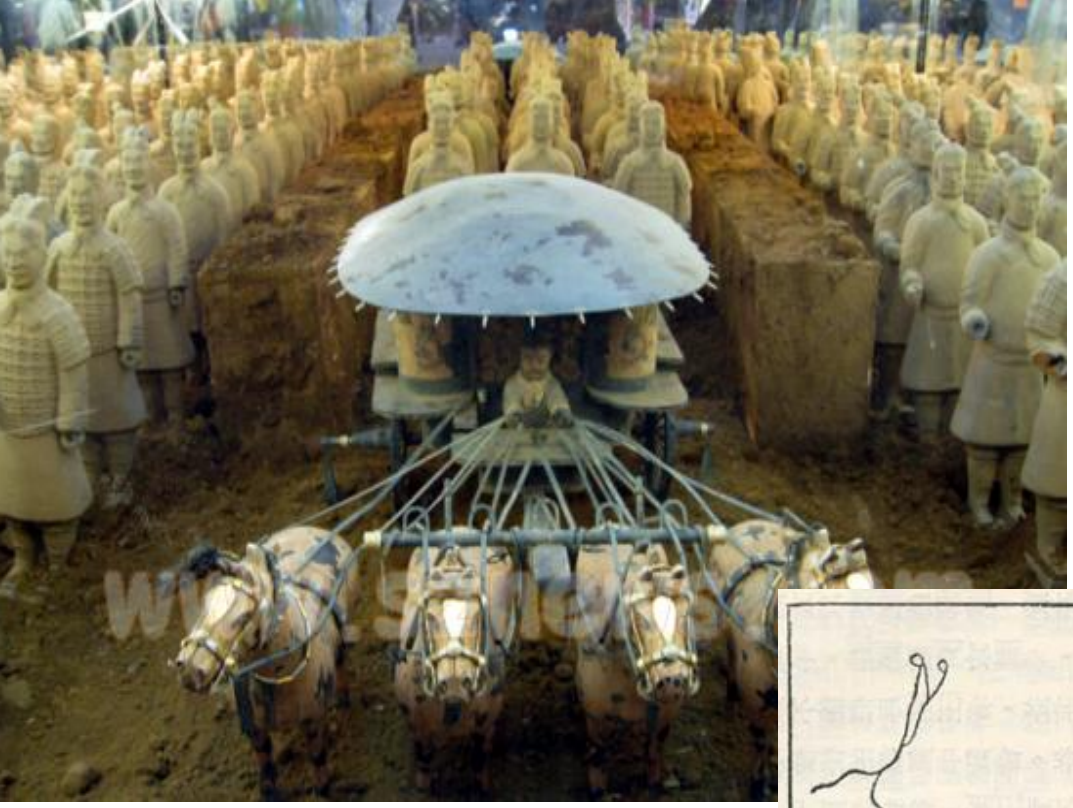
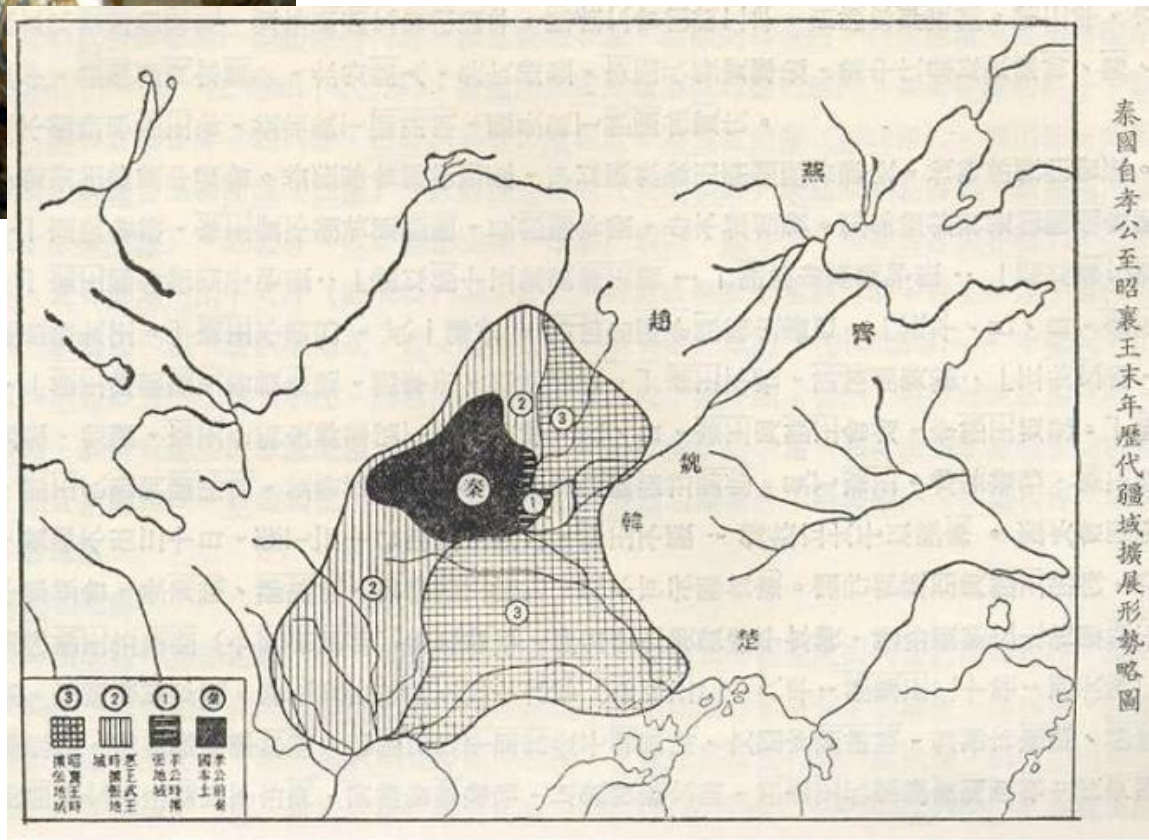
项目管理八卦（上）


