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OCTOBER
2016 ▶ Pullman Bercy Hotel



INTERNATIONAL
RAILWAY SAFETY COUNCIL

A study of safety portal sites to promote exchange and practical application of information among employees

East Japan Railway Company

Safety Research Laboratory

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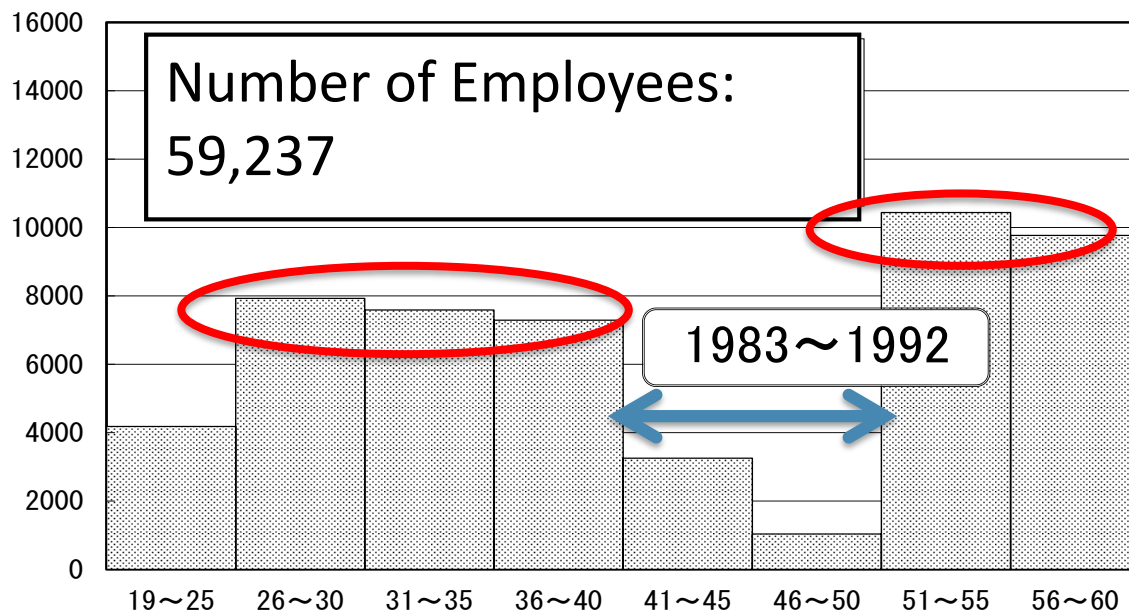
Background of Development

Personnel organization in JR East

○Hollowed-out bipolar structure of old and young employees without an intermediate generation

This was caused by business failure of our predecessor, Japanese National Railways

→The company had to stop hiring new employees for a period of time between 1983 and 1992



Age structure of JR East

We are faced with the need to pass on skills and knowledge to the next generation

Background of Development

Change in the way of thinking about safety

○ Japanese National Railways

Crown company
(Under the supervision of
the Japanese government)

Uniform management

Does not respond to
technical measures
flexibly or quickly

Bureaucratic safety culture

Top-down
management

○ East Japan Railway Company (JR East)

Privatized rail firm
(Administration of
voluntary independence)

Community-based management

Responds to
technical measures
flexibly and quickly

Safety culture, including front-line employees

Both top-down and
bottom-up are important

Background of Development

○ Safety culture in JR East

We think a safety culture can be fostered using
both top-down and bottom-up approaches

Top-down approach by
managers

Safety vision

Teaching of the rules... etc.

Bottom-up activities by
front-line employees

On-site wisdom and experience

Employees solve problems
autonomously

Background of Development

○Challenge Safety (CS) campaign

The challenge of further improving safety levels, rather than just passively maintaining safety

◆The merit of the CS campaign

- Employees can catch imminent problems
- Employees can feel empowered to “think and act for themselves”



～Result of the CS campaign～

Employees acted on their own initiative during the Great East Japan Earthquake, which occurred on March 11, 2011.

