

the 3rd International Symposium "The Formation of  
Ethics Crossroads and the Construction of Science  
and Engineering Ethics: Research Outcomes"

# Business Ethics Program Model

November 20th, 2007

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Applied Ethics Center for Engineering and Science  
Kanazawa Institute of Technology

# corporate scandal in JAPAN ( 1 )

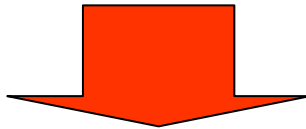
- 1991 stock trading illegality (compensation for damage )
- 1992 paying off corporate extortionist (Ito-Yokado Co.)
- 1993 paying off corporate extortionist (Takashimaya Co.)  
paying off corporate extortionist (Kirin Brewery Co.)  
corporate corruption (major general contractors)
- 1995 Illegal trade of US Treasury (Daiwa bank)
- 1996 paying off corporate extortionist (Ito-Yokado Co.)  
corporate corruption (major general contractors)  
paying off corporate extortionist (Takashimaya Co.)  
illicit trade in copper (Sumitomo Co.)
- 1997 paying off corporate extortionist (4 leading securities companies, Dai-ichi Kangyo Bank, ,AJINOMOTO, Mitsubishi Estate, Mitsubishi Electric, etc.)
- 1998 bill-padding scandal (NEC)

# corporate scandal in JAPAN (2)

- 1999            criticality-caused nuclear accident (JCO)
- 2000            food-poisoning ( Snow Brand Milk (Yukijirushi)  
                  recall coverup (Mitsubishi Motors)
- 2001            violation of the Securities and Exchange Law (Kokusai  
                  Securities)  
                  camouflage of origin of frozen octopus and tax evasion (Maruha)
- 2002            beef-mislabeling (Snow Brand Food, Nippon Ham, Nippon  
                  Food)  
                  System trouble (Mizuho bank)  
                  contain a banned additive (Duskin, Kowakouryokagaku)  
                  payoff scandal of ODA (Mitsui)  
                  serve the expired food etc. (USJ)  
                  concealment of nuclear plant faults (TEPCO, etc.)  
                  money skimming (Toyota)  
                  paying off corporate extortionist (Nippon Shinpan)  
                  insider deal (Daiwa Securities)

# The demand to a company from society

It relates to the technology which involved in community at large. Frequent occurrence of an accident or a scandal.



The demand which asks for "safety" and "relief" is becoming stronger to the company which returns a technical result to society.

# Engineering educator



workplace

engineering society

college

# JABEE

; Japan Accreditation Board for Engineering Education

Established on November 19, 1999, the Japan Accreditation Board for Engineering Education (JABEE) is a nongovernmental organization that examines and accredits programs in engineering education in close cooperation with engineering associations and societies.

# Criteria for Accrediting Japanese Engineering Education Programs Applicable in the year 2004-2007

## Criterion 1: Establishment and Disclosure of Learning and Educational Objectives

- For the purpose of fostering self-reliant engineers the program must establish specific learning and educational objectives that concretize the contents of knowledge and abilities described in items (a) – (h) below. The learning and educational objectives must be disclosed widely on and off campus and must be known to the faculty members and students involved in the program.

# Criterion 1 - (1)

- a. An ability and intellectual foundation to consider issues from a global and multilateral viewpoint.
- b. Understanding of the effects and impact of engineering on society and nature, and of engineers' social responsibility (engineering ethics).
- c. Knowledge of mathematics, natural sciences and information technology and an ability to apply such knowledge.
- d. Specialized engineering knowledge in each applicable field, and an ability to apply such knowledge to provide solutions to actual problems.
- e. Design abilities to organize comprehensive solutions to societal needs by exploiting various disciplines of science, engineering and information.
- f. Japanese language communication skills including methodical writing, verbal presentation and debate abilities as well as basic skills for international communication.
- g. An ability to carry on learning on an independent and sustainable basis.
- h. An ability to implement and organize works systematically under given constraints.



# Engineering educator



workplace

college

engineering society

# Japanese Engineering and Technology Society, Code of Conduct Established year

- 1938 **Japan Society of Civil Engineers** Beliefs and Principles of Practice for Civil Engineers
- 1996 **Information Processing Society of Japan** Code of Ethics of the Information Processing Society of Japan
- 1997 **The Institute of Electrical Engineers of Japan** Code of Ethics
- 1998 **The Institute of Electronics Information and Communication Engineers**  
IEICE Charter of Ethics
- 1999 **Japan Society of Civil Engineers** Code of Ethics for Civil Engineers  
**Architectural Institute of Japan** Code of Ethics (Fundamental Principle/Fundamental Canons of Behavior )  
**The Japan Society of Mechanical Engineers**
- 2000 **The Chemical Society of Japan**
- 2001 **Atomic Energy Society of Japan** Code of Ethics of the Atomic Energy Society of Japan  
**The Institute of Image Information and Television Engineers** Code of Ethics
- 2002 **The Society of Chemical Engineers, Japan**  
**The Japan Society of Applied Physics**  
**The Japanese Geotechnical Society**
- 2003 **Atomic Energy Society of Japan**
- 2005 **Atomic Energy Society of Japan** (Revised)

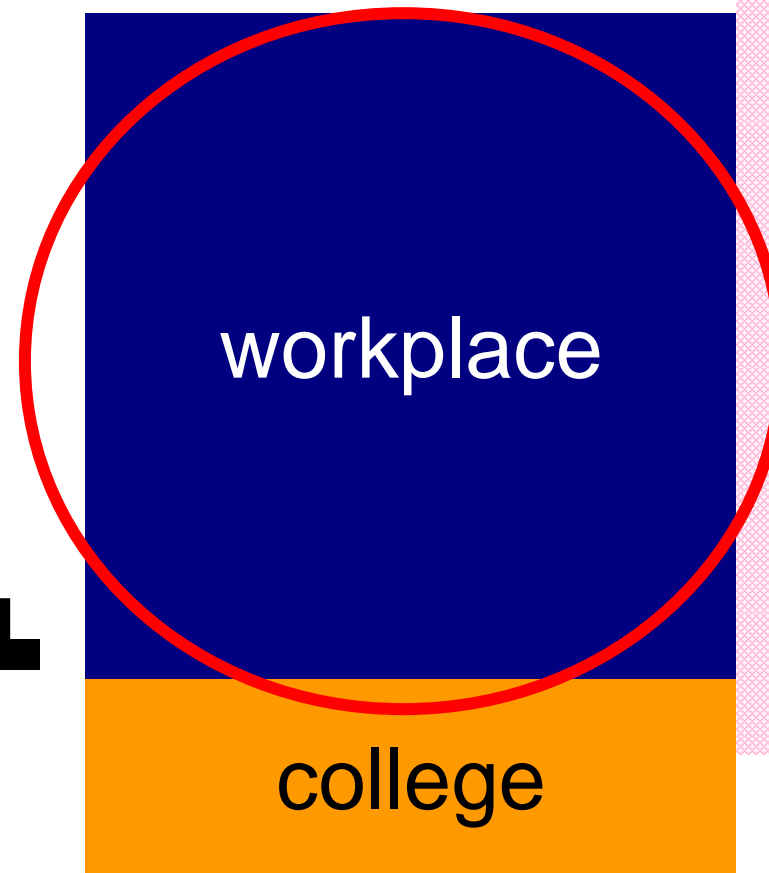
# Code of Ethics of the Atomic Energy Society of Japan

## **Fundamental Canons**

1. We shall restrict the use of atomic energy to peaceful purposes while endeavoring to solve the problems confronting humans.
2. We shall hold the safety of the public paramount in the performance of our professional duties and through our conduct strive to obtain the public trust.
3. We shall strive to improve our own professional competence and simultaneously to improve the professional competence of persons involved.
4. We shall make every effort to be fully aware of our own professional capabilities. If a job requires an extraordinary proficiency beyond our capability, we shall pursue a course that will not cause serious damage to society.
5. We shall strive to assure that all information we utilize is accurate and fulfill the obligation to disclose all information to the public in order to obtain the public trust.
6. We shall respect truth and make our own judgments with fairness, justice, and impartiality.
7. To the extent that contract clauses do not conflict with the provisions of all the laws as well as the norms in society, we shall seriously consider and faithfully fulfill the contracts related to our work.
8. We shall conduct our work related to atomic energy with pride, and make sincere efforts to increase the esteem of that work.