秦朝不错，
回去看看。

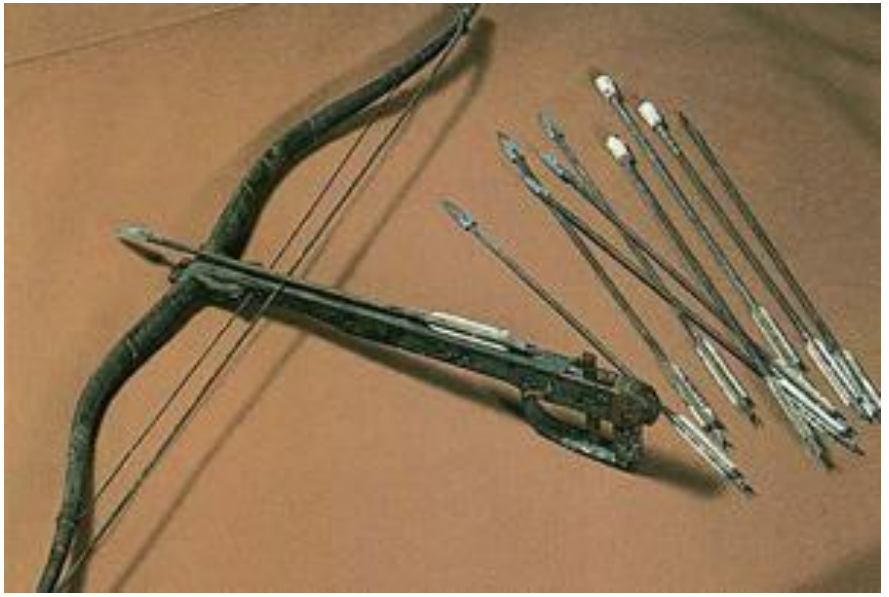




秦國自孝公至昭襄王末年歷代疆域擴展形勢略圖


昵图网 www.nipic.com BY: abcdbeetle
NO:20091217212833099551

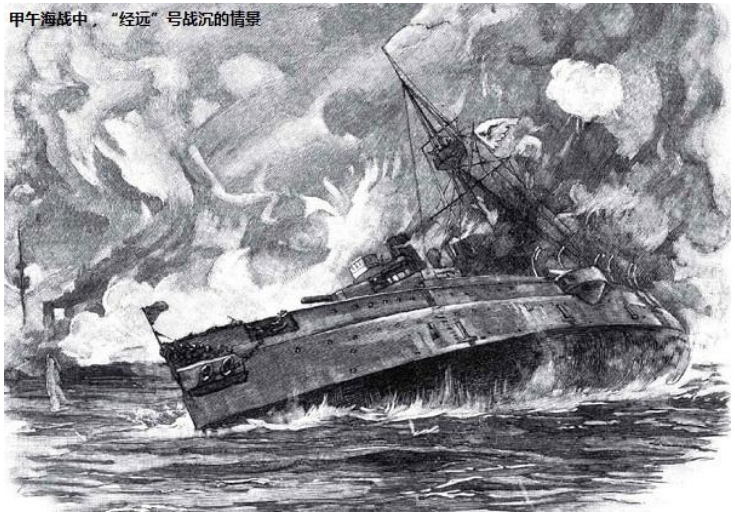

19 11:05PM
【盛世收藏 http://www.sssc.cn】

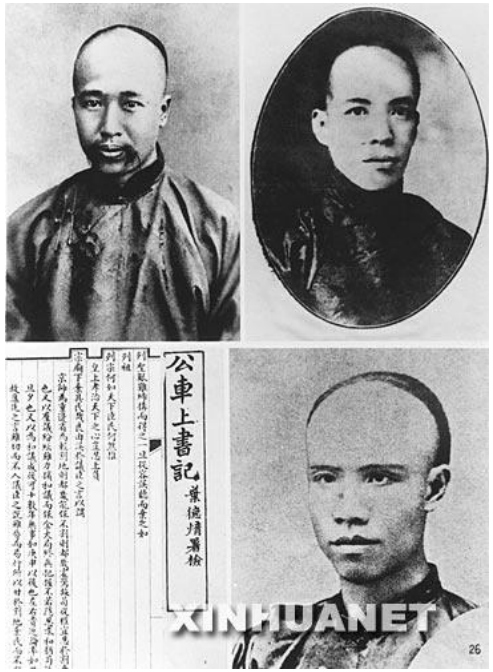


为什么秦军武器如此强大？

1. 标准化
2. 责任追溯
3. 项目负责人 - 吕不韦
4. 熟练工人 - 终身制


超速罚单
1900 年
天哪？我穿越了耶！！！





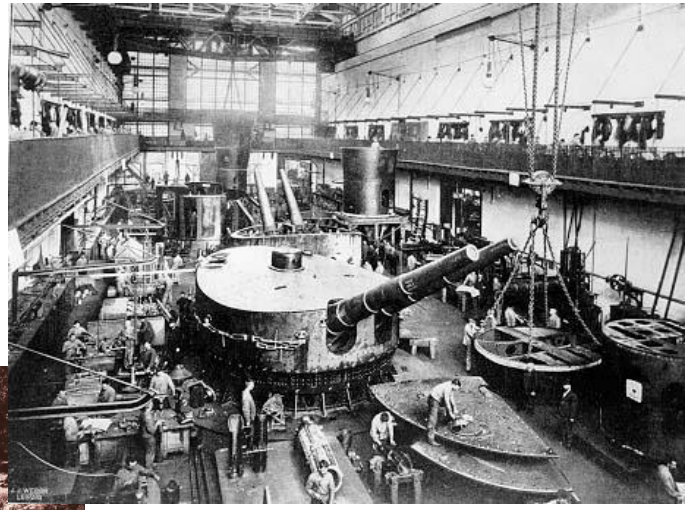
1900年的中国政府堂而皇之与十一国列强宣战

