Strategy for Global Quality Assurance

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株式会社　日立製作所
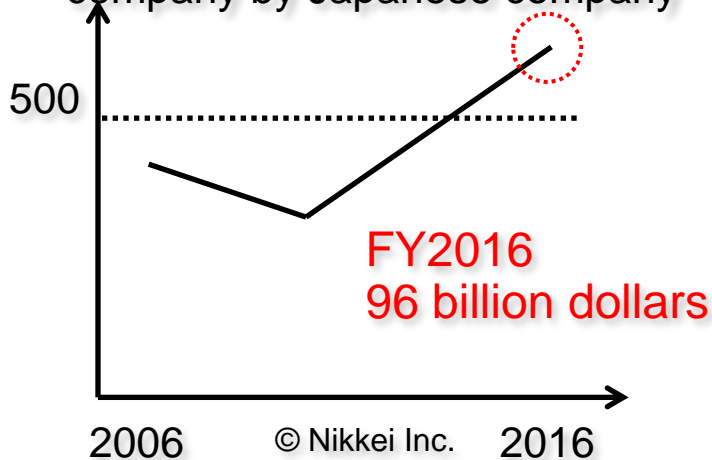システム＆サービスビジネス統括本部
品質保証本部

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Hitachi, Ltd.

The number of M&A of overseas company by Japanese company

500

FY2016
96 billion dollars

2006   © Nikkei Inc.   2016

SSB
(＊1)

システム＆サービスビジネス統括本部	品質保証本部
金融ビジネスユニット（BU）	
公共社会BU	
産業・流通BU　（産業ソリューション事業部）	
サービス＆プラットフォームBU	