We would like to thank Dr. Scott Clark for his suggestions in the translation of this Code of Ethics of AESJ.

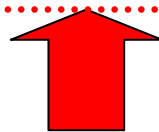
# Engineering educator



engineering society

# Business Ethics in JAPAN

- Japanese Business Federation
  - September 14, 1991 Establishment of actions of JBF → Revised in 1996, 2002, and 2004.
  - Questionnaire enforcement to top management people
  - A business ethics monthly (October)
  - The check of observation the Charter for Good Corporate Behavior at the time of new admission
- Each Company
  - Establishment of a code of ethics
  - Designated ethics official
- As a part of CSR program



The viewpoint of risk management

# The Formation of Ethics Crossroads and the Construction of Science and Engineering Ethics

- Global Code of Ethics
- Ethics Across the Curriculum
- Introduction of an E-learning system, “Agora”
- Assessment and Evaluation of Ethical Reasoning Skills
- Business Ethics Program Model
- Research Ethics Program Model

# Project Members

- OBA, Kyoko (research fellow)
- OKITA, Yuji (visiting professor  
    ／ coordinator of JABEE)
- HAYASE, Kenichi (part-time researcher  
    ／ research Scientist of CRIEPI)
- MOTOKI, Ayako (research assistant)
- OKABE, Yukinori (associate professor)

# The purpose of business ethics programming model construction of KIT

- Realization of the business ethics program including active conduct of business
  - In particular, the program is targeted to the company where technology is an important constituent factor of enterprise deployment.

" Ethics is the science of conduct " which accelerate an action based on the value to which a company attaches importance



# The systematic measure for business ethics

- Systems approach
  - In a company, a management system is necessary (financial affairs, quality, ethics, ...).
  - Process approach is effective in operating a system.
- Program
  - Typical process approach, PDCA (Plan, Do, Check, Act)
  - What clarified the means for operating a management system.
  - An ethics program is required also for an ethics management system.
- Offer of the business ethics program model for turning a PDCA cycle

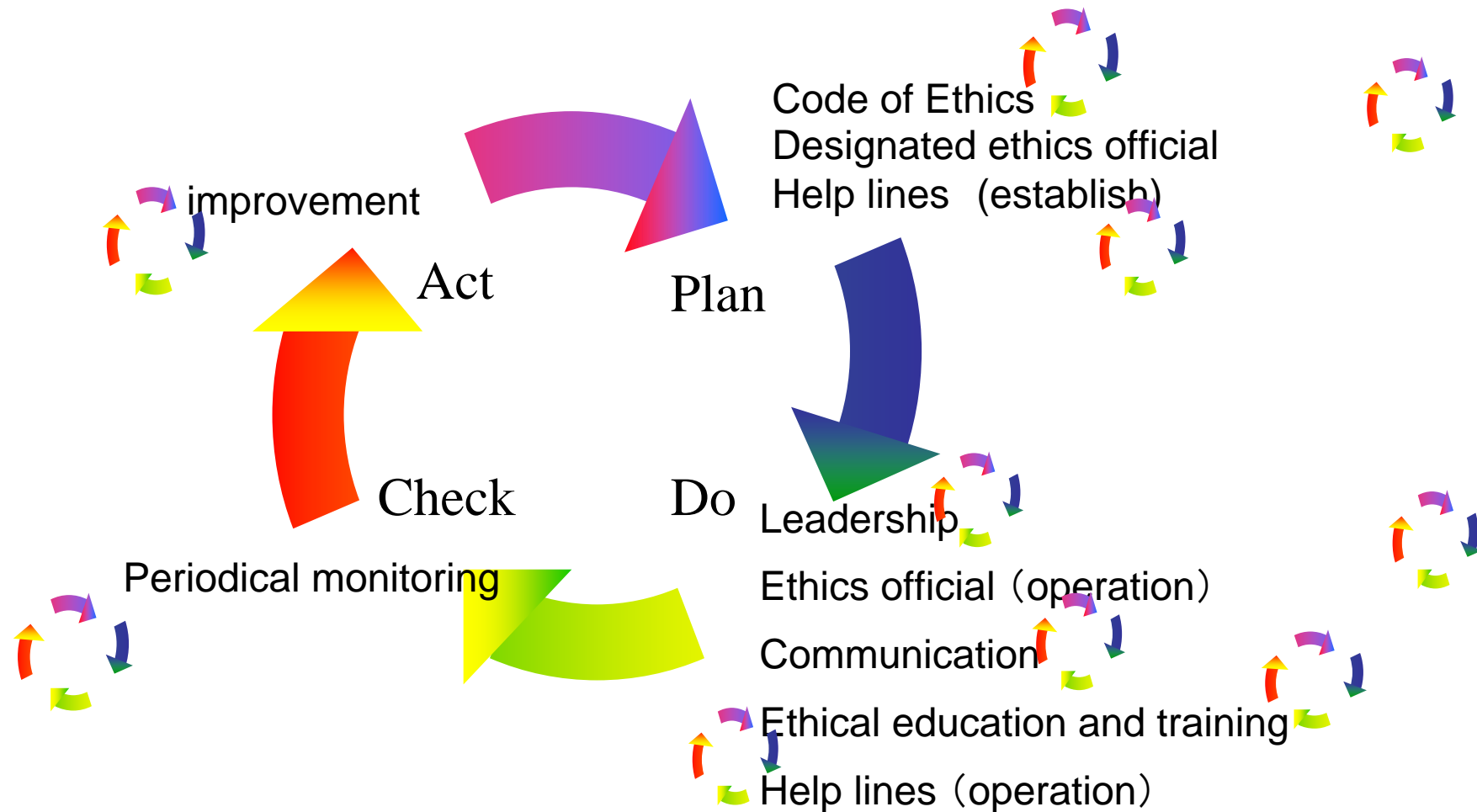
# Key Ethics Program Components

<p style="text-align: center;"><b>ERC</b></p> <p style="text-align: center;">The Ethics Resource Center</p>	<p style="text-align: center;"><b>EOA</b></p> <p style="text-align: center;">The Ethics Officer Association</p>	<p style="text-align: center;"><b>BERC</b></p> <p style="text-align: center;">Business Ethics Research Center</p>
Ethical leadership	Demonstrated commitment from executive and senior management	Code of Ethics
Vision statement	Designation of a high-level person responsible for ethics, compliance...	Leadership
Values statement	Codes of conduct and ethics and compliance policies and procedures	Designated ethics official
Code of Ethics	Training on policies, ...ethical decision making	Communication
Designated ethics official	Comprehensive communication on program	Ethical education and training
Ethics taskforce or committee	Help lines	Help lines
Ethics communication strategy	Risk assessment and self-assessment	Periodical monitoring
Ethics training	Monitoring and auditing	Business ethics and public information
Ethics help line	Investigations of alleged misconduct	
Response system investigations, rewards and sanctions	Preventive and corrective action	
Comprehensive system to monitor and track ethics data	Enforcement of standards, including disciplinary measures	
Periodical evaluation of ethics efforts and data	Regular reporting to and review by senior management and board of directors	
	Measuring performance and effectiveness	
	Benchmarking and sharing of best practices	
	Continual improvement	