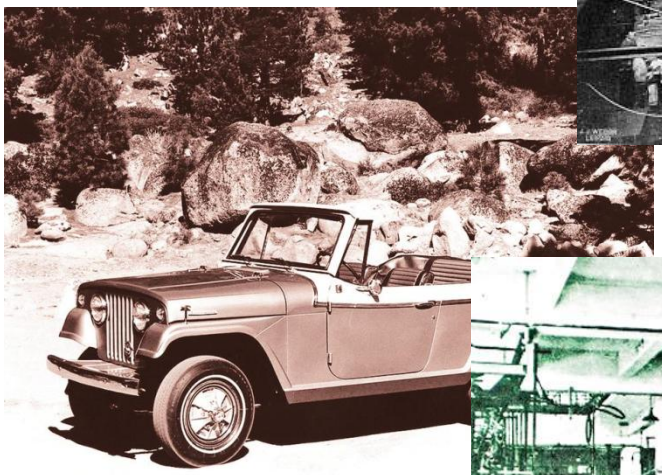
张之洞联络东南诸省，与西方达成协议，保住了大半个中国的安宁

甚至他们开始考虑，推举李鸿章为“伯里玺天德”，与洋人谈判

伯里玺天德，即President（总统）的音译。

Frederick Winslow Taylor
1856-1915



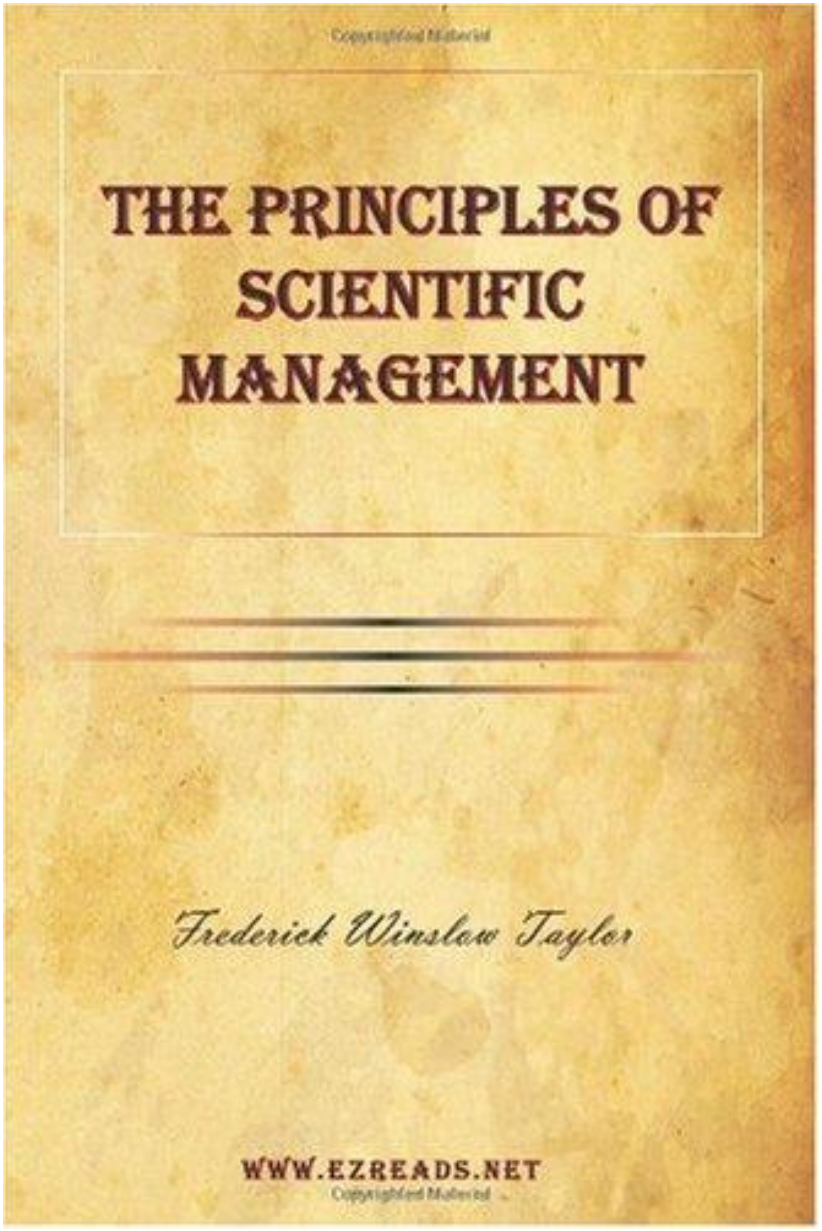


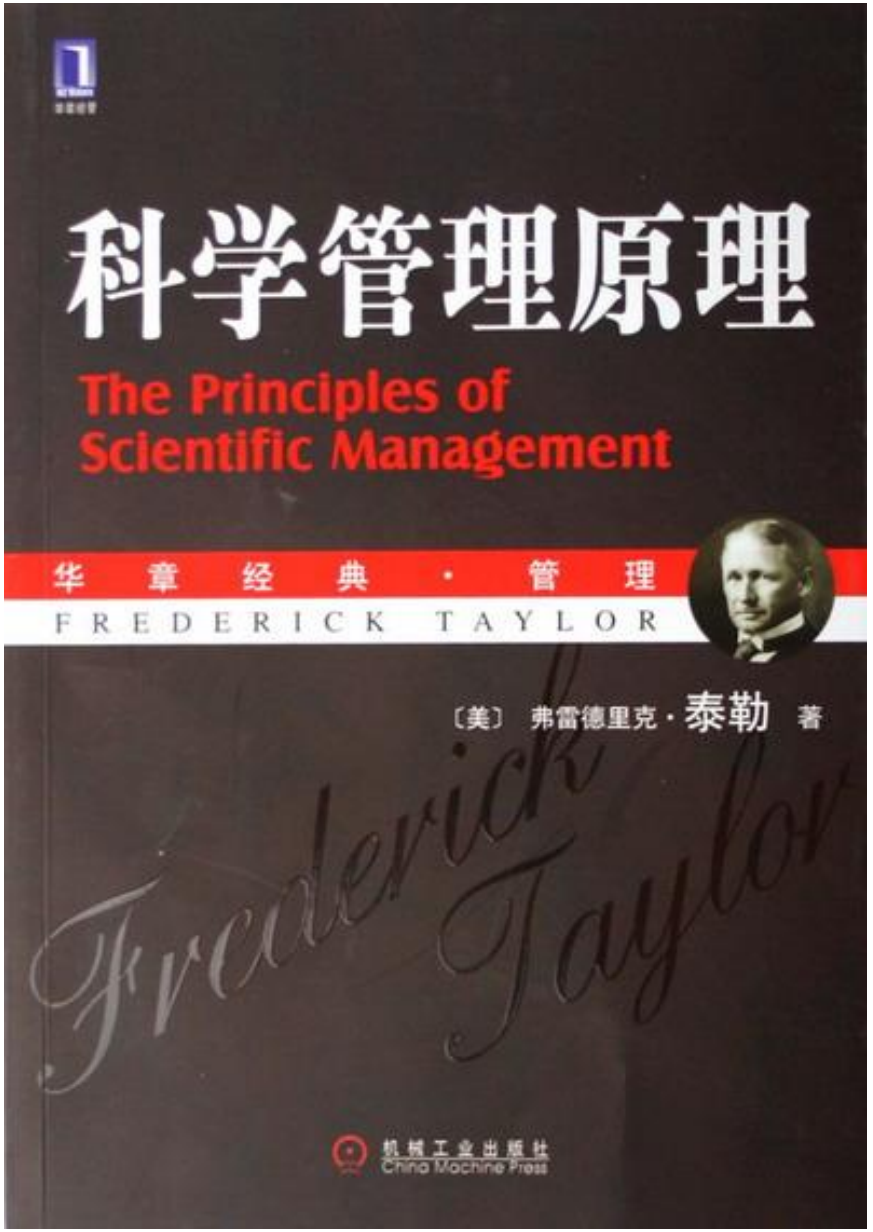
美国<u>伯利恒</u>钢铁公司

深入生产现场，
以实验为基础，
研究生产管理方法，
奠定管理学基础

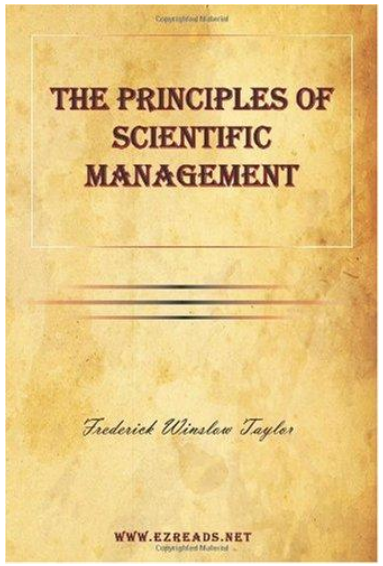
著名的金属切削试验简介

Ⅰ、定了人动时间,也应该定机动时间
Ⅱ、进行了26年
Ⅲ、切削了80万吨钢铁
Ⅳ、进行了三万次实验
Ⅴ、取得了各种机床适当的转速和进刀量以及切削用量标
Ⅵ、发明了高速钢,获得了专利