鉄道BU

アーバンソリューションBU

エネルギーソリューションBU

ヘルスケアBU

・・・・・・・・・

2018 Mid-term Management Plan Targets   **SSB**

	FY2015	FY2018 Targets
売上げ	2兆1093億円	2兆2000億円
営業利益	6.7%	10.0%
海外売上げ比率	33 %	37%

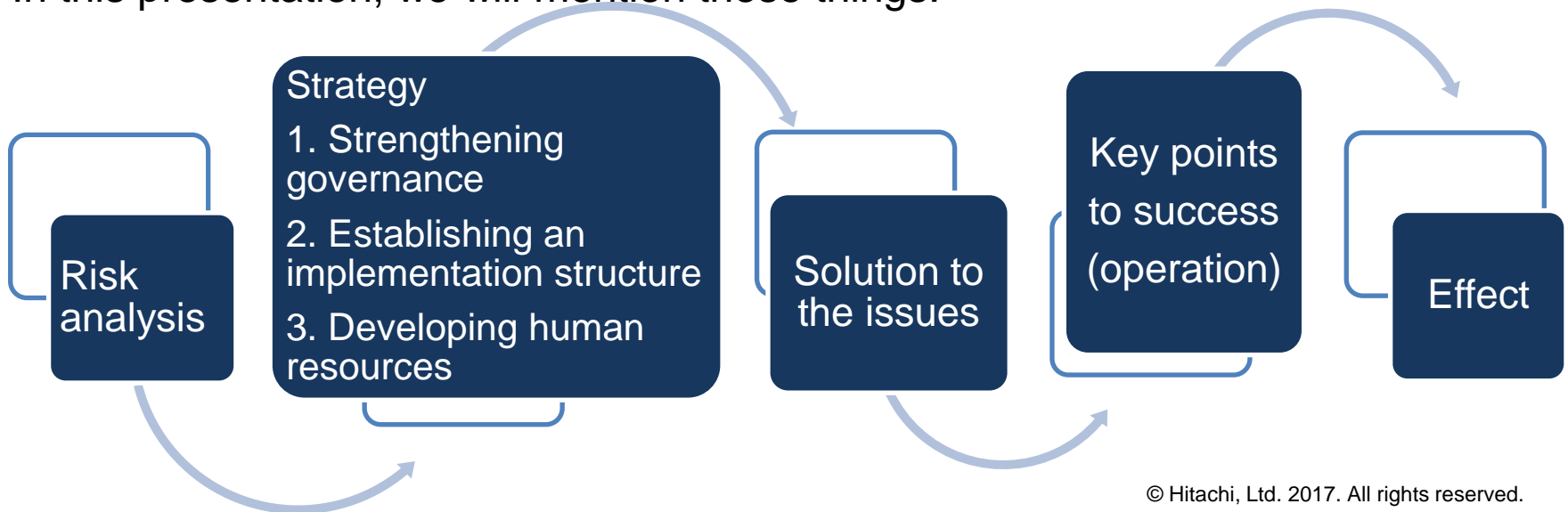（＊1）SSB：System & Service Business

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2.1 日立グループのグローバル化が加速

3
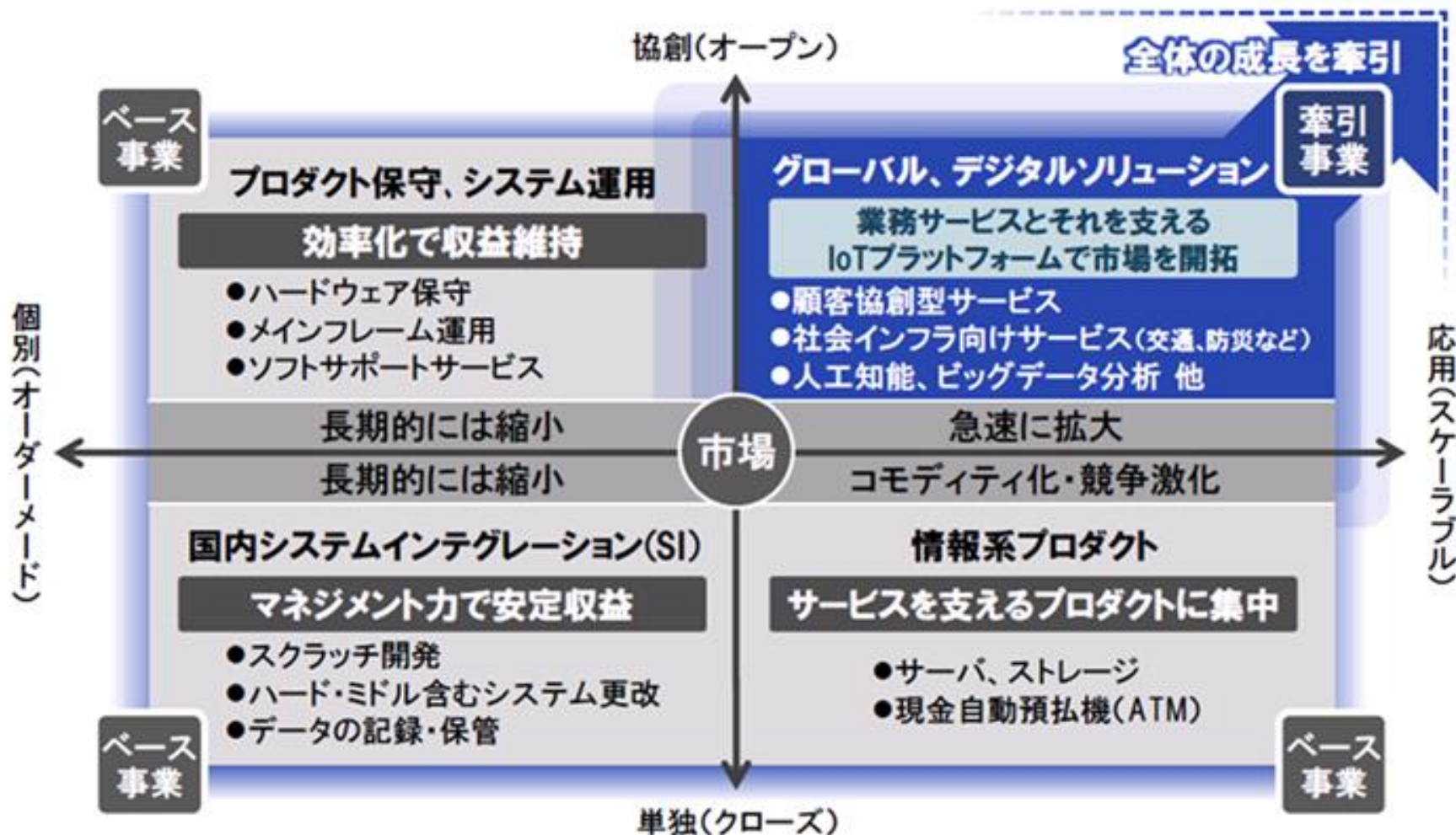
【Hitachi's Business Strategy】 Social Innovation Business
【Hitachi's Strong Point】　　　OT × IT × Product

Challenges of expanding global business

1. Manage Quality Risks

2. Remain Competitiveness

In this presentation, we will mention these things.

| Risk analysis | Strategy
1. Strengthening governance
2. Establishing an implementation structure
3. Developing human resources | Solution to the issues | Key points to success (operation) | Effect |

2. Quality Risk Analysis

2-1 Hitachi Business Strategies and Quality Risks

2-2 Three Global Quality Assurance Strategies

2-1 Hitachi Business Strategies and Quality Risks

Hitachi ICT division draws up and execute the global business strategies

1. Growth through M&As and collaboration
-Increase of costs implementing Japanese way
-After M&A, local customers expect system would be much better quality