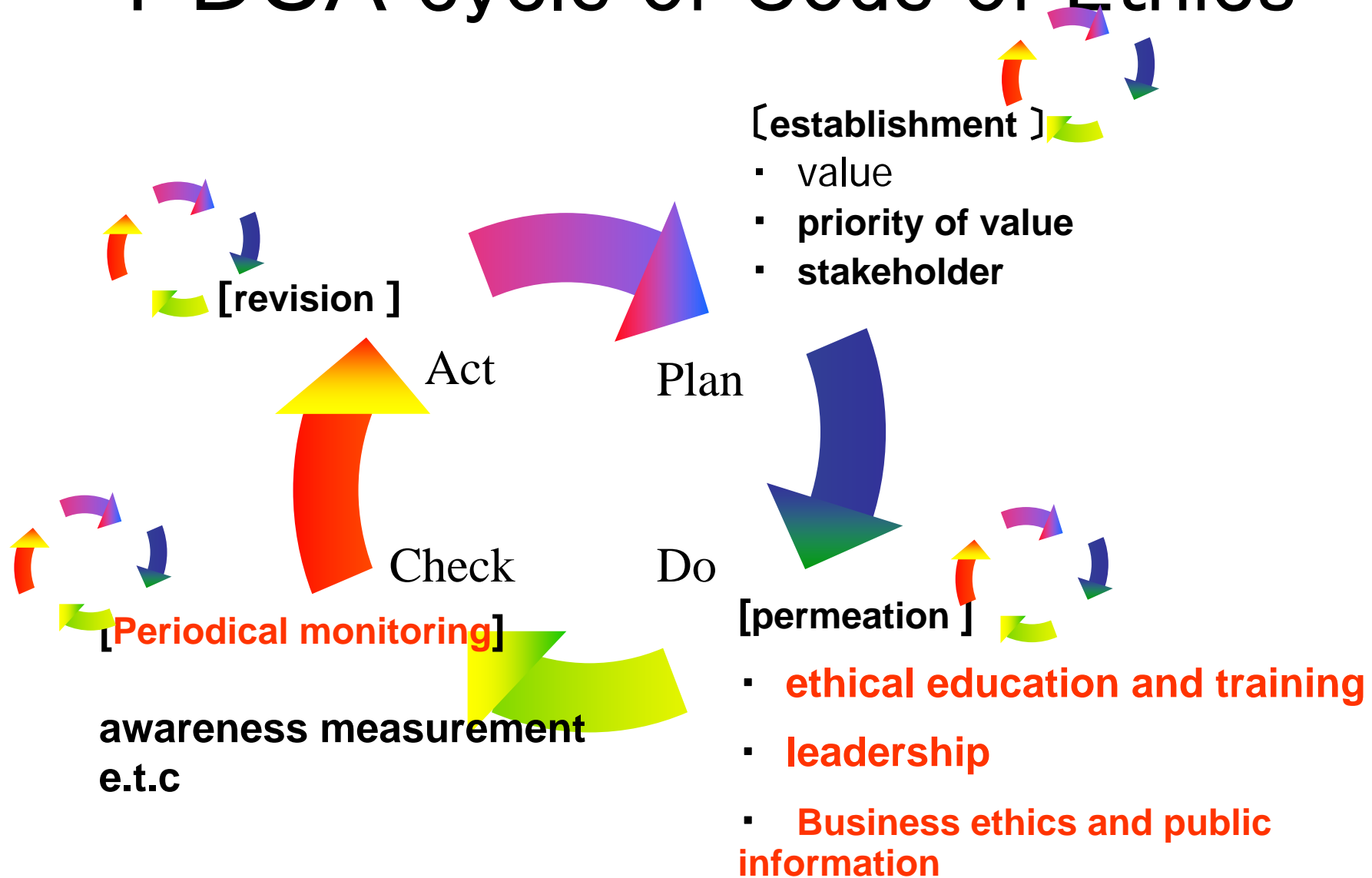
# Key Ethics Program Components (BERC)

1. Code of Ethics
2. Leadership
3. Designated ethics official
4. Communication
5. Ethical education and training
6. Help lines
7. Periodical monitoring
8. Business ethics and public information

# PDCA cycle of Business Ethics



# PDCA cycle of Code of Ethics



# Presentation of an attainment target: EAB

- EAB: Ethics Across the Business
  - Everyday practice of business ethics activity of all the offices, levels of a company.

# Presentation of an attainment target: EAB

- EAB: Ethics Across the Business
  - Everyday practice of business ethics activity of all the posts, classes of a company.
- Development of a questionnaire to perceive the actual condition for EAB realization
  - Employee questionnaire (objective: each employee)
    - To investigate whether each employee can practice ethics.
  - An organization system and measures check sheet (objective: one's post for business ethics of the whole company)
    - Is the important measure implemented for ethics promotion?
    - Is it a measure which can respond to the request from various stakeholders?
    - Can various measures in corporate activity take an ethical measure and compatibility (sense of values etc.)?
    - Ethics activity is involved in active business development (Can EAB be accomplished)?
- Program for business ethics is proposed from the arrangement of EAB realization viewpoint based on the result of literature and document survey, interview of advanced companies.

# procedural step of business ethics program model

- Step 1: selection of good practices from advanced companies
  - bibliographical survey
  - interview
- Step 2: grasp of actual condition
  - employee questionnaire
  - an organization system and a measure check sheet
- Step 3 : develop a business ethics program model
  - guidebook of questionnaire and check sheet
  - business ethics program model



# Step 1: selection of good practices from advanced companies

- bibliographical survey
  - Code of Ethics
  - Leadership
  - Designated ethics official
  - Communication
  - Ethical education and training
  - Helpline
- interview
  - Code of ethics (revision etc.)
  - Leadership
  - Designated ethics official
  - Communication
  - Ethical education and training
  - change in corporate culture
  - Periodical monitoring

# Step 2: grasp of actual condition

- It is important for a company which promotes a business ethics program to understand where a strong point and weak point of the PDCA cycle of company.
- It is effective to perceive actual condition from the following two points.
  - employee questionnaire : whether each employee (a member of an organization) can practice ethics.
  - an organization system and measures check sheet: whether the ethics promotion program is effective.