→They performed an appropriate and safe evacuation

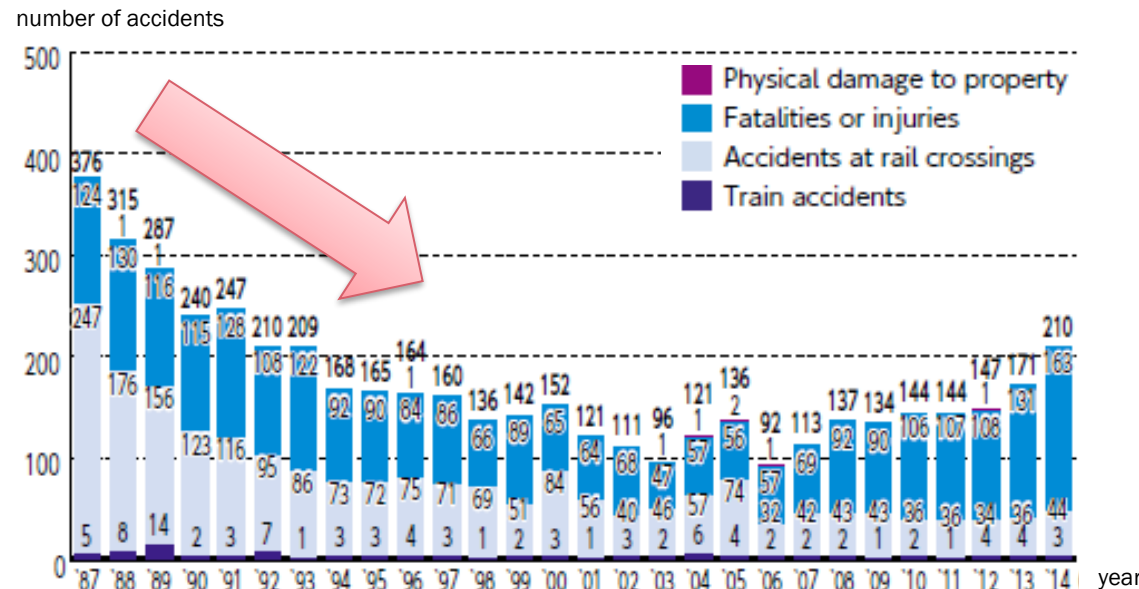
Background of Development

○JR East: **Safety has been our top management priority**

The introduction of technical measures

The creation of a safety culture ...and so on

The number of railway accidents has decreased



The number of railway accidents of JR East

Background of Development

- Pass on skills and knowledge to the next generation
- Improve safety awareness



Urgent problems of our company

In an effort to solve these problems, our company has developed a safety portal site on the intranet

The screenshot shows the top screen of the safety portal site. It features a green header with the title '安全ポータル' (Safety Portal). On the left is a navigation menu with items like 'サイトマップ', '安全ポータル掲示板', and 'グループ安全計画2018'. The main content area includes a 'お知らせ' (Notice) section with three items, a '注目情報' (Attention Information) section with a large pink banner for a '安全力診断ツール' (Safety Power Diagnostic Tool), and an '更新情報' (Update Information) table. On the right, there are side panels for '事故の教訓カレンダー' (Accident Lesson Calendar) showing an accident on July 29th, and '社長メッセージ' (President's Message) with a video player.