2. Expansion of the solutions business and social innovation business (IT × OT)
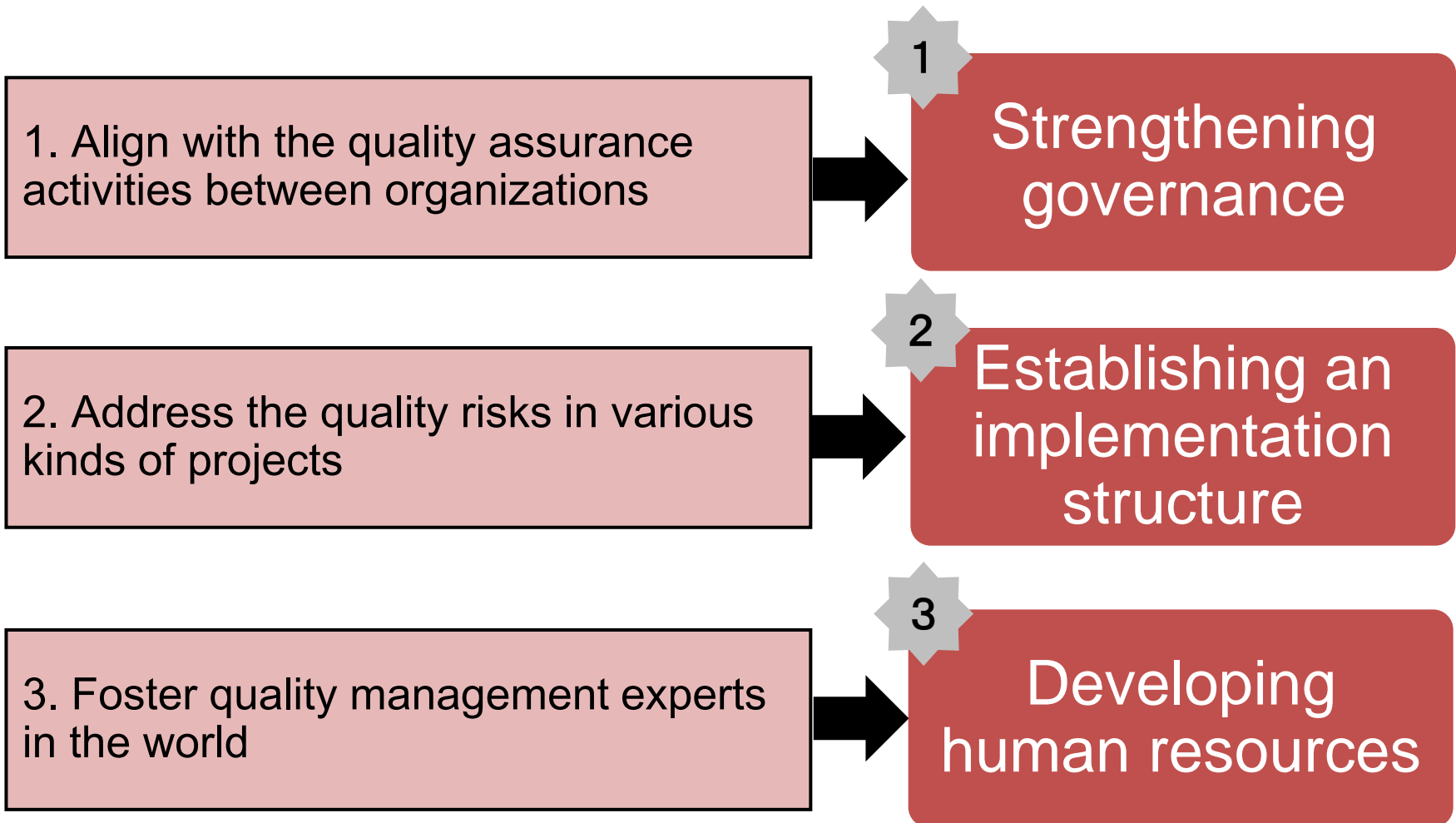-Multiple product failures at the same time and delayed escalation

3. Strengthening of collaboration with overseas group companies and development sites
-The different views about quality causes additional labor-hours and re-working

Total of 26 overseas group companies (as of April 2017)

2-2 Three Global Quality Assurance Strategies

We need to set the countermeasures against the Quality Risks

1. Align with the quality assurance activities between organizations	→	**1** Strengthening governance
2. Address the quality risks in various kinds of projects	→	**2** Establishing an implementation structure
3. Foster quality management experts in the world	→	**3** Developing human resources

HITACHI
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グローバル化・デジタルソリューションビジネス拡大に対応して、
　①日立のグローバル品質保証戦略を立てる
　②国内の強固なＱＡネットワークをグローバルに展開する

目的：**事故情報の共有**と迅速な対応

①「**品質保証規程**」適用展開

全海外法人へ適用義務付け

・事故の第一報の迅速化
・品質マインドの醸成

品質保証規程

・重要事故幹部報告
　評価基準
・QAマネージャーミーティング
・落穂拾い
・QA月報
・品質マネジメント基準
・ドキュメント管理基準

目的：**品質問題の未然防止**

②「**地域毎の品質保証活動**」

品質リスクに対する品質改善活動の推進

・大中規模の海外SI案件が増え、
　ロスコストのリスク増加への対処
・セキュリティ事故への対処

ガバナンス強化

・グローバル品質保証規定の海外法人適用
・障害収集基盤開発とグローバル展開

**グローバル
品質保証戦略
３つの柱**

実行体制の確立

・地域・ビジネスユニット戦略に基づいた
　グローバルQA戦略策定と実行体制の確立

人財育成

・グローバルQA/品質管理エキスパート
　認定制度の定義と展開

3. Solutions to the Issues

3-1 Strengthening Governance

3-2 Establishing an Implementation Structure

3-3 Developing Human Resources

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We established a Global Quality Assurance Center to resolve the problems and execute the strategies.