当当有卖，1997年译本： http://product.dangdang.com/product.aspx?product_id=9239515



假设：

工人会尽可能少干活
工人并不关心质量
工人没有足够的能力找到最高效的工作方法

对效率的看法：

专家把工作分成小片任务并定义每个部分最优的生产方法
给工人更多的钱让他们按照专家定义的方法工作

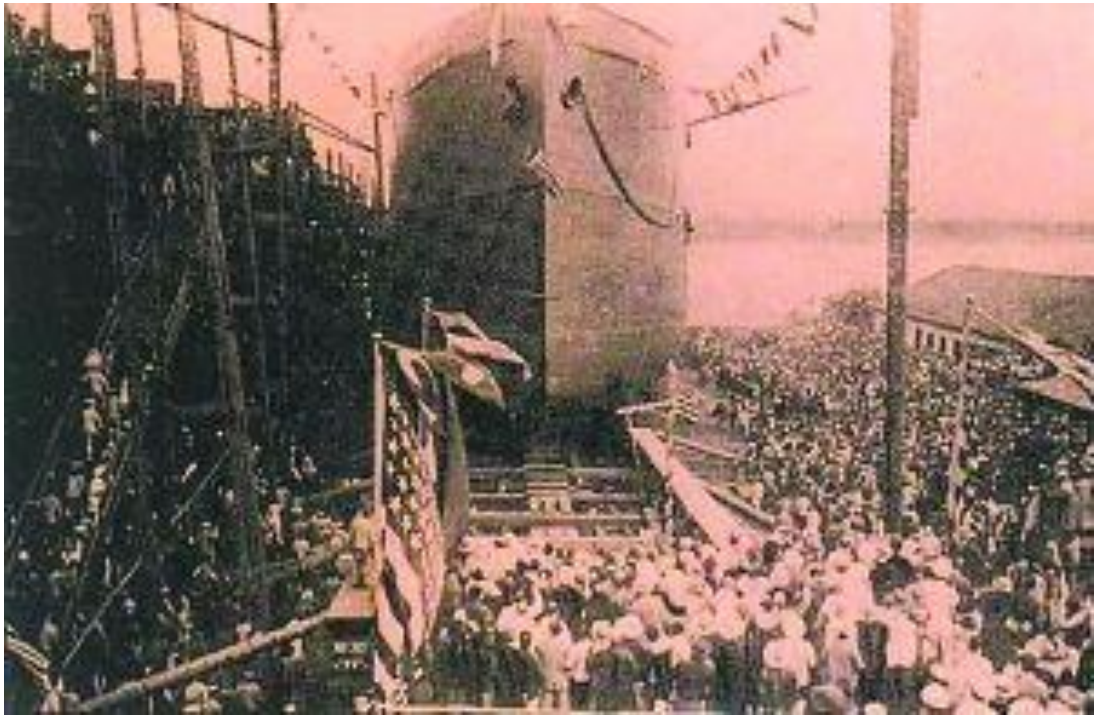
设想的益处：

工人得到更高的工资
老板有更多的利润

大公報

第二十分册

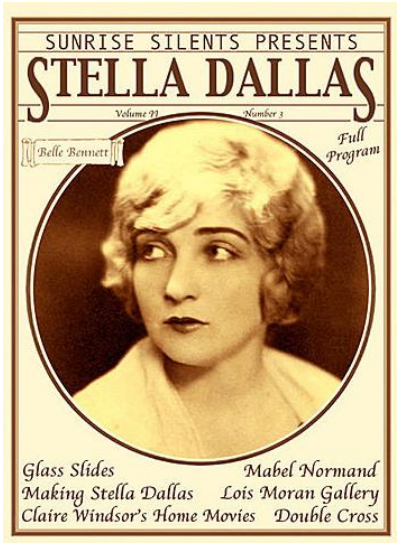
（一九二〇年九——十月）

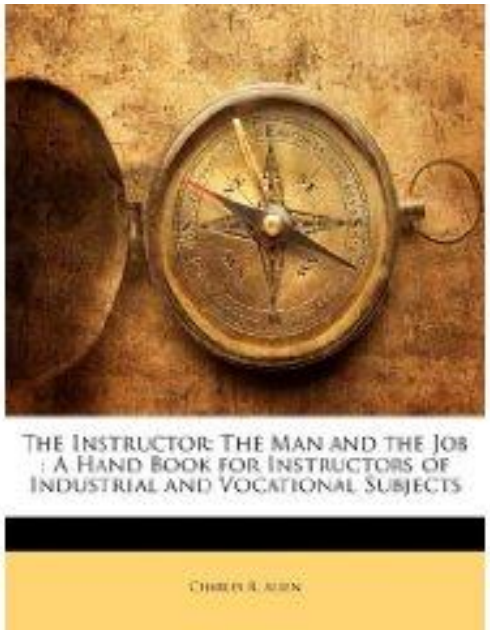


1920年中国万吨轮出口美国（4艘）

1960年新中国第一艘万吨轮

Photo # NH 59672 German battleship Bismarck, stern view





Charles R. Allen

1917年

New Bedford
Massachusetts

相信：

培训非常重要

On-the job training是最好的

培训四步法：准备、演示、应用、检查

方法实践：

1920s战舰需求爆棚，Allen主持造舰培训计划

1. Supervisors know how to do the job
2. Supervisors need training in how to train

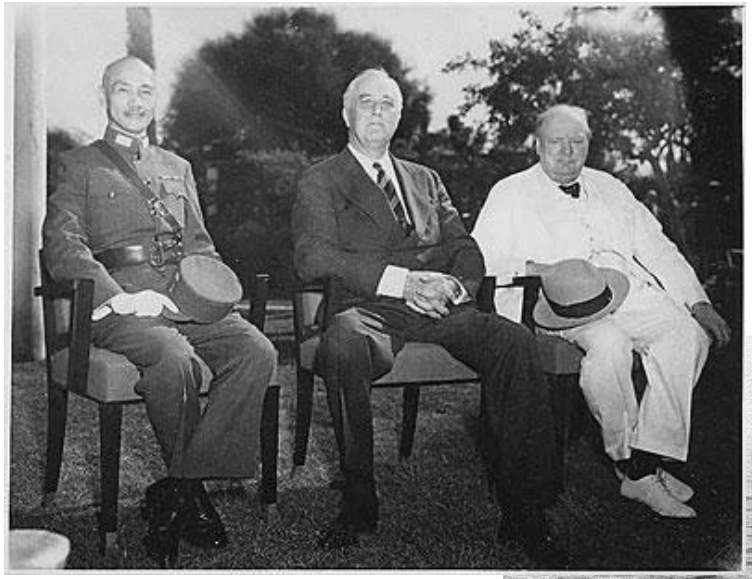
成果：

2年内培训了88,000工人

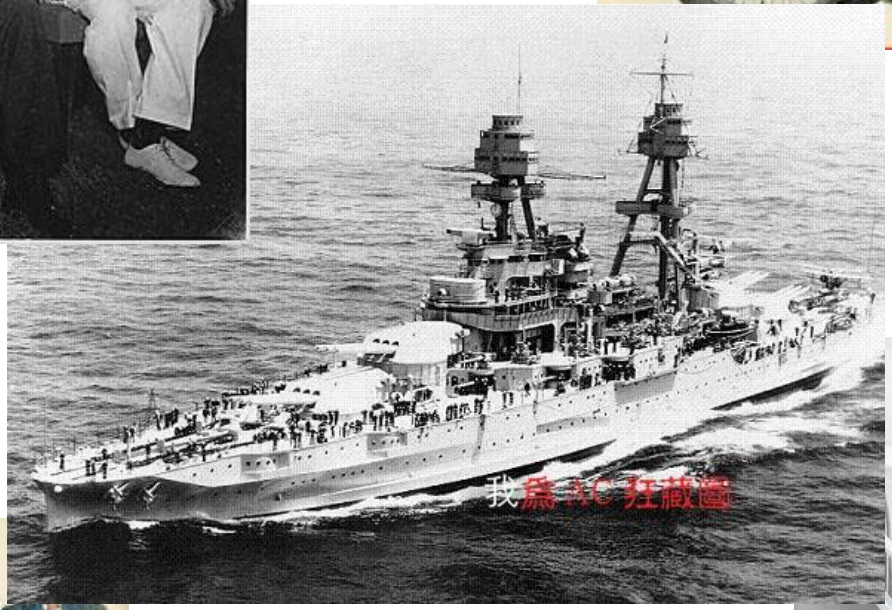
造舰计划很成功

如果工人没学会，那是老师没教好！


F L E C K B E N A F F L E C K B E N A
http://hollywall.yeah.net
PEARL HARBOR

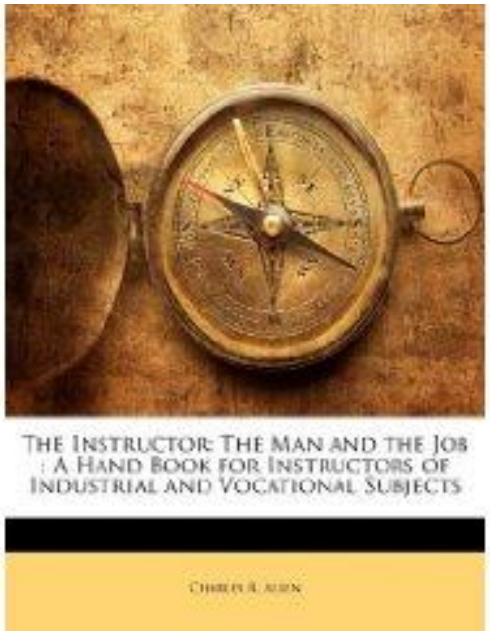



B.S.A. 350 c.c. S.V. Model C12
£46. 5s.
Speedometer Extra.
All machines fitted with speedometer unless otherwise ordered.


我爲RC狂藏圖


BEA
BEA
BRITISH AIRWAYS


U.S. M1 Garand Rifle -Circa 1941
Cal .30-06
The "Gas Cylinder" also served as a bayonet mount
Unauthorized Front Sight adjustment was prevented by a round seal
John C. Garand borrowed from several previous arms designs, most notably Mannlicher's tipping bolt, and gas operated rod with an internal spring. The main success Garand achieved was shortening the action, and therefore the rifle, making it practical for modern infantry use.
The Operating Rod is retracted, opening the Bolt
Note the early "Flush Nut" Rear Sight adjuster
Top view showing Receiver, Rear Sight, Bolt, and Operating Rod handle. Most parts are Parkerized



Charles R. Allen

1917年

New Bedford
Massachusetts

二战期间IBM临危受命为美军生产半自动步枪M1

采用Allen的方法论，并发展之

1. **工作指导** – 如何培训员工
2. **工作方法** – 如何改进工作方法
3. **工作关系** – 尊重员工

HOW TO INSTRUCT

Practical methods to guide you in instructing a new man on a job, or a present worker on a new job or a new skill.

FIRST, here's what **you must** do to **get ready** to teach a job:

1. Decide what the learner must be taught in order to do the job efficiently, safely, economically and intelligently. – Analysis
2. Have the right tools, equipment, supplies and material ready.
3. Have the work place properly arranged, just as the worker will be expected to keep it.

THEN, you should **instruct** the learner by the following **four basic steps:**

Step I—Preparation (of the learner)

1. Put the learner *at ease.*
2. Find out what he already knows about the job.
3. Get him interested and desirous of learning the job.

Step II—Presentation (of the operations and knowledge)

1. *Tell, Show, Illustrate* and *Question* in order to put over the new knowledge and operations.
2. Instruct slowly, clearly, completely and patiently, one point at a time.
3. Check, question and repeat.
4. Make sure the learner really learns.

Step III—Performance Try-out

1. Test learner by having him perform the job.
2. Ask questions beginning with *why, how, who, when* or *where.*