コンテンツ	タイトル	更新日	更新者
安全ポータル掲示板	【大宮支社 小山保線技術センター】踏切事故防止対策！早の宮踏切に注意喚起看板を設置しました。	2016年7月29日	栗原 翔太
監査ログ保存場所	安全ポータル の監査ログ 2016-07-25T180824	2016年7月29日	システム アカウント
安全ポータル掲示板	【大宮支社・小山保線技術センター】川野豊副社長の車庫MTがおこなわれました！	2016年7月28日	柴崎 くりす

Top screen of the safety portal site



Background of Development

- The purpose of the safety portal site
 - “Platform for safety-related information”
 - To facilitate the sharing of safety-related information
- Browsing the safety portal site



**Employees can browse the contents
of the site on their own PCs**

Contents of the Safety Portal Site

The safety portal site has the following concrete contents

- Information about accidents and incidents
- Safety rules and manuals
- Analyses of accidents and incidents
- Information about the human factor

Contents of the Safety Portal Site

● Information about accidents and incidents: “Accident calendar”

Extracts significant railway accidents from the past 366 days

Presents a summary of the accidents that occurred on any given day

安全ポータル

お知らせ

- 「安全情報」に「JR東日本 山手線 有明 八木山駅 列車と乗客の衝突」を追加しました。(6/23)
- 「安全力診断ツール」～あなたの安全上の強みを知ろう～「入門編」を公開しました。(7/1)
- 「安全情報」に「JR東日本 常磐線 高松駅 急行の乗客列車と乗客の衝突」を追加しました。(7/15)

注目情報

あなたの強みパターンは？
『安全力診断ツール ～あなたの安全上の強みを知ろう～』
「入門編」を公開しました！

社長メッセージ

更新情報

記憶に残りたい事故・災害の歴史

南武線 踏切内に立ち往生したバスと衝突

事故種別	概況
踏切障害事故	普通電第1824列車が稲田 堤駅に到着予定で速度約65km/hで進行運転中、同駅構内の観光道踏切(1種自動)で踏切バス(回送)が踏切出口付近に違法駐車していた軽乗用車により踏切から進出できず、後部を支障して停止しているのを約70m手前で発見した。直ちに非常停止手配をとったが及ばずこれと衝突し、旅客7名、バスの運転者、このバスと衝突した対向乗用車の運転者との同乗者1名、通行人2名、同駅委託職員及び電車運転士の計14名が負傷した。
発生日時	1986年(昭和61年)7月29日(火) 18時35分
発生場所	南武線 稲田堤駅構内
被害規模	負傷者:14名

< 7月28日 一覧表示 7月30日 >

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- ★ Learn a lesson about the accident
- ★ Use it as teaching material for a study session

Contents of the Safety Portal Site

● Safety rules and manuals: “A manual for major earthquakes”

- ★ Employees learn the rules in study sessions at each workplace
- ★ Employees utilize the rules as needed

◆ Various rules and manuals are located on the site
(official regulations about the railway, manuals for each system, and so on)

大地震発生時の対応マニュアル (携帯版)

5つの基本的な考え方

支社エリア内において震度6以上の地震(大地震)が発生した場合、5つの基本的な考え方を基に行動します。(東京30km圏で発生した場合は、東京・横浜・八王子・大宮・千葉支社も同一支社とみなします)
非被災支社等は必要要請に応じて連絡がとれる体制を整えます。

東京30km圏

東 京 圏	→ 東京23区、武蔵野市、三鷹市、小金井市、立川市、日野市、国立市、小平市、国分寺市、多摩市、町田市、八王子市、府中市、清瀬市、稲城市、東村山市、昭島市
神奈川圏	→ 横浜市、川崎市、相模原市
千 葉 圏	→ 千葉市、市川市、船橋市、習志野市、浦安市、松戸市、柏市、流山町、流山市
埼 玉 圏	→ さいたま市、川口市、蕨市、所沢市、越谷市、三郷市、朝霞市、新座市、戸田市、吉川市
茨 城 圏	→ 取手市

2012年6月

- 1 家族の安否を確認し救助活動等への体制を整えます。
- 2 社員一人ひとりがマニュアルに従って、**自律的に行動**します。
- 3 人命救助を優先し、グループ会社全体で72時間以内に最大限の救助活動を行います。
- 4 お客さまはもとより被災した社員・家族も救助の対象として対応します。
- 5 初動にあたっては、以下のことについて**最優先**に対応する。
 - 駅における対応**
駅社員は、自駅の安全確認を行い、お客さまの安全確保を最優先します。
 - 列車における対応**
列車中の乗務員等においては、列車内のお客さまの安全確保を最優先します。
 - 駅以外のその他の場所における対応**
その位置からの社員は、被害状況を把握し、被害甚大箇所への救援を最優先します。