QA organizations

Hitachi, Ltd.

システム＆サービスビジネス統括本部

品質保証本部：14 departments

★GQA: Global Quality Assurance Center
(Set up in April 2015)

金融ＢＵ

公共社会ＢＵ

・・・・

サービス＆プラットフォームＢＵ

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Group companies

Total of 26 overseas group companies (as of April 2017)

Goal: Establish a global quality assurance structure and a HITACHI's quality brand

Assign the **QA Manager** to each overseas company
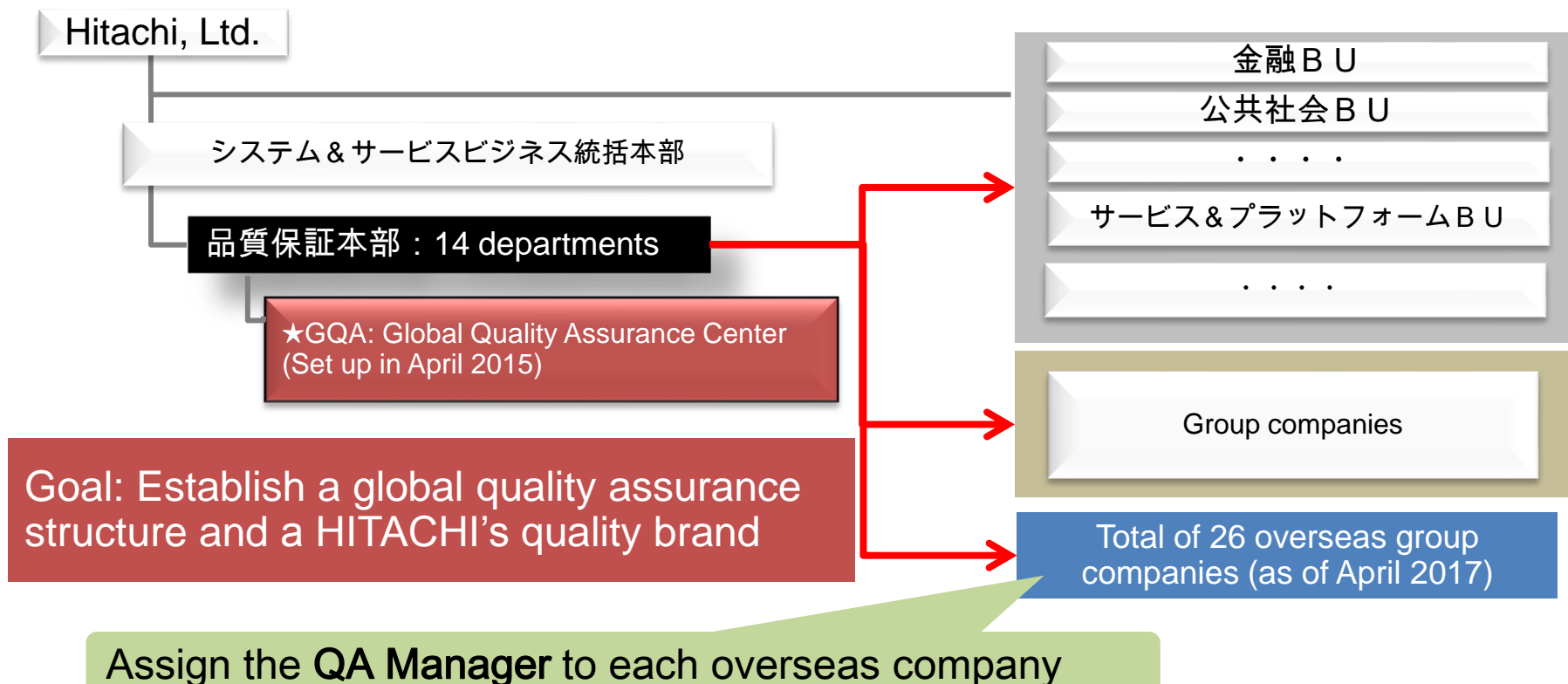
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We established a "Hitachi Global Quality Assurance Standard"

- Hitachi Global QA **Standard** -

1. Critical Quality Problem Report To Executives
2. OCHIBO-HIROI Meeting
3. QA Manager Meeting
4. QA Monthly Report
5. Guidelines for applying the Quality Management Guidelines
6. · · · ·