# society

Organization

Requests from stakeholder

consistency

laws and regulations

Consistency

Consistency

Consistency

Engineers

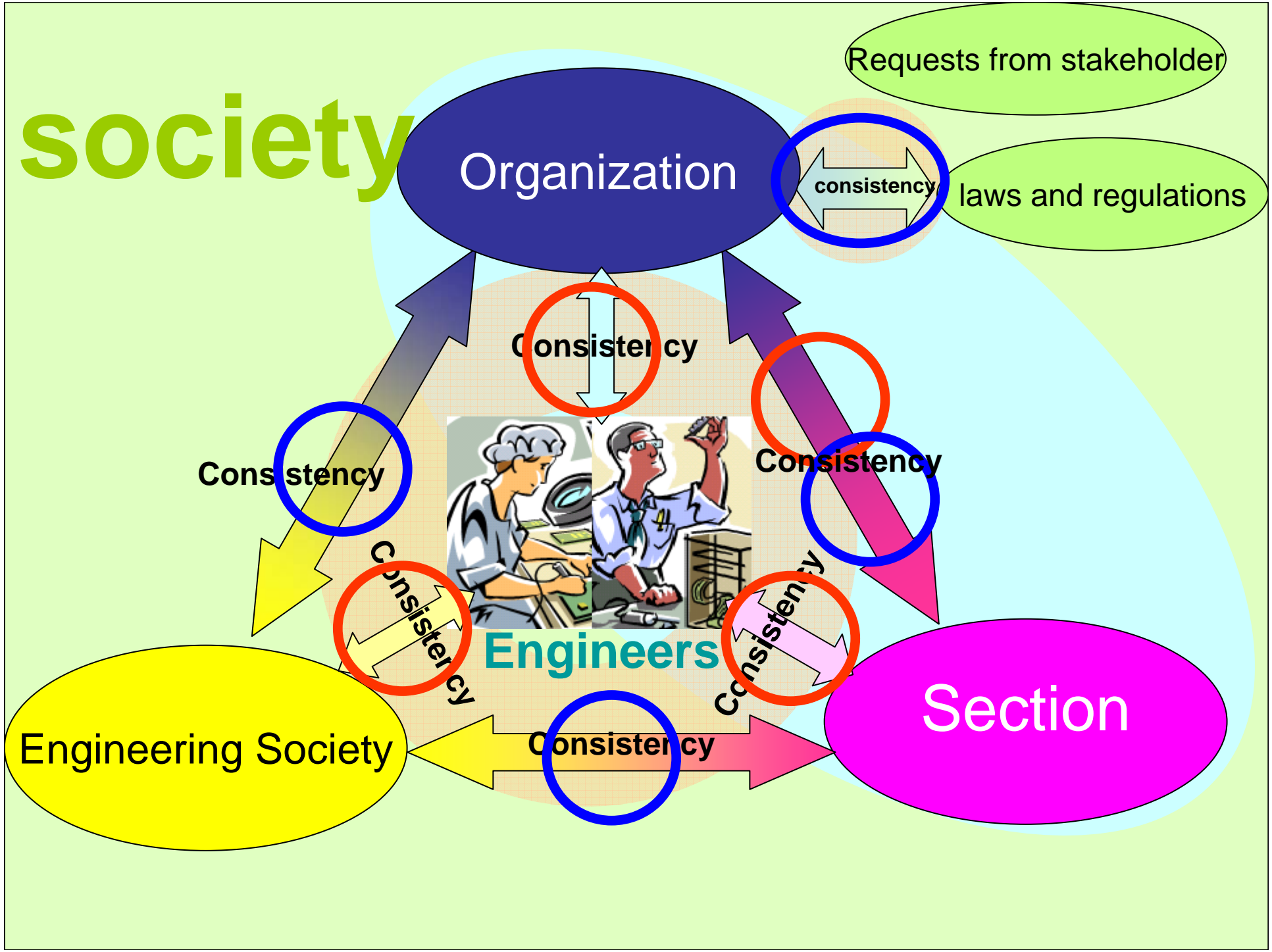
Consistency

Consistency

Engineering Society

Consistency

Section



society

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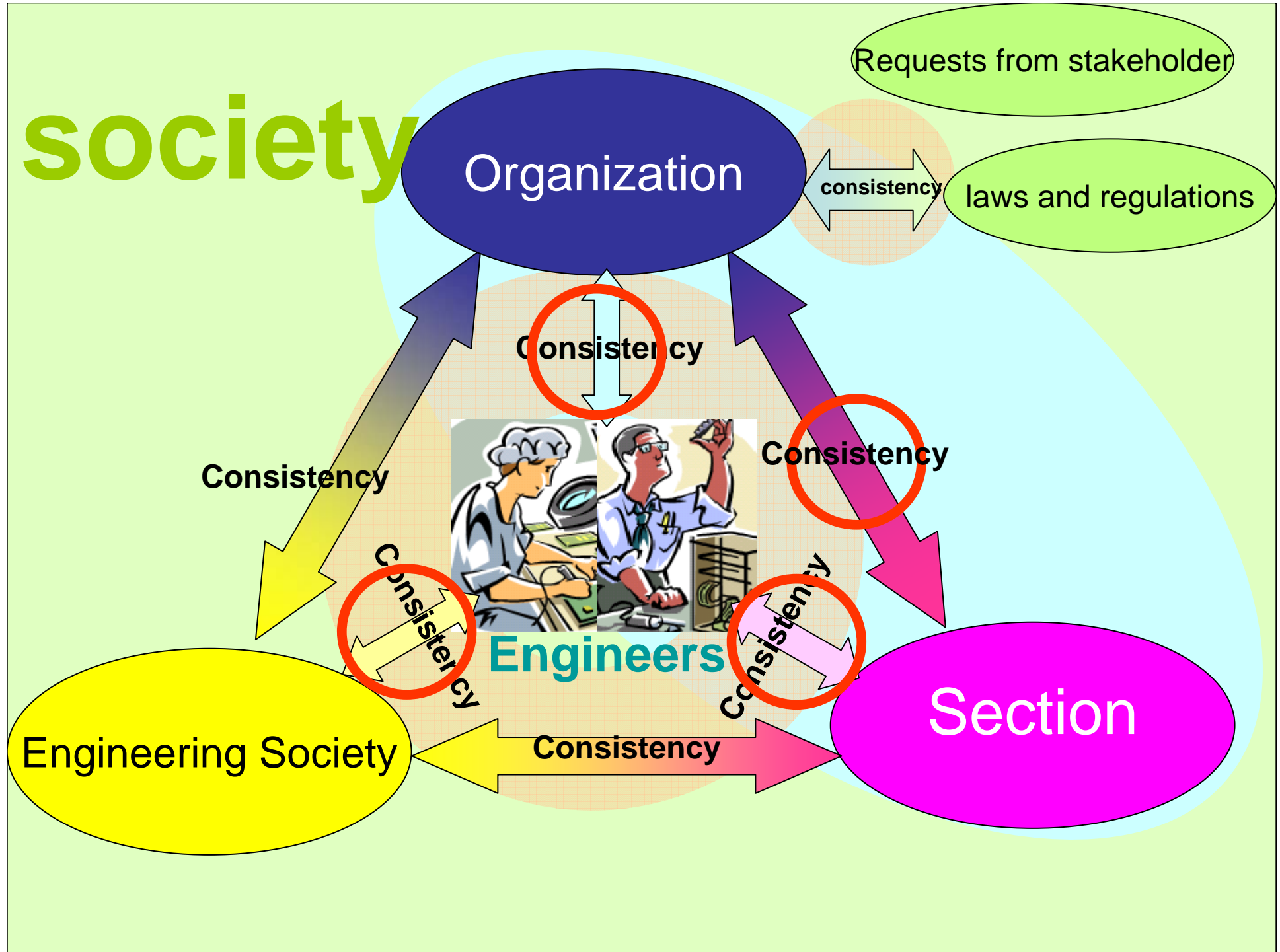
Consistency

Engineers

Consistency

Section

Engineering Society



# Research on actual-condition grasp: the Employee Questionnaire

- Development of the employee questionnaire
  - The questionnaire proposal was created based on the codes of ethics of academic societies and companies, the precedence research and the interview investigation to the company of advanced business ethics.
  - The researchers of corporate ethics, and the persons in charge of business ethics promotion section reviewed and improved the questionnaire proposal.
  - “The questionnaire about business ethics and engineering ethics” was completed.
- The questionnaire consists of 3 groups of questions.
  - A) Individual consciousness/action
  - B) System/measure of organization
  - C) Organizational climate
- Each question was constituted after developing each 3 groups of questions into the 5-6 subgroup.

# Making of the Questionnaire (1)

## Individual Consciousness/Action(A), Organizational climate (C)

### Individual consciousness/action (A)

- The factors were extracted which are common in the codes of ethics of the company of advanced business ethics which we interviewed, and in the code of ethics of 11 academic societies belonging to the Japan Federation of Engineering Society. Questions for each factor were constituted.
- When questions were made, the knowledge acquired by interview investigation was also reflected.
- Questions about consciousness/action were constituted as a pair of question.

### Organizational climate (C)

- Questions were constituted as the form of asking everybody's action in the workplace, in every question contents about individual consciousness/action.

# The example of questions of A and C

## A. Individual Consciousness/Action

A1. Consciousness/Action to law and contract, etc. observance

Q01a

...

Q04a I think that I must not skip the defined procedure in order to advance business efficiently.

Q04b I don't skip the defined procedure in order to advance business efficiently.

A2. Consciousness/Action to the safety/the health/the welfare of society

## B. System/measure of organization

B1. Recognition to the osmosis of ethics policies

B2. Recognition to the consistency between policies and activities

...

## C. Organizational climate

C1. Situation recognition to law and contract, etc. observance

Q67 Everybody in my workplace doesn't skip the defined procedure in order to advance business efficiently.

C2. Situation recognition to the safety/the health/the welfare of society

...

Questions about individual consciousness/action are asked by a pair.

The same content of question is asked with everybody's action in the workplace.

# Making of the Questionnaire (2)

## System/Measure of Organization (B)

### System/measure of organization (B)

- The factors pointed out by the precedence research etc. as the elements which should be contained in business ethics program, were extracted.
- The questions were constituted corresponding to each factor.
- When questions were made, the knowledge acquired by interview investigation was also reflected.



# The example of a question of B

B. System/measure of organization

B1. Recognition of the osmosis of ethics policies.

Q36 In my workplace, the judgment of occupational cases is made based on the values shown by the management philosophy, the code of ethics, the code of conduct, the CSR charter, etc.

B2. Recognition of the consistency between policies and activities.

...