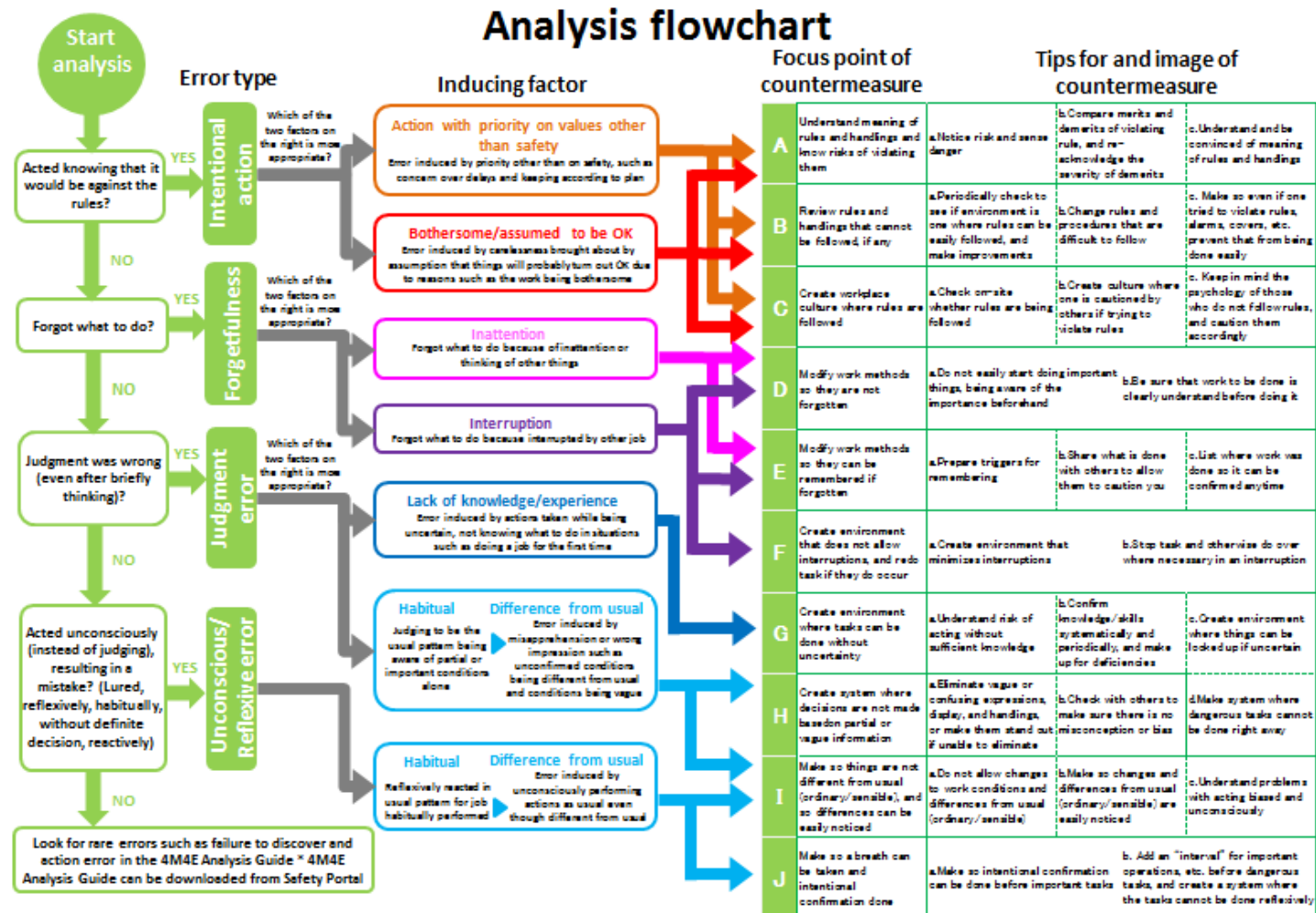
Portable manual
for major earthquakes

Contents of the Safety Portal Site

● Analysis of accidents and incidents:

“A support tool to help employees learn lessons from incidents experienced by others”

★ Imaging to replace others' accidents with own accidents



Contents of the Safety Portal Site

● Analysis of accidents and incidents:

“A method of image training for irregular situations”

★ Discussion of factors to be considered in order to make the best decision in a given situation

Example situation

The train stopped at a red signal in a tunnel, and, at the same time, smoke arose in a cabin. A few passengers were trying to open the door and escape.

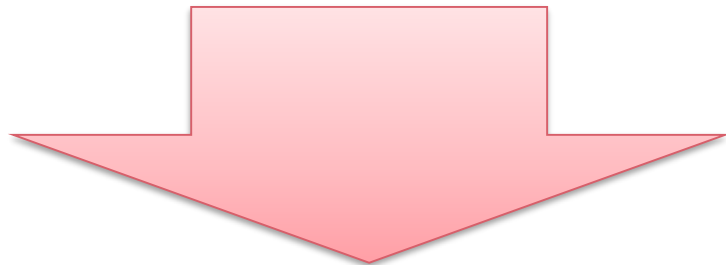
Will you stop them?



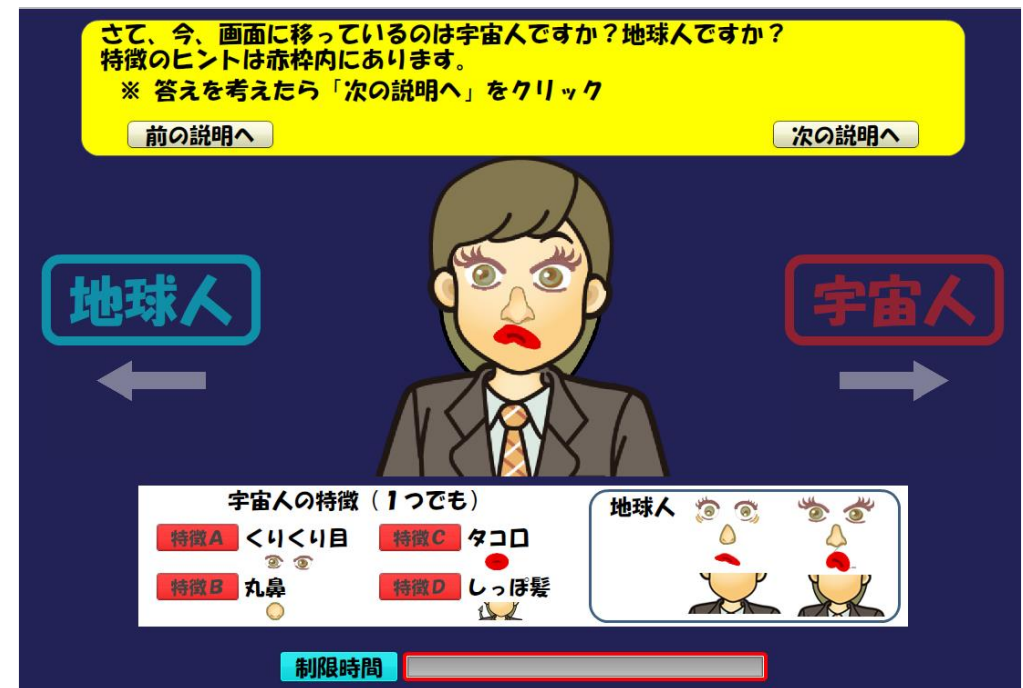
Contents of the Safety Portal Site

- Provision of information about the human factor:
“The educational program about human error”

