

How Lean Companies in Japan Operate *KAIZEN* and Achieve **OPERATIONAL EXCELLENCE**

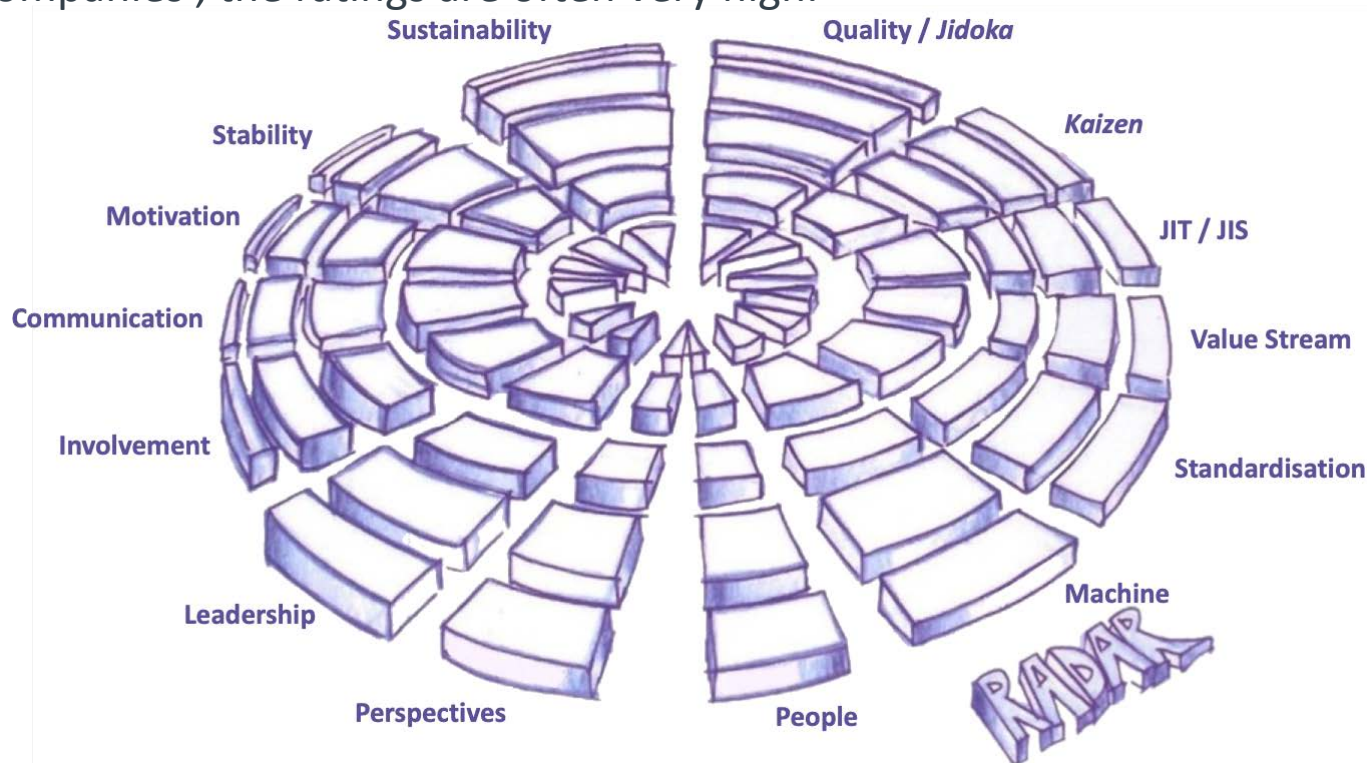
Dr Roman Ditzer

March 2019

Executive Summary on 12 Slides

The 'LEAN-RADAR' measures the strengths of a company.

During our 'Japan Seminars' we visit companies in Japan, and these are then discussed in terms of the lean production concept. The characteristics and strengths of each manufacturing system are determined and entered on the 'LEAN-RADAR'. As we visit 'lean flagship companies', the ratings are often very high.