3. Observe performance, correct errors, and repeat instructions if necessary.
4. Continue until you *know he knows.*

Step IV—Follow-Up

1. Put him "on his own."
2. Check frequently to be sure he follows instructions.
3. Taper off extra supervision and close follow-up until he is qualified to work with normal supervision.

REMEMBER—If the learner hasn't learned, the teacher hasn't taught.

OFFICE OF PRODUCTION MANAGEMENT
Job Instructor Training Program
~~District of New Jersey~~

HOW TO IMPROVE

JOB METHODS

A practical plan to help you produce GREATER QUANTITIES of QUALITY PRODUCTS in LESS TIME, by making the **best use** of the **Manpower, Machines and Materials, now available.**

STEP I—BREAK DOWN the job.

1. List **all** details of the job **exactly** as done by the **Present Method.**
2. Be sure details include all:—
   - Material Handling.
   - Machine Work.
   - Hand Work.

STEP II—QUESTION every detail.

1. Use these types of questions:
   WHY is it necessary?
   WHAT is its purpose?
   WHERE should it be done?
   WHEN should it be done?
   WHO is best qualified to do it?
   HOW is the 'best way' to do it?
2. Also question the:
   Materials, Machines, Equipment, Tools, Product Design, Layout, Work-place, Safety, Housekeeping.

16—31488-1

STEP III—DEVELOP the new method.

1. ELIMINATE **unnecessary** details.
2. COMBINE details when practical.
3. REARRANGE for better sequence.
4. SIMPLIFY all **necessary** details:—
   - Make the work **easier** and **safer.**
   - **Pre-position** materials, tools and equipment at the best places in the **proper work area.**
   - Use **gravity-feed** hoppers and **drop-delivery** chutes.
   - Let **both hands** do **useful** work.
   - Use **jigs** and **fixtures** instead of hands, for holding work.
5. **Work out** your idea **with** others.
6. Write up your proposed new method.

STEP IV—APPLY the new method.

1. **Sell** your proposal to the **boss.**
2. **Sell** the new method to the **operators.**
3. Get final approval of all concerned on **Safety, Quality, Quantity, Cost.**
4. Put the new method to work. Use it until a **better** way is developed.
5. Give **credit** where credit is due.

Job Methods Training Program
TRAINING WITHIN INDUSTRY
War Manpower Commission

GPO 16—31488-1

A Supervisor Gets Results Through People

FOUNDATIONS FOR GOOD RELATIONS

1. Let Each Employee Know How He Is Getting Along

Figure out and tell him what you expect.
Point out ways to improve.

2. Give Credit When Due

Recognize extra or unusual performance.
Tell him while it's fresh.

3. Tell An Employee in Advance About Changes That Will Affect Him

Tell him WHY if possible.
Get him to accept the change.

4. Make Best Use of Each Person's Ability

Look for ability not now being used.
Never stand in an employee's way.

People Must Be Treated As Individuals

JOB RELATIONS TRAINING

U. S. Civil Service Commission

JR-2
April 1945 16—44202-1 GPO

HOW TO HANDLE A PROBLEM

DETERMINE OBJECTIVES

Step 1—Get the Facts

Review the record.
What policies, rules, regulations apply?
Talk with individuals concerned and get opinions and feelings.
Be sure you have the whole story.