Employees experience human error using this program



★ Employees can learn the mechanisms through which errors occur and formulate countermeasures for themselves



An example of an educational program about human error

Development of the Safety Bulletin Board

- Information from the safety portal site has contributed to the promotion of the CS campaign
- The CS campaign has spread widely throughout the company



In order to support information exchange about the CS campaign among workplaces

JR East established a “safety bulletin board” on its safety portal site

- ◆ Bilateral communication among different employees in different workplaces

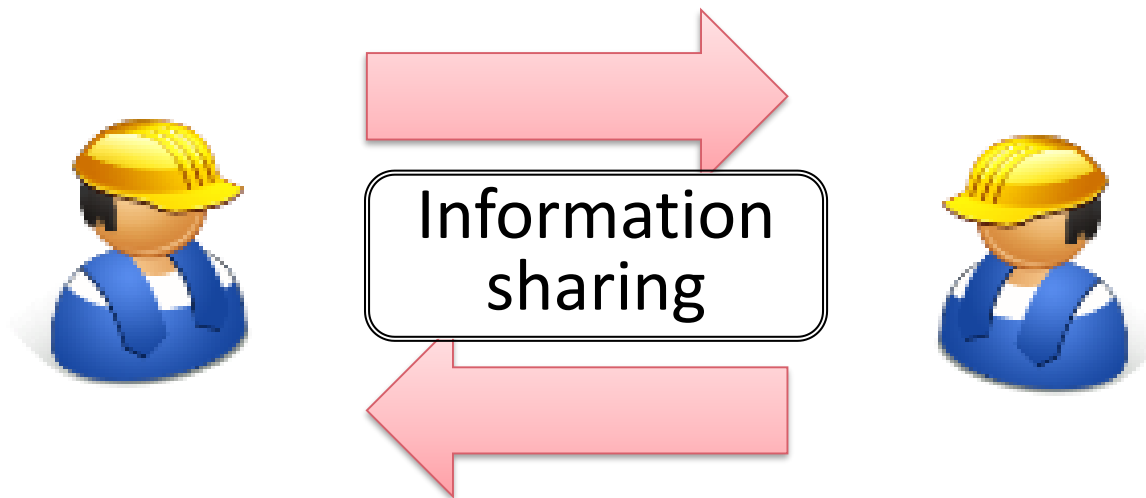
件名	登録者	登録日時	「いいね!」の数	返信	賛成
【新潟支社 新潟電力技術センター 羽倉】安全体感訓練実施	羽倉 裕也	昨日 (16:01)	◎ 5 いいね!	1	いいえ
【盛岡支社 北上地区 平成28年度 北上地区実車訓練会まとめ】	山内 伸一	6 時間前	◎ 3 いいね!	0	いいえ
【仙台支社 仙台電力技術センター 加藤】仙台地区 CS 委員による三現「現地・現物・現人」の成果報告	加藤 浩	6 日前	◎ 16 いいね!	4	いいえ
【千葉支社 佐倉運輸区 鈴木】脱炭に関する工夫や取組みをご教授下さい。	吉田 昌紀	5月26日	◎ 11 「いいね!」の数がまし	4	はい
【盛岡支社 盛岡車両センター 近藤】安全網様の交換の紹介について	近藤 伸也	昨日 (12:32)	◎ 10 いいね!	1	いいえ