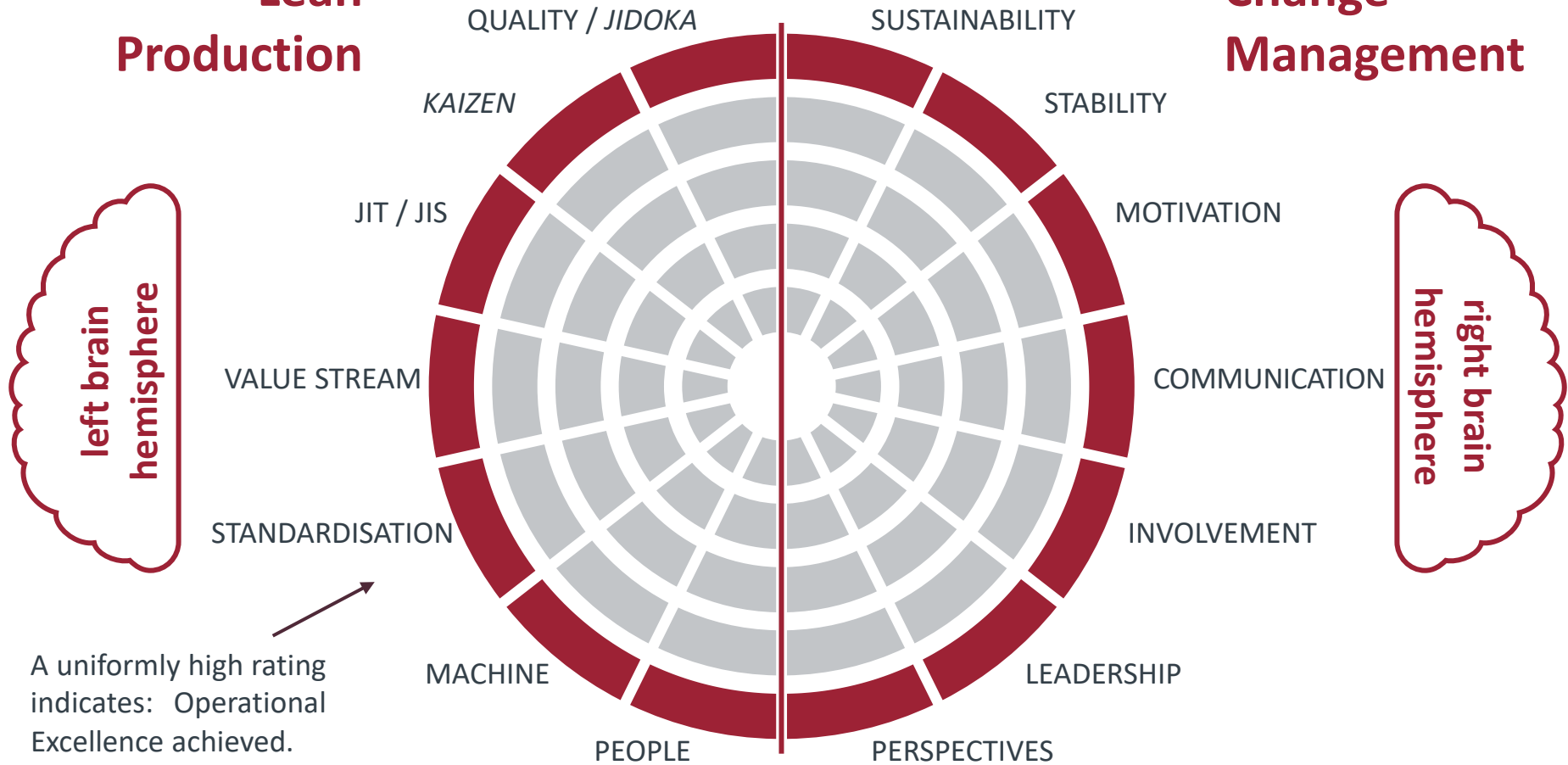
LEAN-RADAR with kind permission of AKKA Consulting GmbH © AKKA Consulting GmbH

Executive Summary on 12 Slides

Manufacturing excellence often goes hand in hand with a capacity for change.

Lean Production

Change Management



LEAN-RADAR: © AKKA Consulting GmbH

Executive Summary on 12 Slides

The pathway to Operational Excellence goes via *KAIZEN*.