# The Composition of the Employee Questionnaire

Contents		The number of questions	
Individual Consciousness/Action	A1	Consciousness/Action to law and contract, etc. observance	7(※)
	A2	Consciousness/Action to the safety/the health/the welfare of society	3
	A3	Consciousness/Action to objective/autonomous judgment	6
	A4	Consciousness/Action to communication	7
	A5	Consciousness/Action to special capability improvement/education/training	4
	A6	Pride/morale to work	2
System/Measure of Organization	B1	Recognition to the osmosis of ethics policies	4
	B2	Recognition to the consistency between policies and activities	6
	B3	Recognition to the commitment of the organizational top	6
	B4	Recognition to the systematic measure for ethics communication	5
	B5	Recognition to the promotion system of ethics activities	7
Organizational Climate	C1	Situation recognition to law and contract, etc. observance	7(※)
	C2	Situation recognition to the safety/the health/the welfare of society	3
	C3	Situation recognition to objective/autonomous judgment	6
	C4	Situation recognition to communication	7
	C5	Situation recognition to special capability improvement/education/training	4
Others		7	

(※) The number of questions which is constituted as a pair of A1 and C1 is five.

# The survey by the Employee Questionnaire Positioning of the WEB survey and the X company survey

- The WEB survey
  - Acquisition of the reference data of the employee questionnaire
- The survey to 3 sections of the X company
  - Trial survey of the employee questionnaire in a company

## The viewpoint of evaluation, the viewpoint of analysis of the feature

### The viewpoint of evaluation

- Comparison with the average value of WEB survey
- The gap between consciousness and action

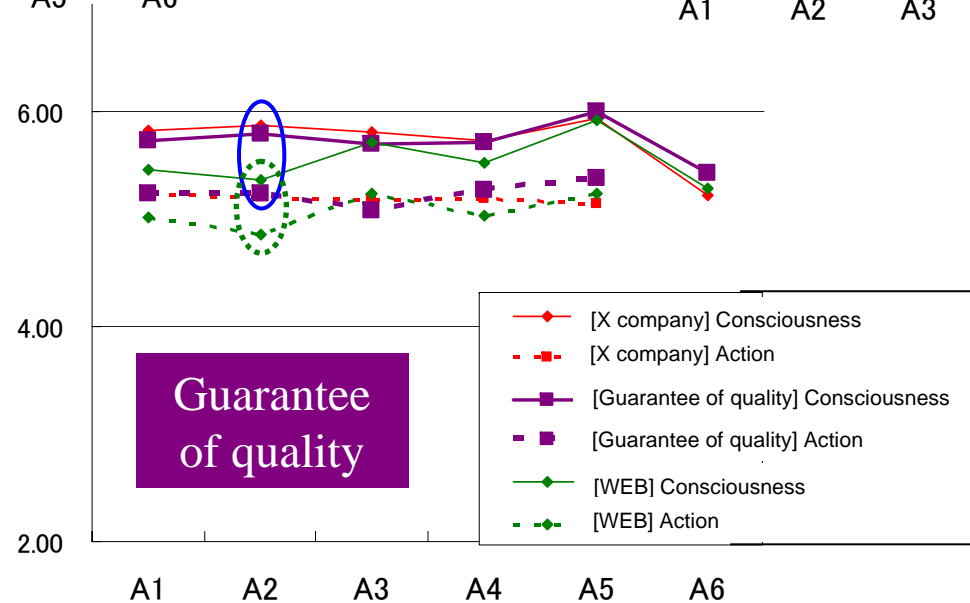
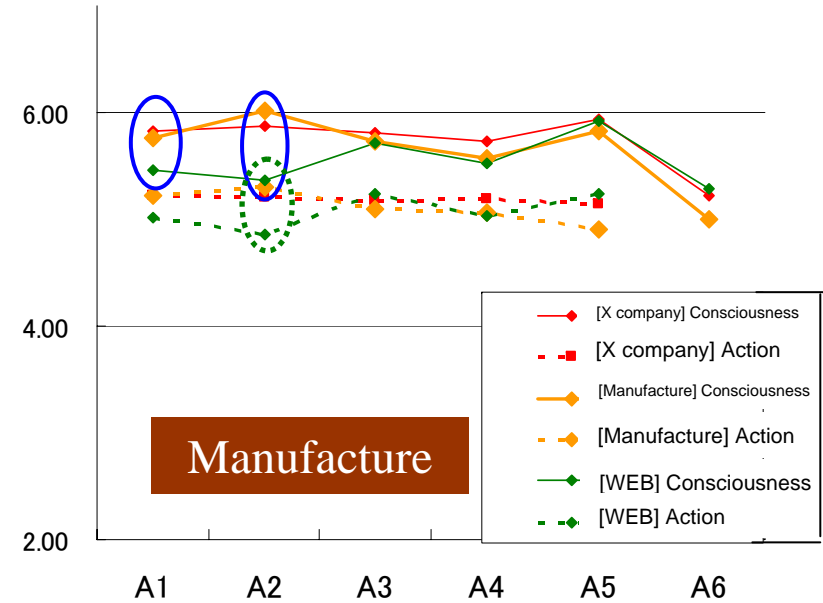
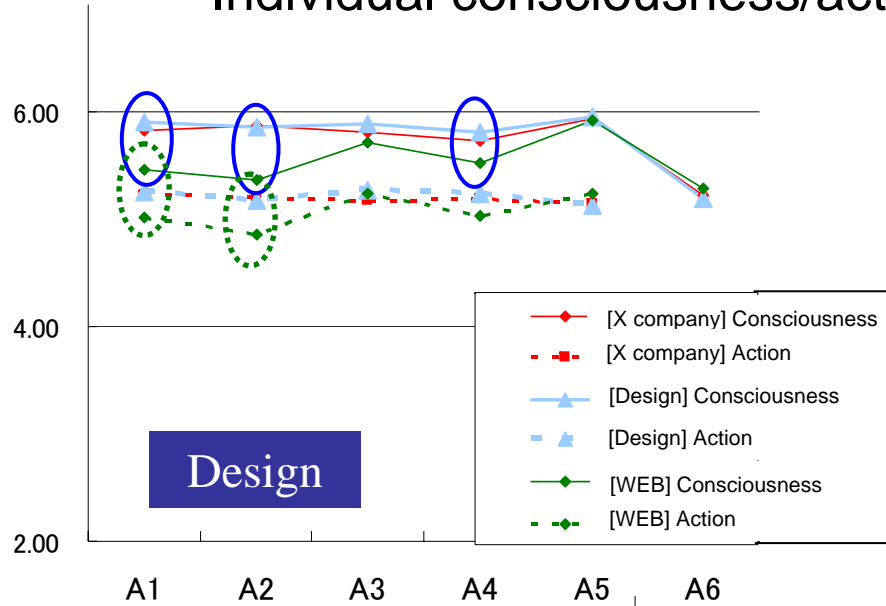
### The viewpoint of analysis of the feature

- Analysis of the standard deviation
- Analysis of the gap between individual action and organizational climate (recognition of everybody's action in the workplace)

# Comparison of average value with the manufacturing industry data of the WEB survey

Individual Consciousness/ Action	A1	Consciousness/Action to law and contract, etc. observance
	A2	Consciousness/Action to the safety/the health/the welfare of society
	A3	Consciousness/Action to objective/autonomous judgment
	A4	Consciousness/Action to communication
	A5	Consciousness/Action to special capability improvement/education/training
	A6	Pride/morale to work