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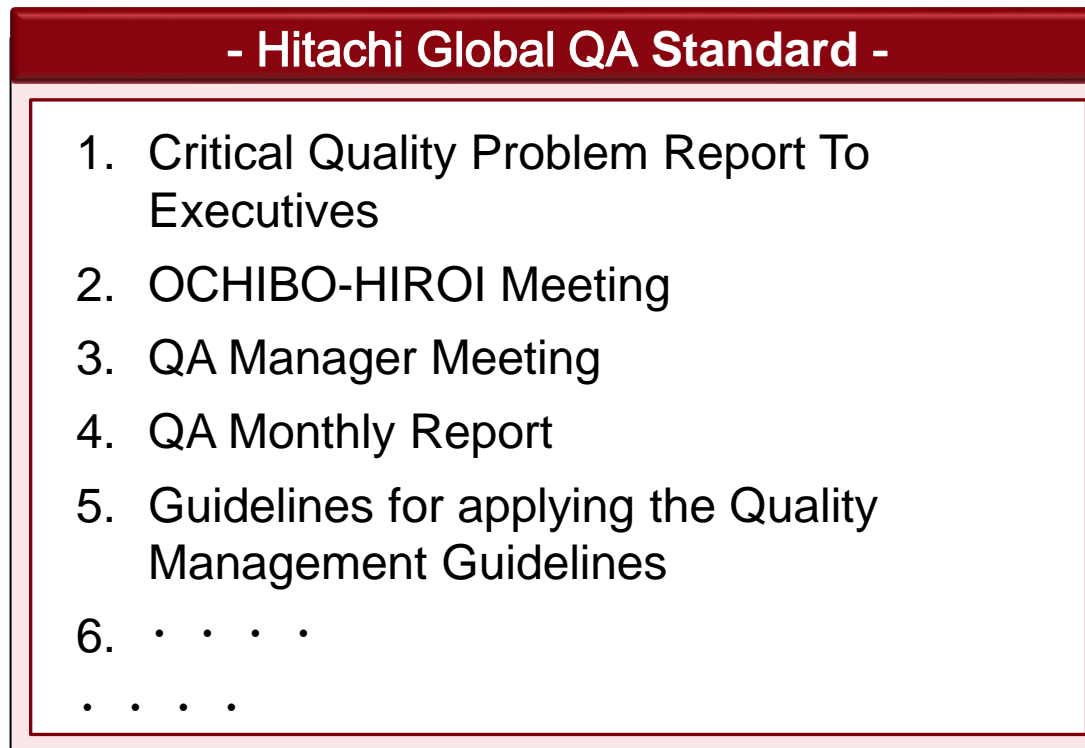
Collaborate with QA manager

Visualization of issues	Escalation to executives	Address the issue quickly

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3-2 Establishing an Implementation Structure

**1. Systematic quality assurance activities in the organization
  - Applying the Quality Assurance Standard to all companies -**

India	ASEAN	China, S. Korea Taiwan	U.S.	Europe

Quality enhancement measures

IP quality improvement & process optimization for the projects with Japanese customers

IP quality improvement & process optimization for the projects with Japanese customers

Key measures: PM & QA enhancements

Quality process optimization

ATM service quality improvement measures

2. Each quality assurance activity per region

Support

Japan

What is the "Role of QA" ?

<Hitachi QA Manager Role>

PJ: Project

Organization Level		PJ Level (optional)
QMS	**PJ Monitoring**	**Management QA**

ISO9001
Rules
Guidelines
Training
Metrics
Analysis
Tools
	Reporting
	Review the Phase Gate
	Audit
		Judge
		  - Quality Plan
		  - Quality Control
		  - Quality Improvement
		Product QA
		  Inspection
		Process QA
		  Audit

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What is the "QA skill needed" ?

Hitachi Training Programs in Japan (2012/2H onward)

Organize quality management techniques into knowledge that is to be provided in training courses.

Expert → **Sort out and carry on quality management techniques as a subject matter expert.**

Advanced → **Learn quality management techniques as a manager.**

Foundation → **Learn quality management techniques as a person in charge with no title.**
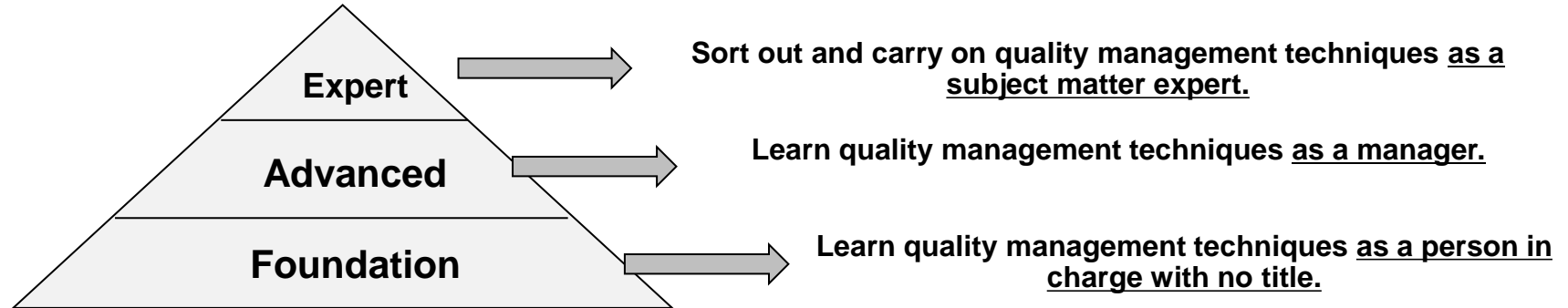
Developing skills for discerning quality accurately for each layer of human resources
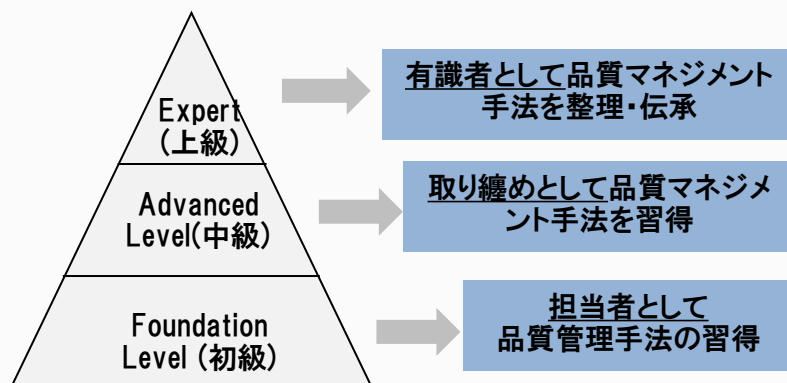
Propagation to overseas group companies