Step 2—Weigh and Decide

Fit the facts together and consider their bearing on each other.
What possible actions are there?
Check each action against objectives weighing effect on individual, group, and production.
Select the best actions.
Don't jump to conclusions.

Step 3—Take Action

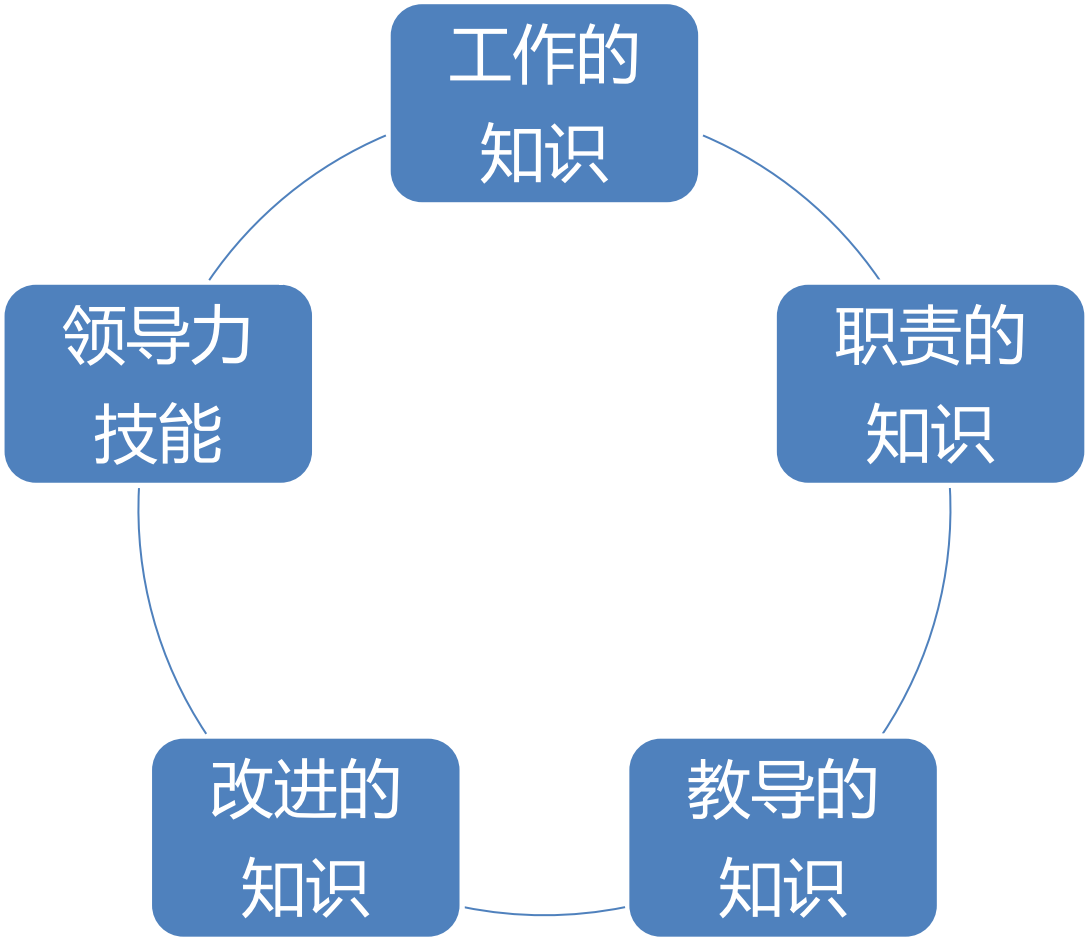
Should I handle this myself?
Who can help in handling?
Should I refer this to my supervisor?
Consider proper time and place.
Explain and get acceptance.
Don't pass the buck.

Step 4—Check Results

How soon and how often will I check?
Watch for changes in output, attitudes, and relationships.
Did my action help production?

WERE OBJECTIVES ACCOMPLISHED?