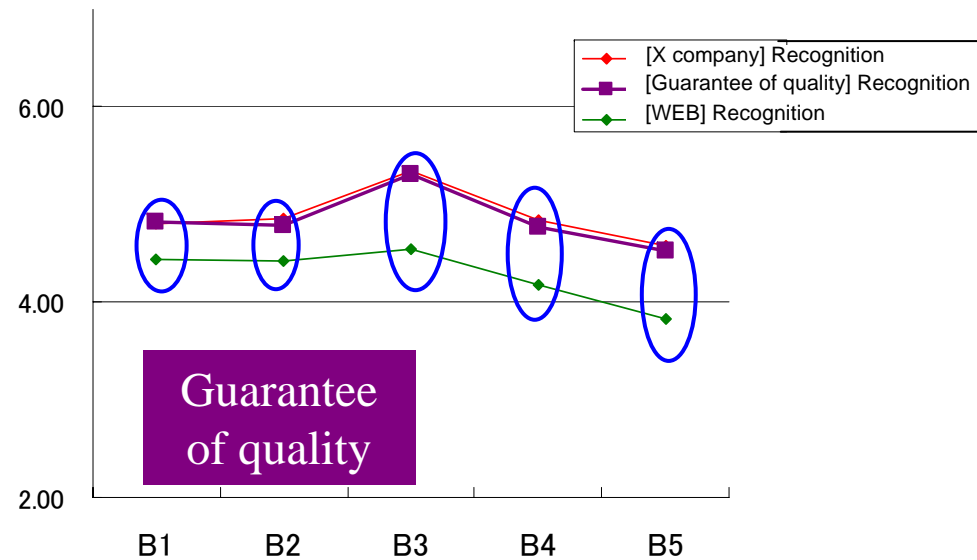
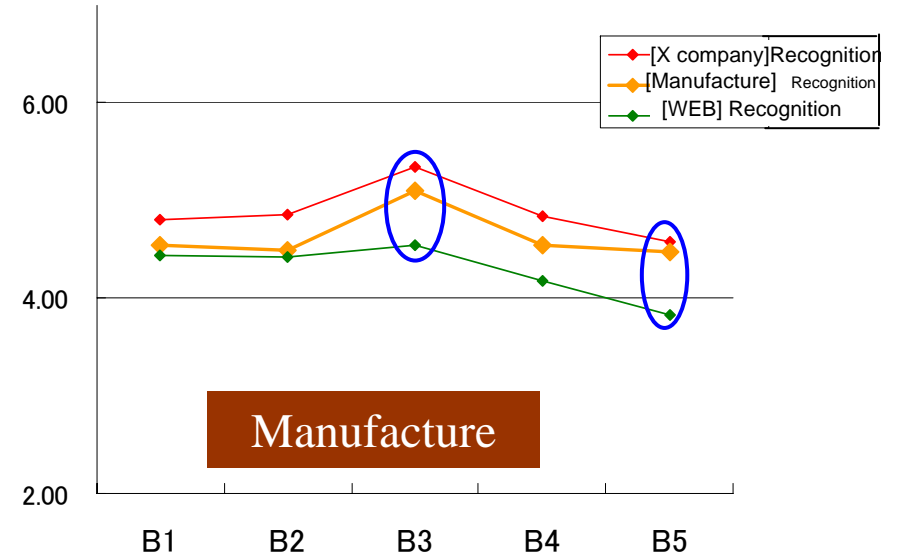
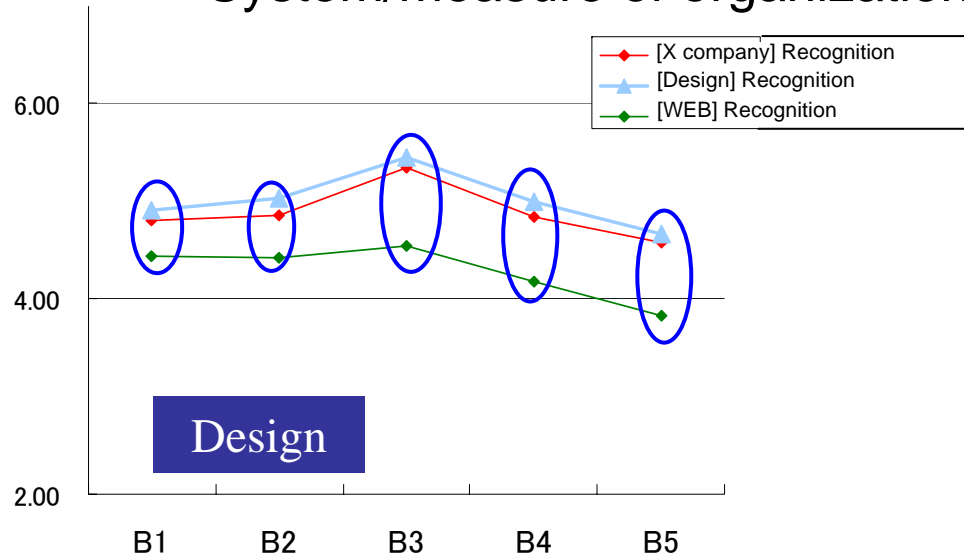
(Evaluation Example) 3 section of the X company  
Individual consciousness/action



# Comparison of average value with the manufacturing industry data of the WEB survey

System/Measure of Organization	B1	Recognition to the osmosis of ethics policies.
	B2	Recognition to the consistency between policies and activities.
	B3	Recognition to the commitment of the organizational top
	B4	Recognition to the systematic measure for ethics communication
	B5	Recognition to the promotion system of ethics activities

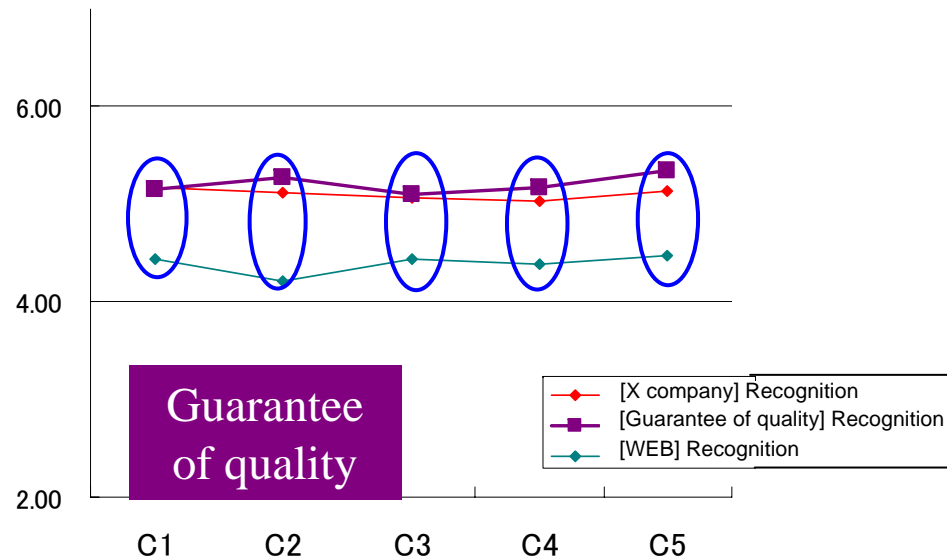
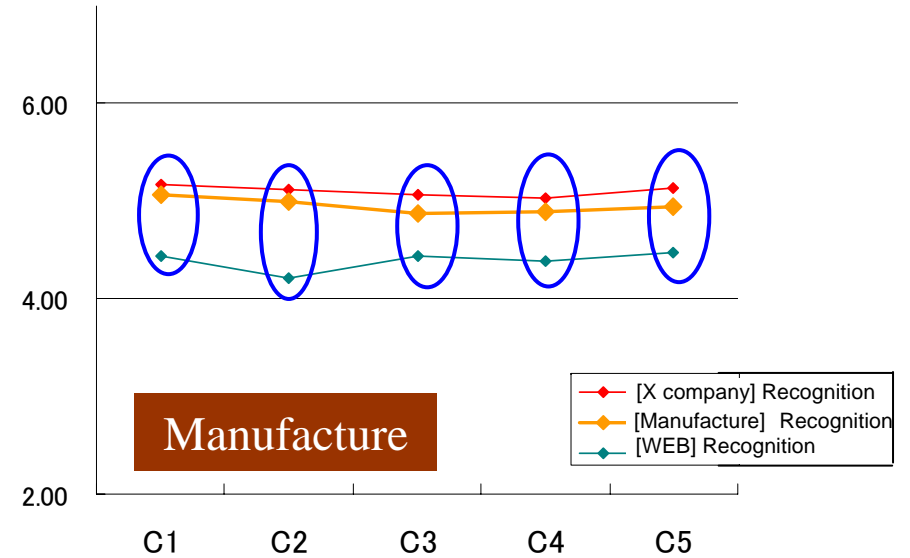
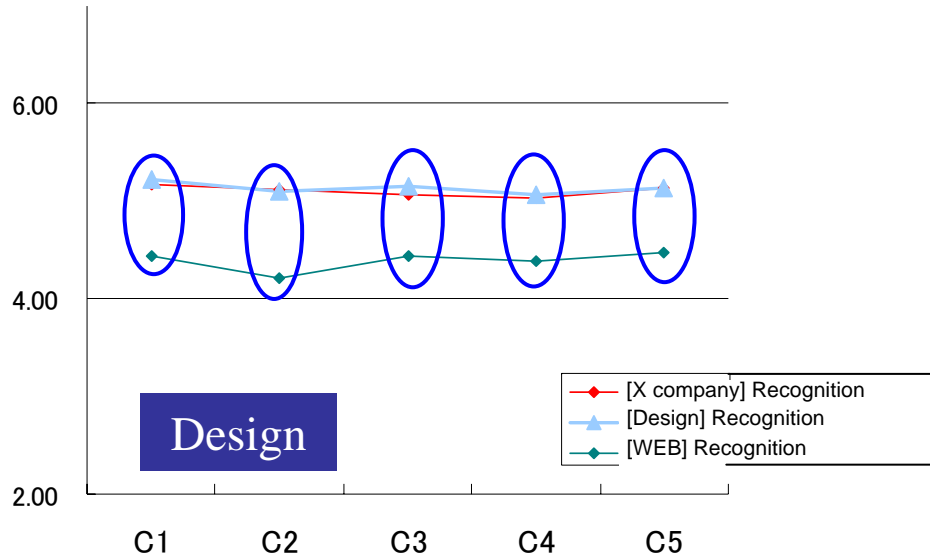
## (Evaluation Example) 3 section of the X company System/measure of organization