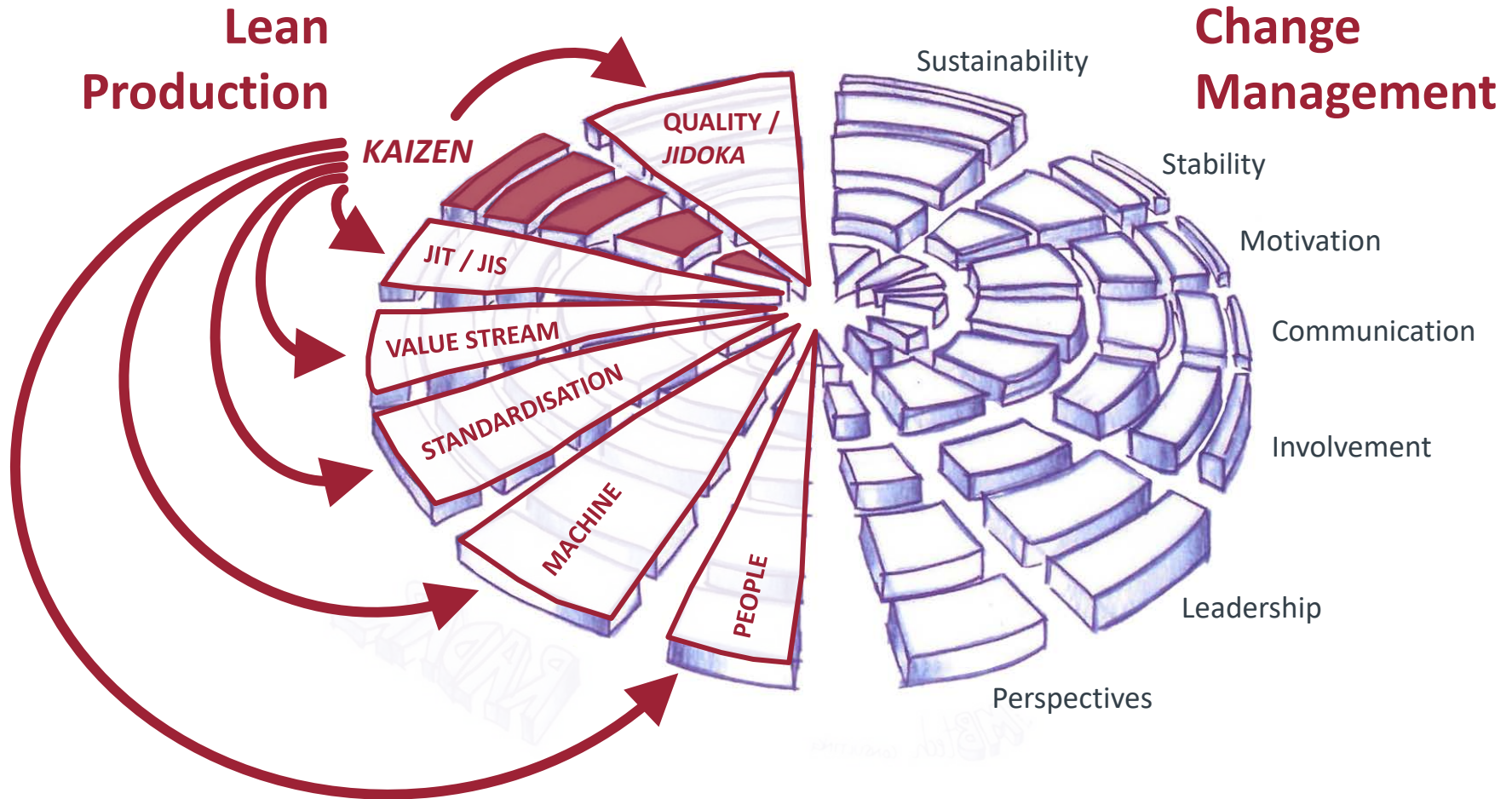
These companies have spent many years creating their production system and striving to improve it. Such improvement activities are crucial when establishing a production system. These enterprises have become flagship companies because they have improved their own methods, processes and organization. This is the result of a continuous effort to improve processes, and herein lies the strength of the flagship companies in Japan. They all share the same **aptitude for continuous and long-term improvement.**



© KEIHIN SEIMITSU KOGYO (KSK): Use of the calligraphy with kind permission of KSK