Organizing the training programs

- **Provide training materials organized into components that suit the nature of the business of the company.**
- **Provide concrete case examples and templates.**

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・国内はSE・QA向け、グローバルではQA向けに認定制度を展開する

日本国内の育成施策(2012下～)

日立：品質管理エキスパート認定制度
国内の品質管理手法を知識化し講座を展開

- Expert（上級） → 有識者として品質マネジメント手法を整理・伝承
- Advanced Level(中級) → 取り纏めとして品質マネジメント手法を習得
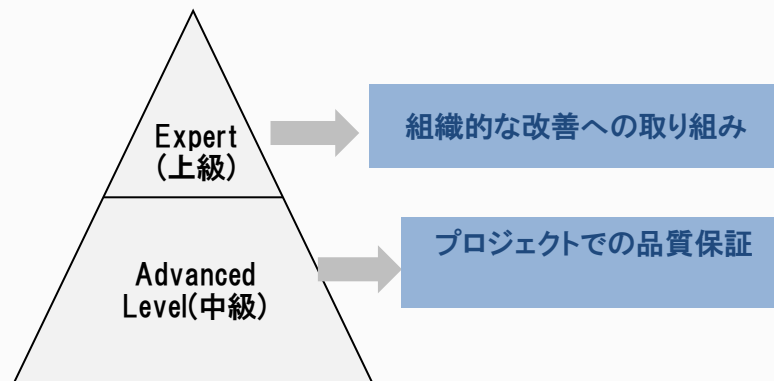- Foundation Level（初級） → 担当者として品質管理手法の習得

『人財層別に品質を的確に見極めるスキルを育成中。2017年9月時点で、**4734**名が受講。CIP＊の1職種として推進中。』

＊日立ITプロフェッショナル認定制度(Hitachi Certified IT Professional)
グローバル・メジャー・プレーヤーにふさわしい高度ITプロフェッショナルを育成する

国外の育成施策(2018上～)

●日立：グローバルQA認定制度の発足
●海外現地法人のSE・QA向け教育の推進

- Expert（上級） → 組織的な改善への取り組み
- Advanced Level(中級) → プロジェクトでの品質保証

日立におけるQA人材像：
(1) 自社の品質マネジメントシステム(QMS)を熟知し、組織的な改善に取り組める人
(2) 一般的な品質保証の知識があり、プロジェクトへ適用できる人
(3) テストマネジメント技術を持ち、プロジェクトで技術を実行できる人

4. Key Points to Success in the Operation

4-1 Points to Consider at the Organizational Level
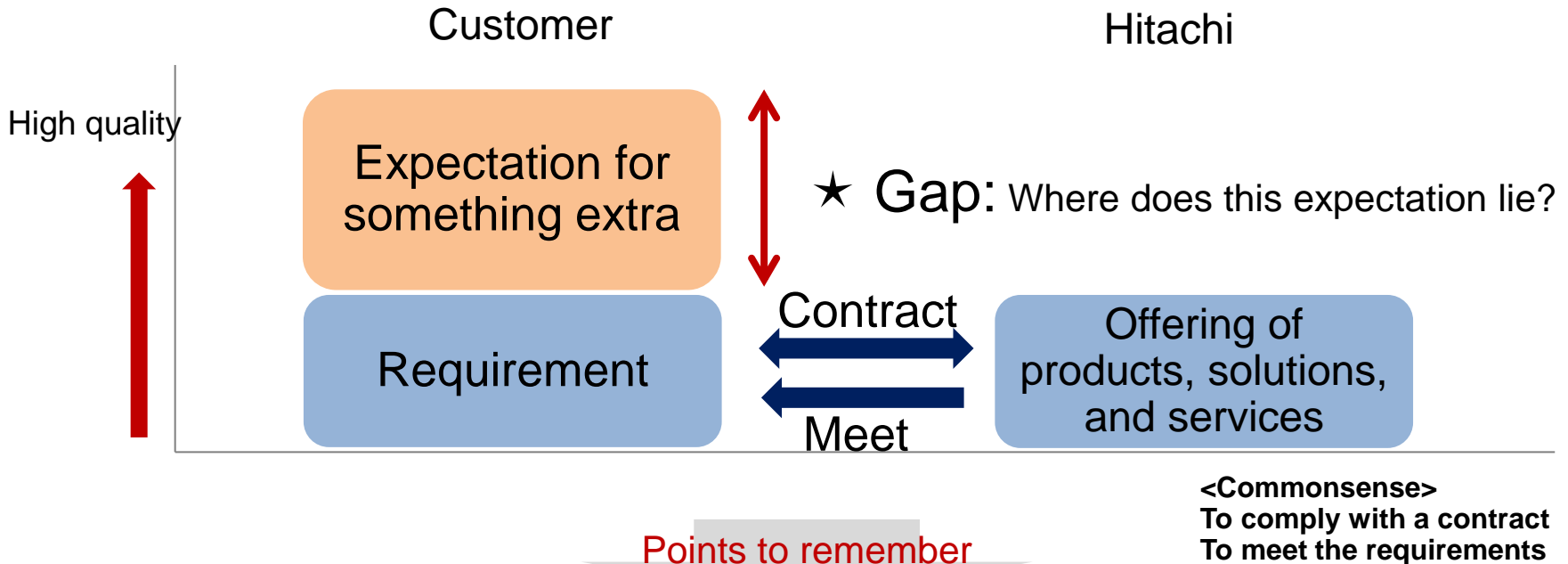
4-2   Points to Consider the Expectation Gap