# Comparison of average value with the manufacturing industry data of the WEB survey

Organizational Climate	Category	Description
C1	Situation recognition to law and contract, etc.	observance
C2	Situation recognition to the safety/the health/the welfare of society	
C3	Situation recognition to objective/autonomous judgment	
C4	Situation recognition to communication	
C5	Situation recognition to special capability improvement/education/training	

## (Evaluation Example) 3 section of the X company Organizational climate



# society

Organization

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consistency

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Consistency

Consistency



Engineers

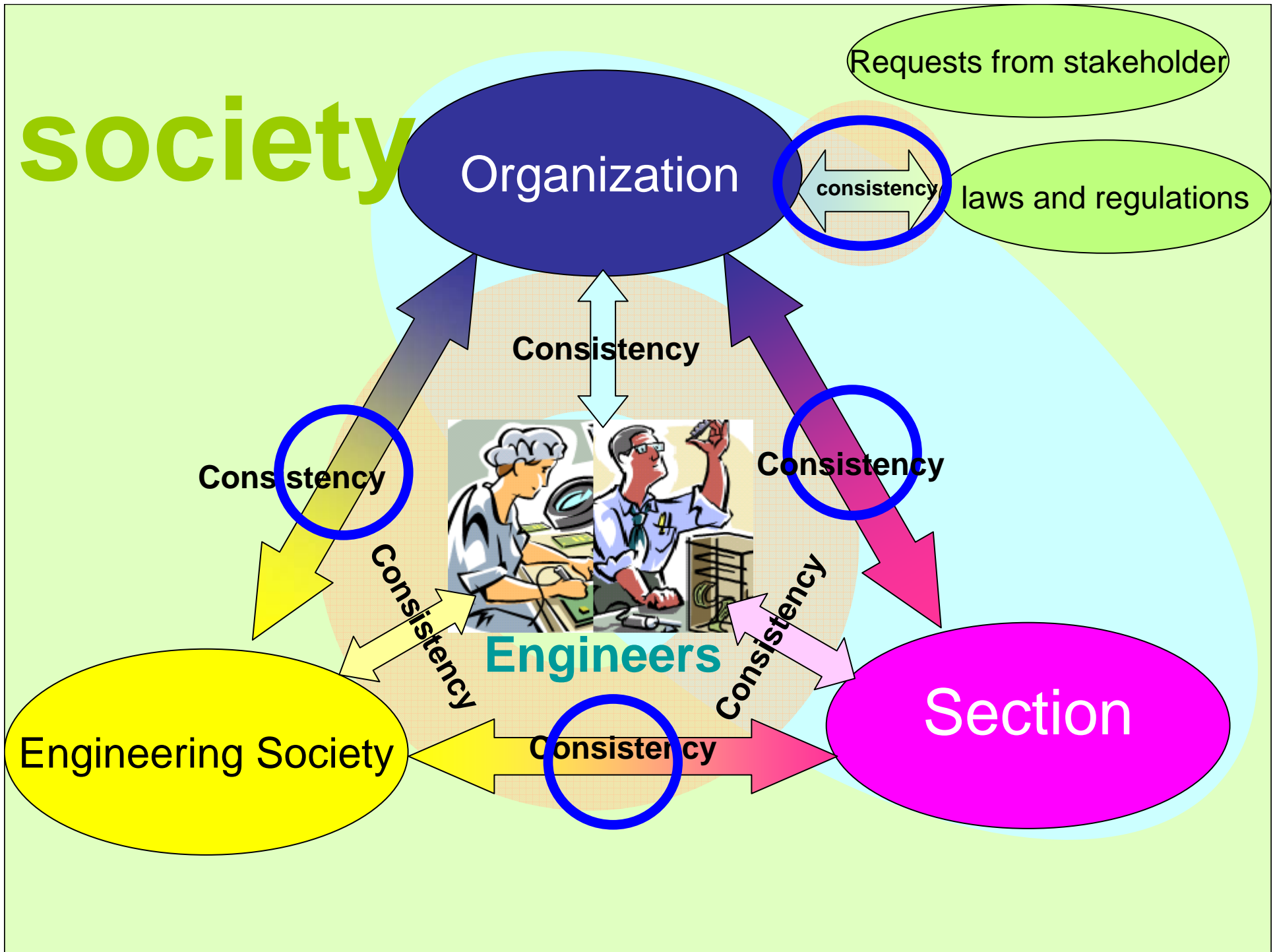
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Engineering Society