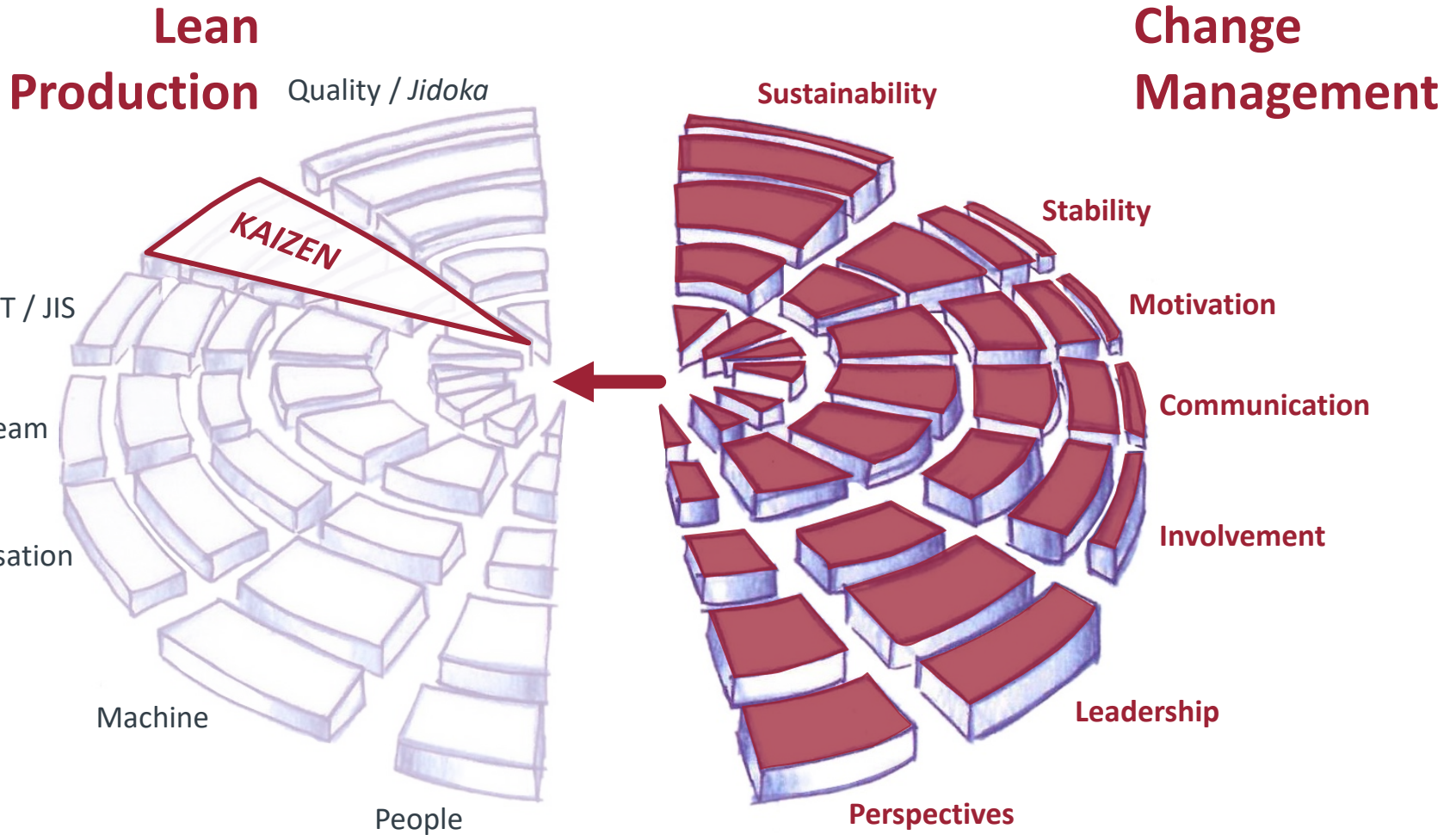
Executive Summary on 12 Slides

This *KAIZEN* strength leads to Operational Excellence.



Executive Summary on 12 Slides

However: They are only strong in *KAIZEN* because they are good at changing.



Executive Summary on 12 Slides

How can companies achieve Operational Excellence?