TWI的优秀主管模型




日本投降矣！

答覆四國接受規定條欵

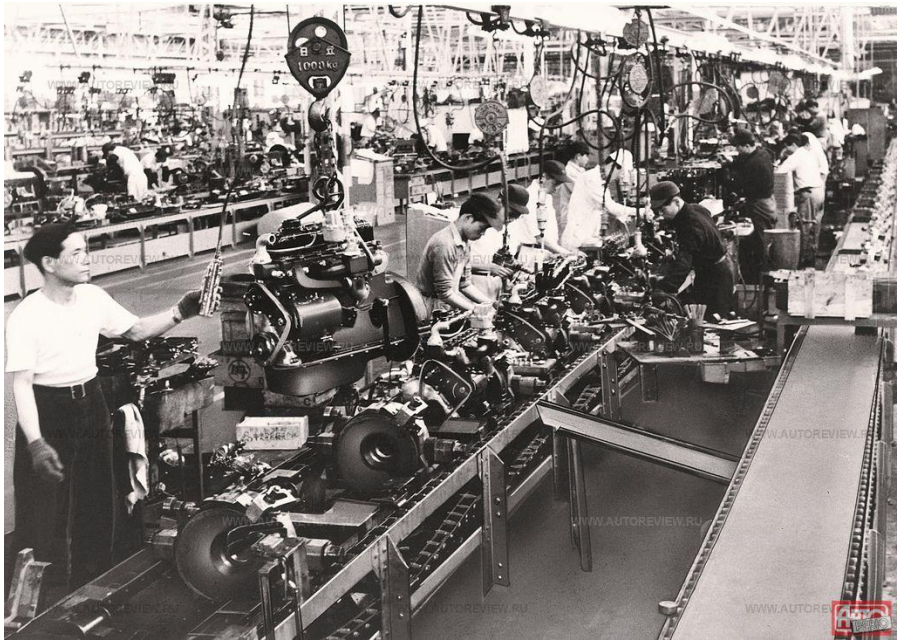
今晨七時四國首都同時正式宣布

日本答覆係昨晚提出

社評

注意善後救濟工作

1945年



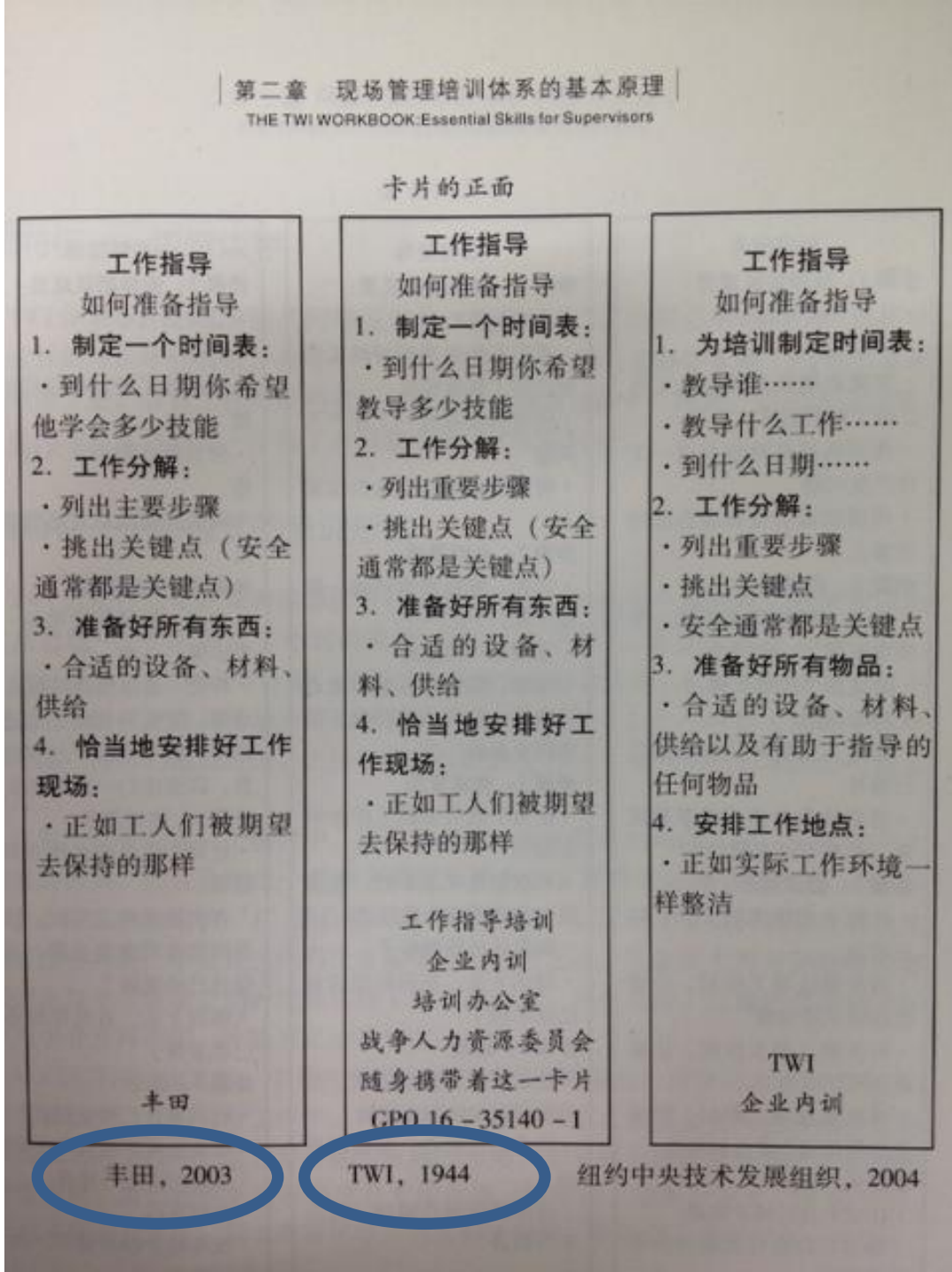
1950年

TWI现场管理培训 (Training Within Industry)

在美国战时取得巨大的成功

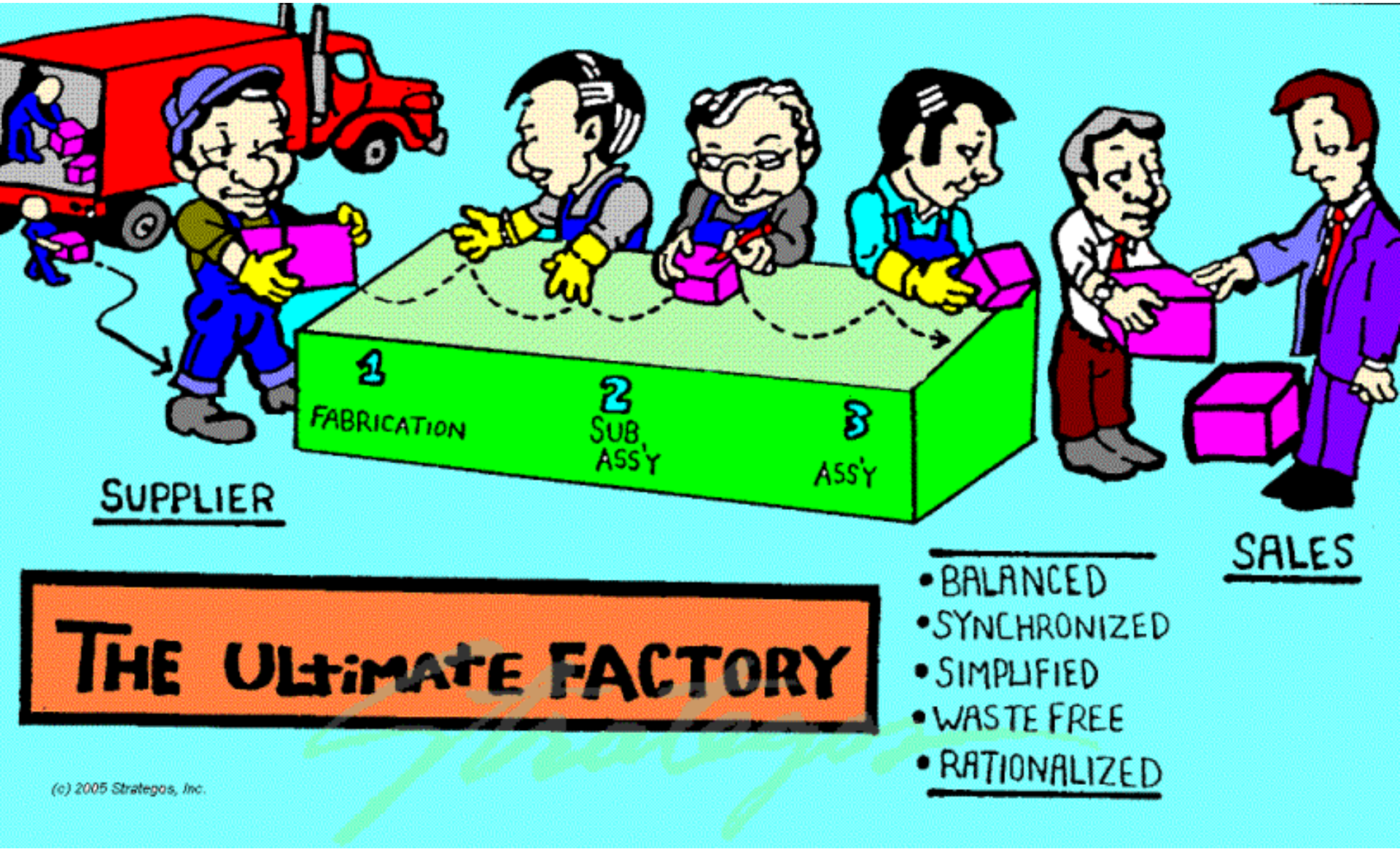
但是战后并没有持续使用

反而被日本学到



JIT
消除浪费

1950 Toyota Production System



1950 Toyota Production System

Stop and Fix

防止错误

1950 Toyota Production System

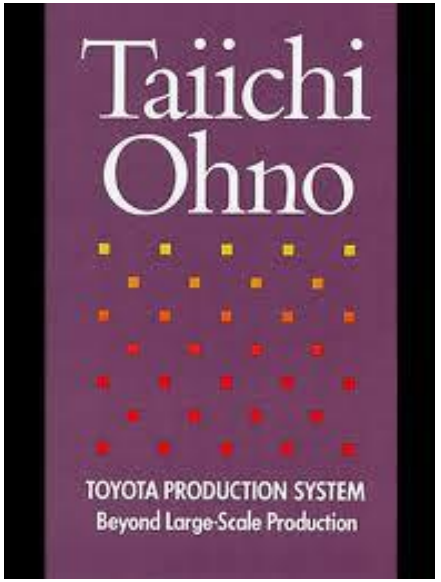
改 = KAI = CHANGE

善 = ZEN = GOOD
(FOR THE BETTER)