Section



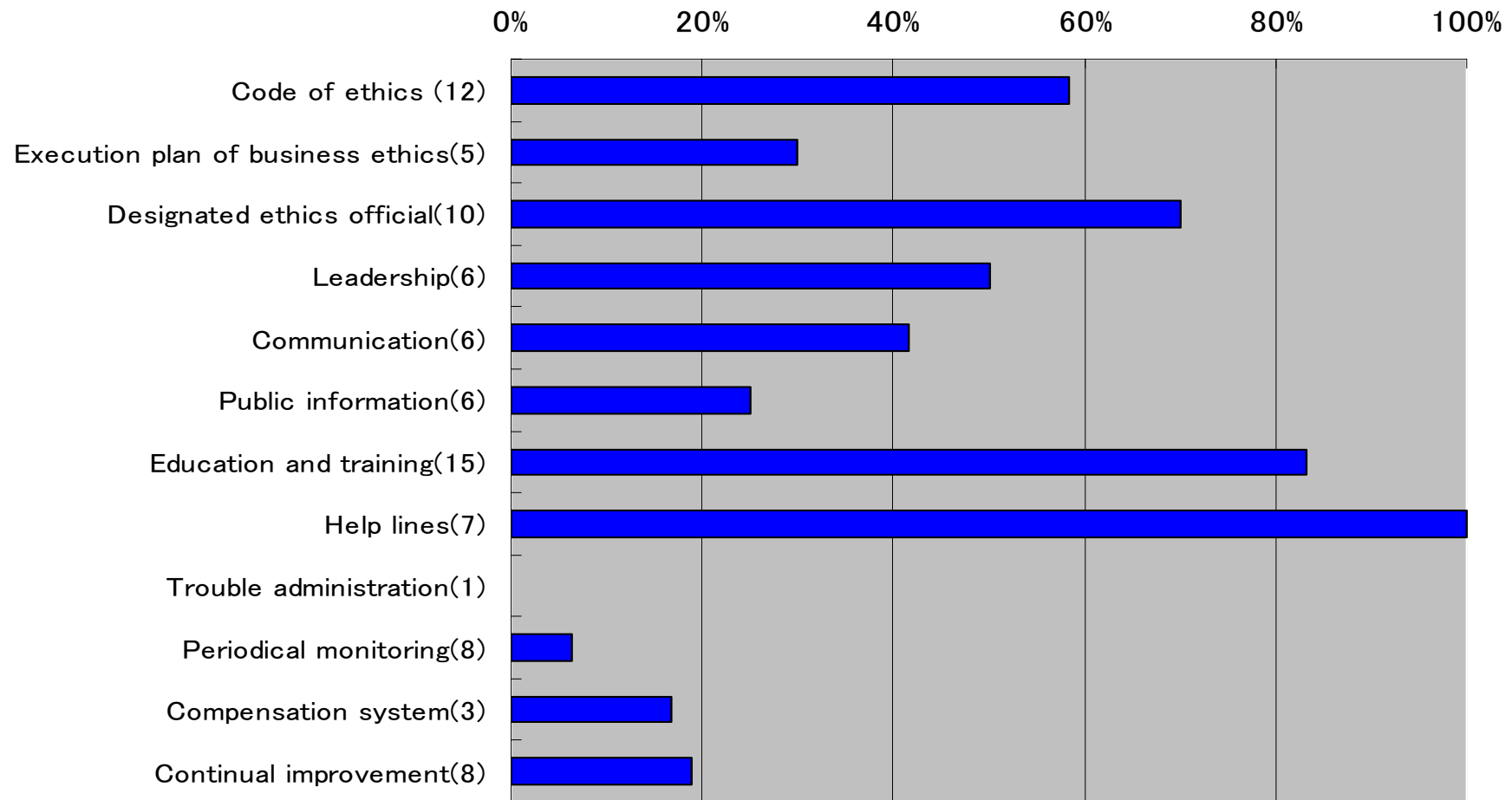


# an organization system and measures check sheet(1)

- Build process
  - Key Ethics Program Components
  - PDCA-cycle
  - Good Practices
  - questionnairemade out from Project member
- 12batches of questions (total:89)
  1. Execution plan of business ethics (5)
  2. Designated ethics official (10)
  3. Leadership (6)
  4. Communication (6)
  5. Code of Ethics (12)
  6. Business ethics and public information (6)
  7. Ethical education and training (15)
  8. Help lines (7)
  9. Trouble administration (3)
  10. Periodical monitoring (8)
  11. Compensation system etc. (3)
  12. Continual Improvement (8)

※(n)= number questions

# Result of Company X system and measures check sheet



(n) Number of questions

## an organization system and a measures check sheet(2)

- You try a check sheet proposal in your post for business ethics promotion of the whole company, and I received the comment of an improvement etc.

### **[The point which was shown in obtaining a comment]**

- The appropriateness of O&X and three-step evaluation
- About the well-qualified person of a check sheet reply
- Interest to feedback of evaluation by the viewpoint of EAB
- Relation to good practice etc.
- Appropriateness of category etc.

# Toward the construction of the business ethics program model realizing the EAB by KIT.

- The improvement of the system and measures check sheet of an organization
- Prepare a guidebook of questionnaire and check sheet
- Seek consistency with a company and an engineering society

society

Organization

Requests from stakeholder

consistency

laws and regulations

Consistency

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Consistency

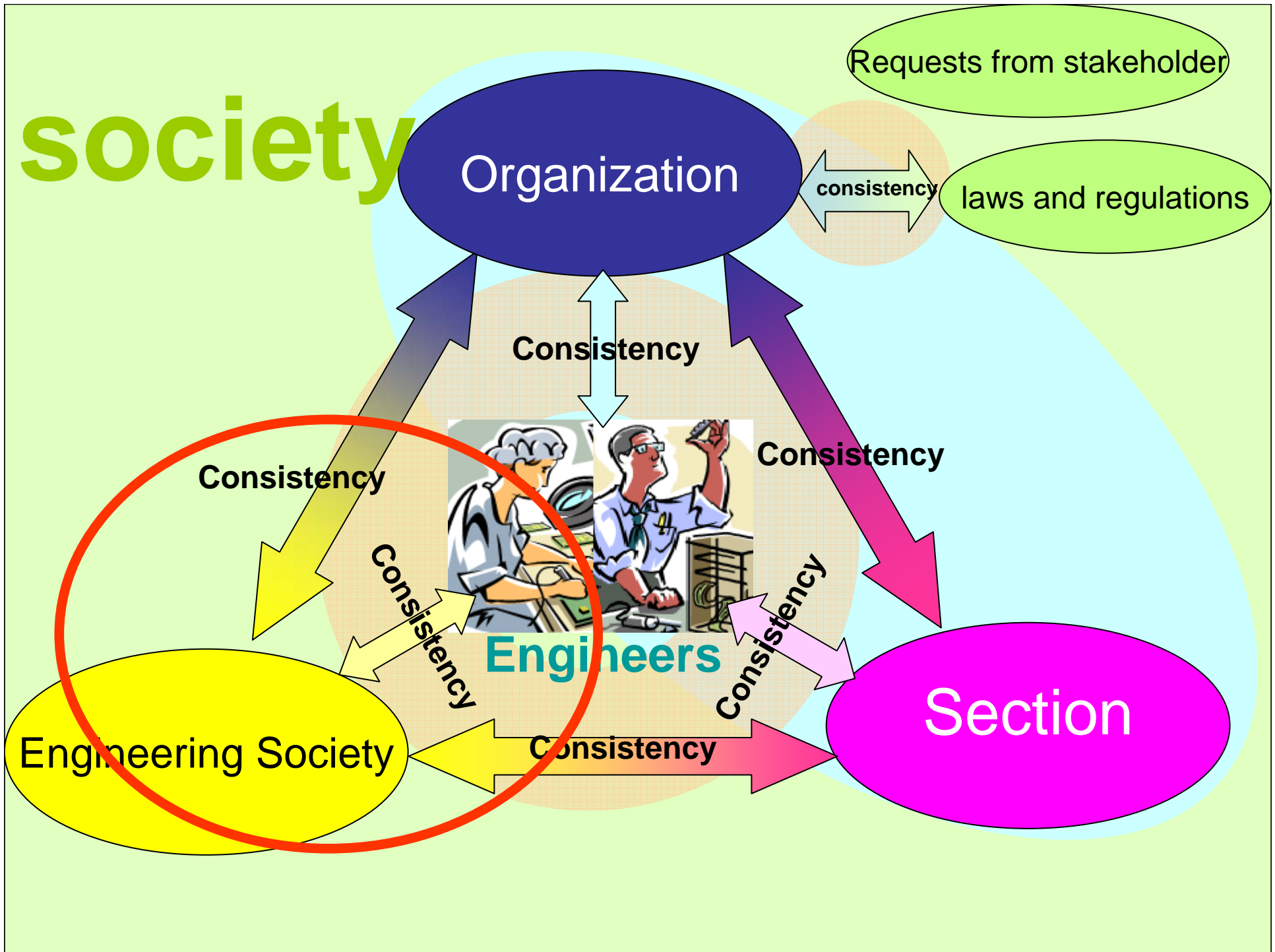
Consistency

Consistency

Engineers

Section

Engineering Society



# A quota of a company and an engineering society

Large Purpose: Effective ethics activity is carried out in many companies.

Small purpose: We want to raise the cost performance due to substantial ethics activity.

Method: A company and an engineering society recognize the difference in each ethics activity (viewpoint),

- ① A company does what a company should do.
  - ② An engineering society does what an academic society should do.
- Based on ①, ②, complement to be carried out or wants to be carried out is implemented.

# Toward the construction of the business ethics program model realizing the EAB by KIT.

- The improvement of the system and measures check sheet of an organization
- Prepare a guidebook of questionnaire and check sheet
- Seek consistency with a company and an engineering society
- Arrangement the item included in an effective business ethics program through implementation of a PDCA cycle