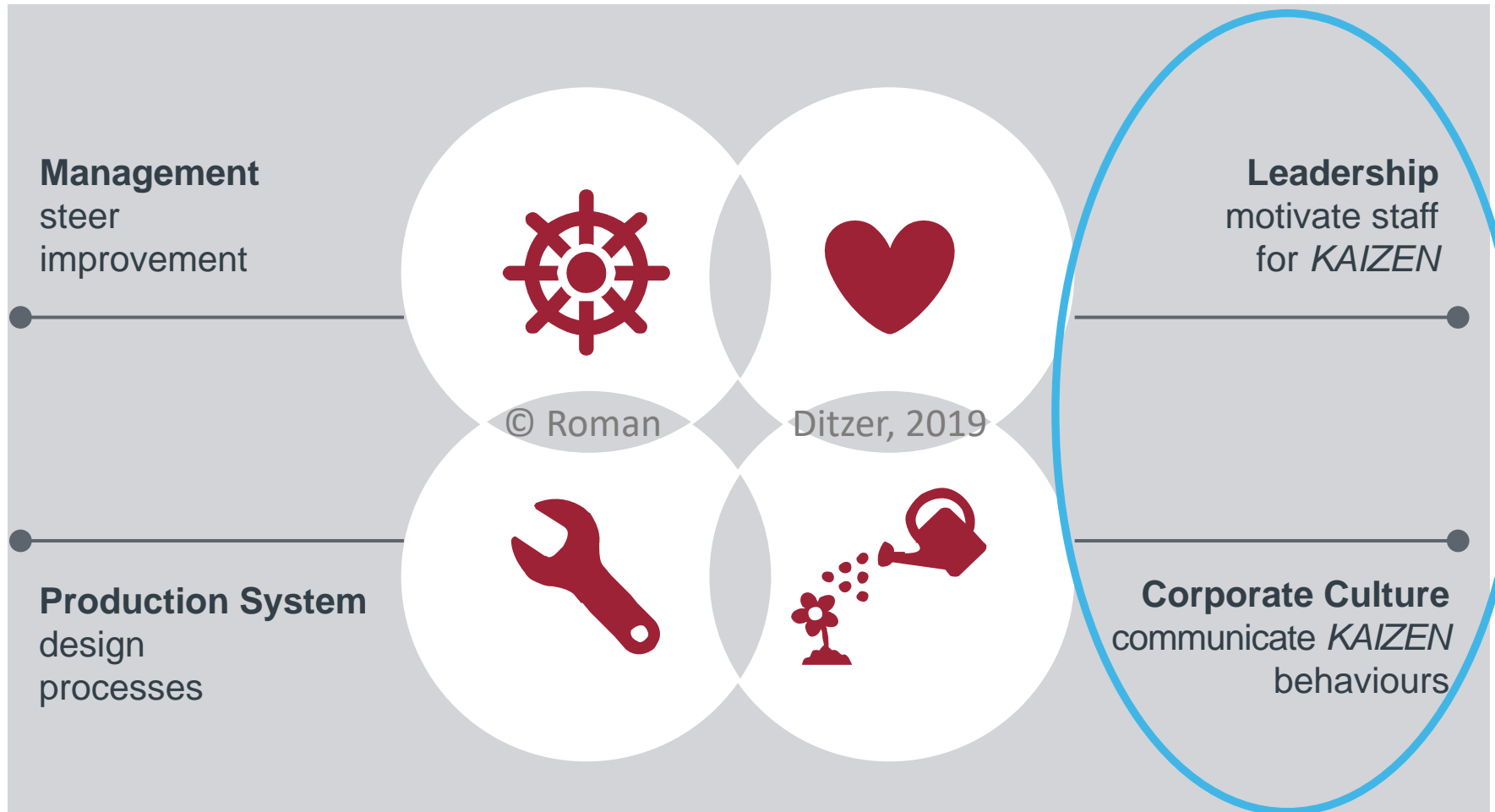
Finding 1: Operational Excellence cannot be achieved without the soft factors.

Finding 2: Managers / Executives play a decisive role in this respect.

Finding 3: Managers / Executives in Japan improve and lead differently to us:

Executive Summary on 12 Slides

Lean managers in Japan place their focus on the right side.



Executive Summary on 12 Slides

By contrast, we utilise only a portion of our potential ...

**'KAIZEN with the left
brain hemisphere'**



Leadership

Lean-Vision

Role of Managers

Communication

Employee Guidance

Autonomous Improvement
Activities

KAIZEN Competitions ...

**'KAIZEN with the right
brain hemisphere'**



Role Model

KAIZEN Mottos

Codified Corporate
Culture

Visualised Rules

Discipline ...

Corporate Culture

Executive Summary on 12 Slides

Moreover: Compared to us, Japanese companies place great importance on a bottom-up approach. This is another reason for their *KAIZEN* strength.

