cost-down projects
- ④ **Total Preventive Maintenance**
: 'My Machine' Activity
: All workers maintain welding machine
- ⑤ **Management[Process] Innovation**
: All persons in Administrative & Supporting department

**If the worker hasn't learned,
the instructor hasn't taught.**

All employees constantly pursue excellence.

The most entire work force was divided into small groups, each comprising 10 to 15 members. A production process based on the same small group structure was then a logical and effective work unit.

This small group structure became the primary unit from which the on-going improvement endeavor was built. Education and training were based on this close-knit small group structure. Training began with operators rather than supervisors. “A small group is like the roots of a tree. If these roots are healthy, the tree will flourish”. Moreover, since managers had participated in the education program alongside operators, trust began to be rekindled between the two parties—and common goals again became clear.

Suggestion for Improvement		
Year	Number	%
'93	32,000	320
'92	26,700	267
'91	17,900	177
'90	10,000	100

700 Small groups[BAN] based on production process
=Logical & Effective work unit, Primary unit of Improvement

Once it became clear that each group's fate was tightly intertwined, things began to change. Operators began to become active in making suggestions to improve inefficient operations or eliminate excessive consumption of resources.

In turn, Daewoo management devised an incentive system to encourage and reward such suggestions, and also tried to build a process for more systematic learning and experimentation for those problems requiring higher level of engineering expertise.

Leader of Small working group[BAN] Actual CEO



[Weekly meeting on Monday]

- Family matter: Anniversary, Birthday, Health problem

▪ Production:

Review of Last week: Progress, Productivity, Problem, Solution

This week program: Safety, Job instruction to each person, Vital point of Quality work,

▪ Improvement/Suggestion

▪ Autonomous Monitor & Control of QCDMS

▪ Perfect Work preparation in Advance[by Friday]

- ① Production-friendly Drawings
- ② Work Procedure, Tools
- ③ Job Program
- ④ Material Pallet

Self-Assessment of 6 Basics: ①Be punctual! ②Keep clean! ③Keep Safety rule! ④Don't hang around
⑤Greet with smile ⑥Use refined words

Miraculous Recovery in 2 years

[1987] → Collapsed, seriously critical, in Coma

[1988] **Authentic & Visionary Leadership**

(Chairman came down and live with the shipyard.)

- Recover Consciousness: **Authentic & Careful Nursing**
Build Trust: Open Mind, Open Eyes → Save our shipyard!
- Restructure Business: **Cut the Fat, Create New Business**

[1989] **Vision 90s**: Holistic treatment for Real change

- Back-to-Basic → Behavior Change
- Learn how to learn: Real Learning culture
for 'Better Tomorrow'

[1990] 'Almost completely recovered in 2 years.'

→ Employees are **Full of vitality!**

→ **Well prepared to transform shipyard.**

* **Shipbuilding Market depressed[1986-1991]**

6 Basics

- ① Be punctual!
- ② Keep clean!
- ③ Keep Safety rule!
- ④ Don't hang around
- ⑤ Greet with smile
- ⑥ Use refined words