4-3 Points to Consider in Quality Management

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What should we do to succeed with overseas companies?

(1)Management's commitment to the QA activities

(5)Education of QA Expert to local QA engineers and development them

(2)Appointing a QA manager
- **Incentive control of QA managers**

Key to success

(4)Dispatch of QA engineers to overseas companies

(3)Support to apply the most suitable quality management process to local culture

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What should we do for improving customer service(CS)?

Customer   Hitachi

High quality

Expectation for something extra

★ Gap: Where does this expectation lie?

Contract

Requirement

Offering of products, solutions, and services

Meet

\<Commonsense\>
To comply with a contract
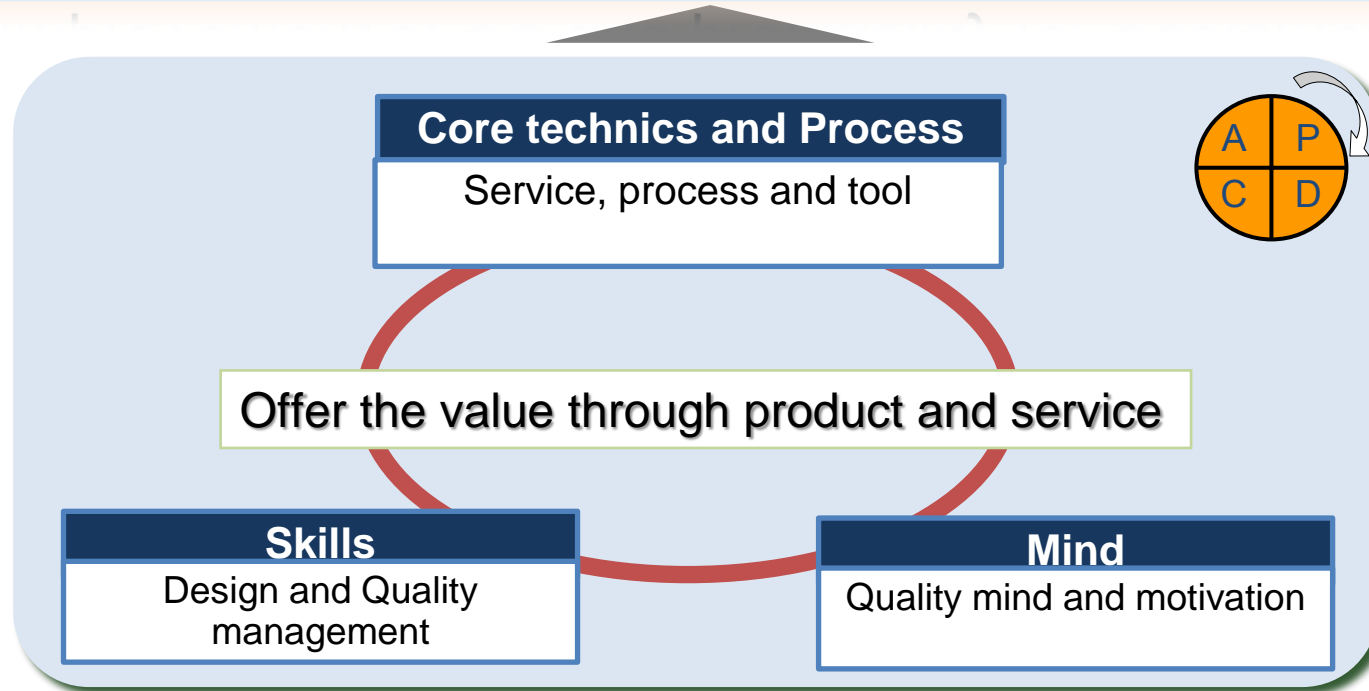**To meet the requirements**

Points to remember

The key is the concretization & visualization of expectations.

1. Create templates.
2. Optimize the quality processes.
3. Maintain and improve the value of the brand.

What is the value for customers?