Top screen of the safety bulletin board

Development of the Safety Bulletin Board

The effects of the safety bulletin board

(1) Sharing good examples about safety



Employees post about safety actions that occurred in their own workplace

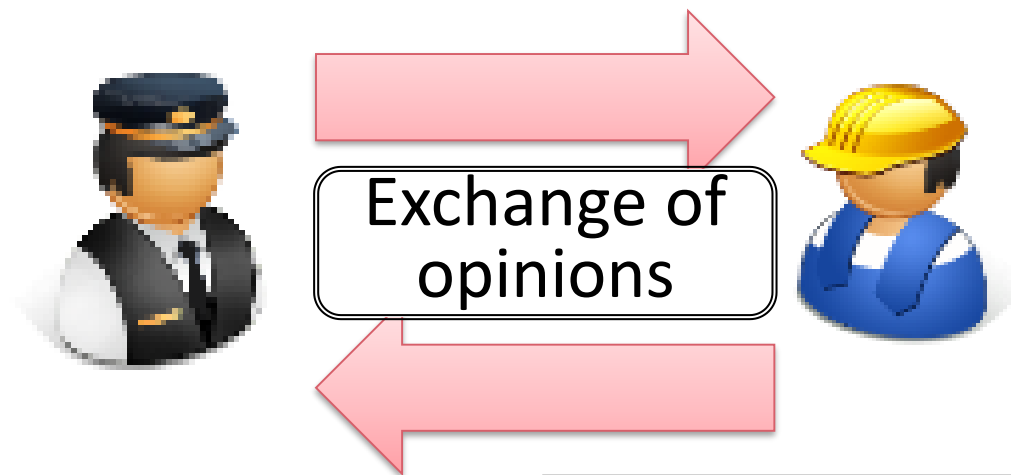
By sharing information, employees can develop new knowledge about safety measures

Development of the Safety Bulletin Board

The effects of the safety bulletin board

(2) Discussing problems from different workplaces

→ Improvement of teamwork through the exchange of safety-related information among the workplaces



Employees submit a problem from their own workplace

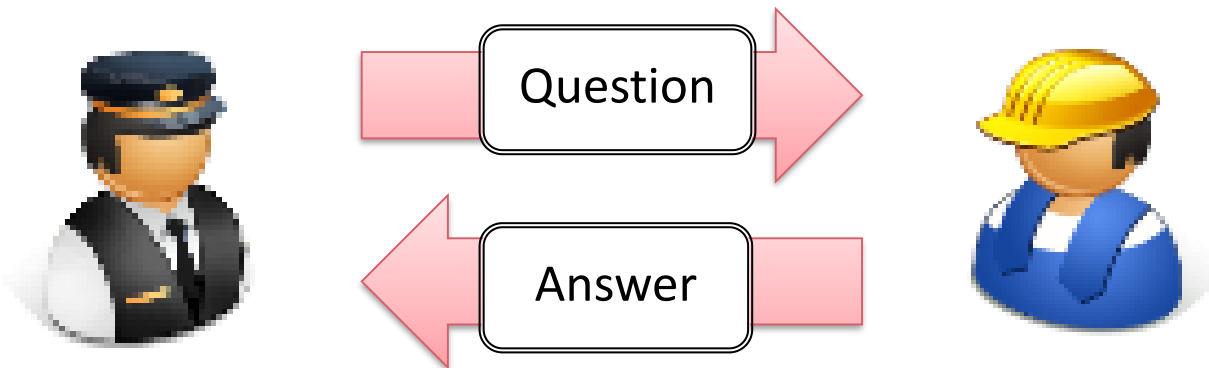
Employees solve the problem with reference to problems from other workplaces

Improving safety through teamwork
across sections

Development of the Safety Bulletin Board

The effects of the safety bulletin board

(3) Improving knowledge about safety



Post a question
about safety

Answer the question

Employees improve their knowledge
about safety

Development of the Safety Bulletin Board

The effects of the safety bulletin board

◆ Safety bulletin board—inaugurated in November 2014

Employees communicate bilaterally with fellow workers in different workplaces through the bulletin board



By communicating through the bulletin board, employees share good examples from their workplaces and enable other employees to improve the safety of their own workplaces

◆ Future issues

- Linking the site to the company's intranet
- Allowing access from tablet devices



We will continue to improve and promote information sharing about safety

Conclusions

◆ Promotion of the safety portal site

○ Sharing the know-how of front-line employees

Technical skills

Non-technical skills

○ Preserving the technical traditions of the veterans

○ Improving the safety awareness of front-line employees

Safety improvement of JR-east

Thank you for your kind attention!