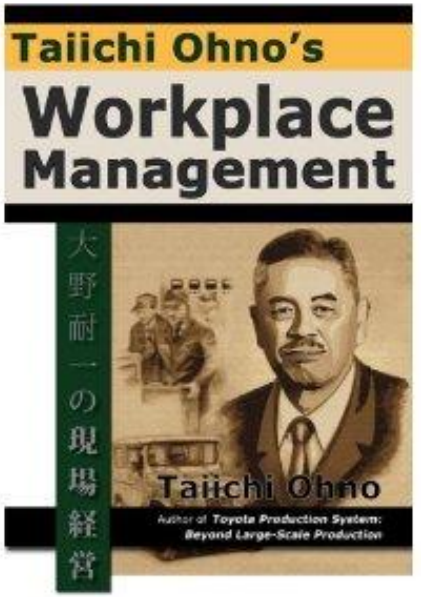
改善 = KAIZEN

= CONTINUAL
IMPROVEMENT

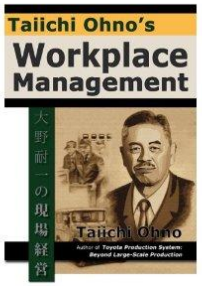
1950 Toyota Production System



大野耐一
丰田生产系统之父
1912-1990
出生在大连



关于标准化。。。

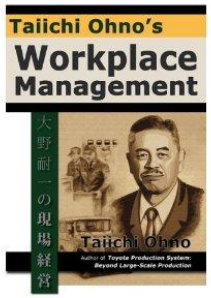


大野耐一如何理解标准化？

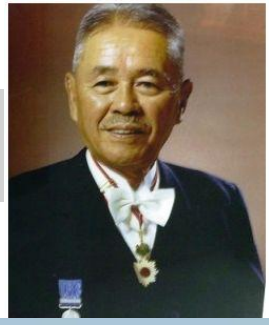
There is something called standard work, but standards should be changed constantly. Instead, if you think of the standard as the best you can do, it's all over. The standard work is only a baseline for doing further kaizen. It is kai-aku [change for the worse] if things get worse than now, and it is kaizen [change for the better] if things get better than now. Standards are set arbitrarily by humans, so how can they not change?

You should not create these away from the job. See what is happening on the gemba and write it down.

From ***Workplace Management,*** by Taiichi Ohno, originally published in 1982, from translation by Jon Miller, Gemba Press, 2007.

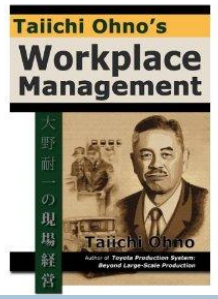


大野耐一看标准的用途？

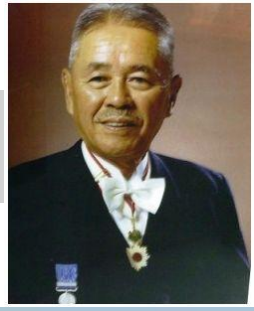


When creating Standard Work, it will be difficult to establish a standard if you are trying to achieve 'the best way.' This is a big mistake. Document exactly what you are doing now. If you make it better than it is now, it is kaizen. If not, and you establish the best possible way, the motivation for kaizen will be gone.

That is why one way of motivating people to do kaizen is to create a poor standard. But don't make it too bad. Without some standard, you can't say 'We made it better' because there is nothing to compare it to, so you must create a standard for comparison. Take that standard, and if the work is not easy to perform, give many suggestions and do kaizen.

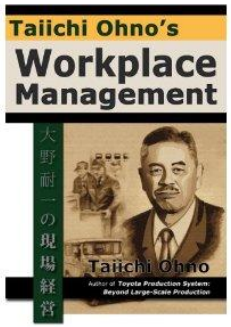


大野耐一看：谁来建立标准？

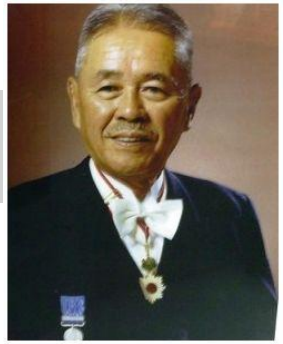


We need to use the words 'you made' as in 'follow the decisions you made.' When we say 'they were made' people feel like it was forced upon them. When a decision is made, we need to ask who made the decision. Since you also have the authority to decide, if you decide, you must at least follow your decision, and then this will not be forced upon you at all.

But in the beginning, you must perform the Standard Work, and as you do, you should find things you don't like, and you will think of one kaizen idea after another. Then you should implement these ideas right away, and make this the new standard.



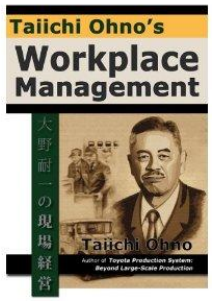
大野耐一看：标准的改变？



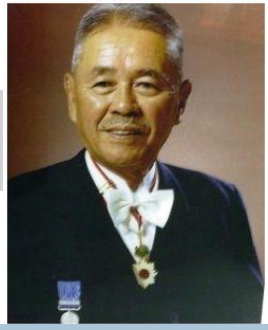
Years ago, I made them hang the standard work documents on the shop floor. After a year I said to a team leader, 'The color of the paper has changed, which means you have been doing it the same way, so you have been a salary thief for the last year.' I said 'What do you come to work to do each day? If you are observing every day you ought to be finding things you don't like, and rewriting the standard immediately. Even if the document hanging there is from last month, this is wrong.'

At Toyota in the beginning we had the team leaders write down the dates on the standard work sheets when they hung them. This gave me a good reason to scold the team leaders, saying 'Have you been goofing off all month?'

If it takes one or two months to create these documents, this is nonsense.



美国人看：Toyota Production System



"Only after American carmakers had exhausted every other explanation for Toyota's success – an undervalued yen, a docile workforce, Japanese culture, superior automation – were they finally able to admit that Toyota's real advantage was its ability to harness the intellect of 'ordinary' employees."

"Management Innovation" by Gary Hamel, *Harvard Business Review*, February, 2006

大家一起总结一下

Q & A

项目管理八卦（中、下）- 预告

质量控制统计学奠基人是谁？

被日本企业称为“日本质量管理之父”的是谁？

美国阿波罗计划对项目管理的贡献

80年代后项目管理的方向？

精益是神马意思？

你知道这些项目管理工具吗？Gantt图、PERT图、关键路径法、RUP…

软件项目管理和传统项目管理的共性和区别？

互联网行业项目管理的特点？

敏捷、精益和丰田生产系统有关系吗？

Scrum到底是什么意思？敏捷就是scrum吗？ 敏捷已死？