We provide " the Value" through our product and service.

Improvement of CS and profitability for Customers
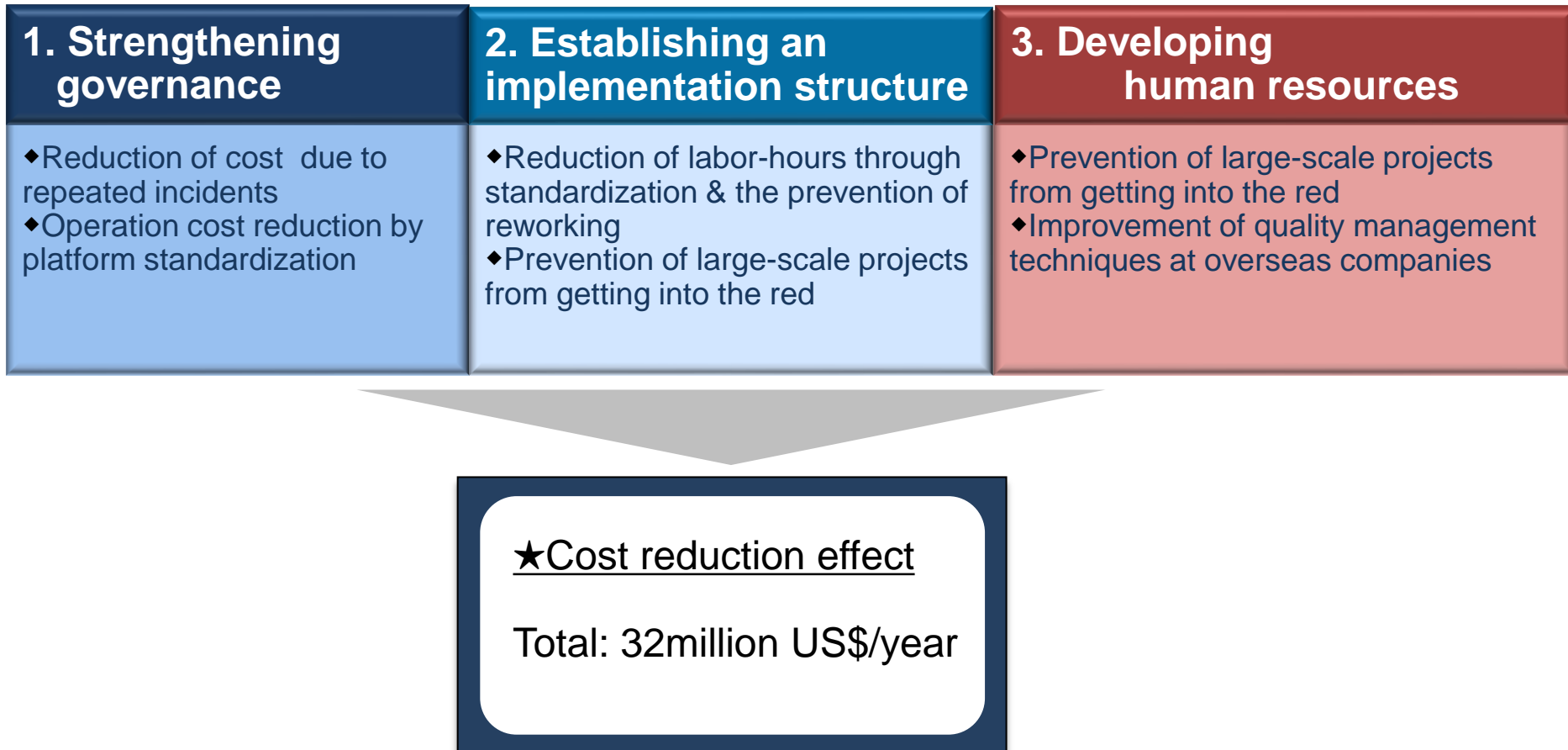
Core technics and Process
Service, process and tool

A | P
C | D

Offer the value through product and service

Skills
Design and Quality management

Mind
Quality mind and motivation

5. Predicted Effect

We estimated cost reduction effect from past experiences.

1. Strengthening governance	2. Establishing an implementation structure	3. Developing human resources
◆Reduction of cost due to repeated incidents ◆Operation cost reduction by platform standardization	◆Reduction of labor-hours through standardization & the prevention of reworking ◆Prevention of large-scale projects from getting into the red	◆Prevention of large-scale projects from getting into the red ◆Improvement of quality management techniques at overseas companies

★Cost reduction effect

Total: 32million US$/year

6. Conclusion

6. Conclusion

Goal: Establish a global quality assurance structure and a HITACHI's quality brand

Contribute to business expansion on the global markets by maintaining and even improving the HITACHI quality brand

Three Strategies

| Strengthening governance | Establishing an implementation structure | Developing human resources |

Three Operations

| Points to consider at the organizational level | Points to consider the expectation GAP | Points to consider in quality management |

Challenges for the future

- Cooperating closely with QA Managers
- Improving the project management (Complicated project)
- Defining the QA role and tasks

END

Strategy for Global Quality Assurance

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品質保証本部**

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