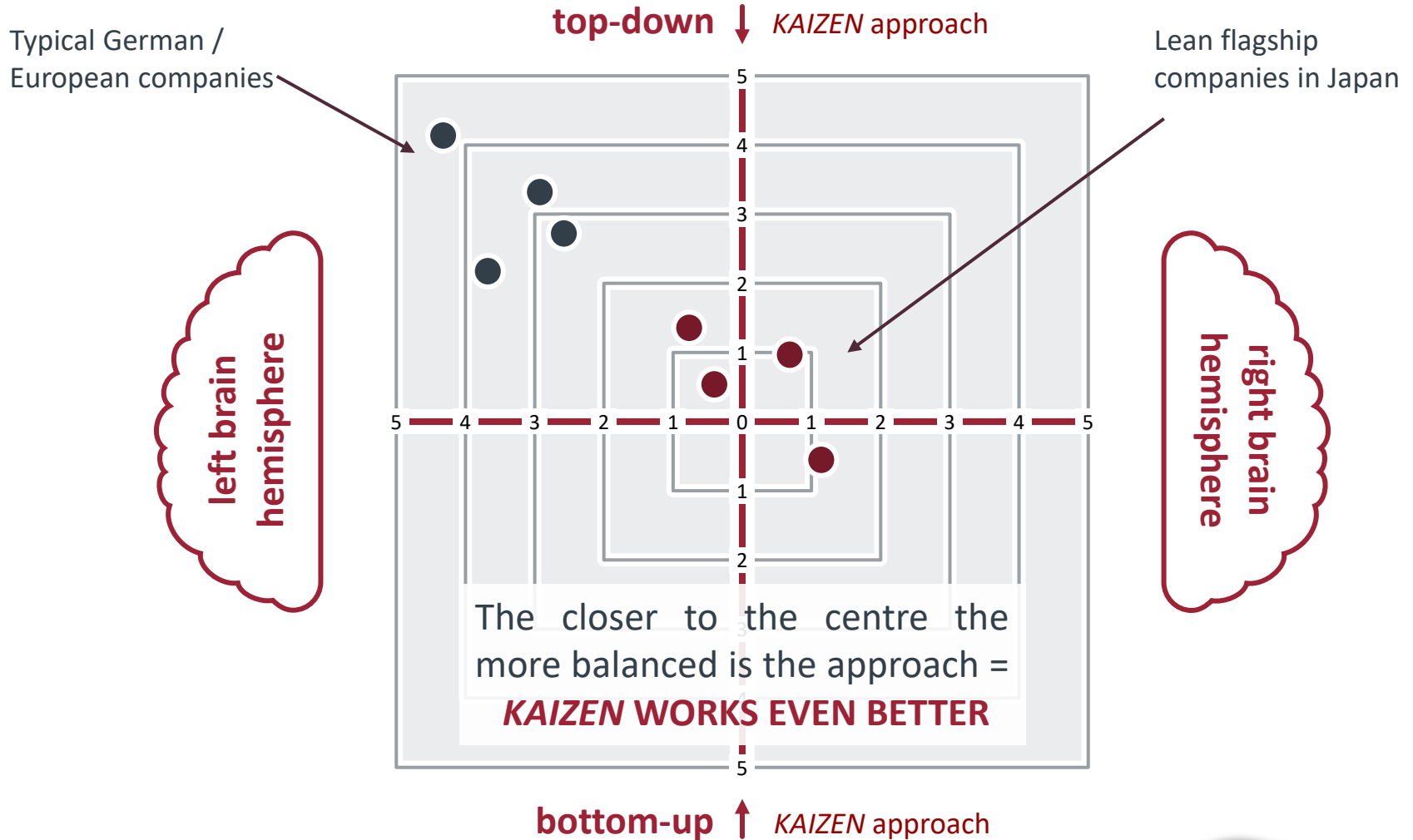
top-down
KAIZEN approach

bottom-up
KAIZEN approach

Surprising, but nonetheless true: Japanese companies are known for their rigid hierarchies, but lean flagship companies 'empower' their employees and give them enough freedom for *KAIZEN*.

Executive Summary on 12 Slides

The *KAIZEN* Balance MATRIX illustrates the differences.



Executive Summary on 12 Slides

How do companies achieve Operational Excellence?

Finding 4 – with regard to *KAIZEN*:

The right mixture is key – between top-down / bottom-up, and right / left brain hemispheres.

Finding 5 – with regard to leadership and organisation:

Excellence in value CREATION comes from APPRECIATION.

'Lean Production and Leadership Operational Excellence of Companies in Japan'



Nothing is more inspirational than successful role models.

Illustration: R. Ditzer 2013

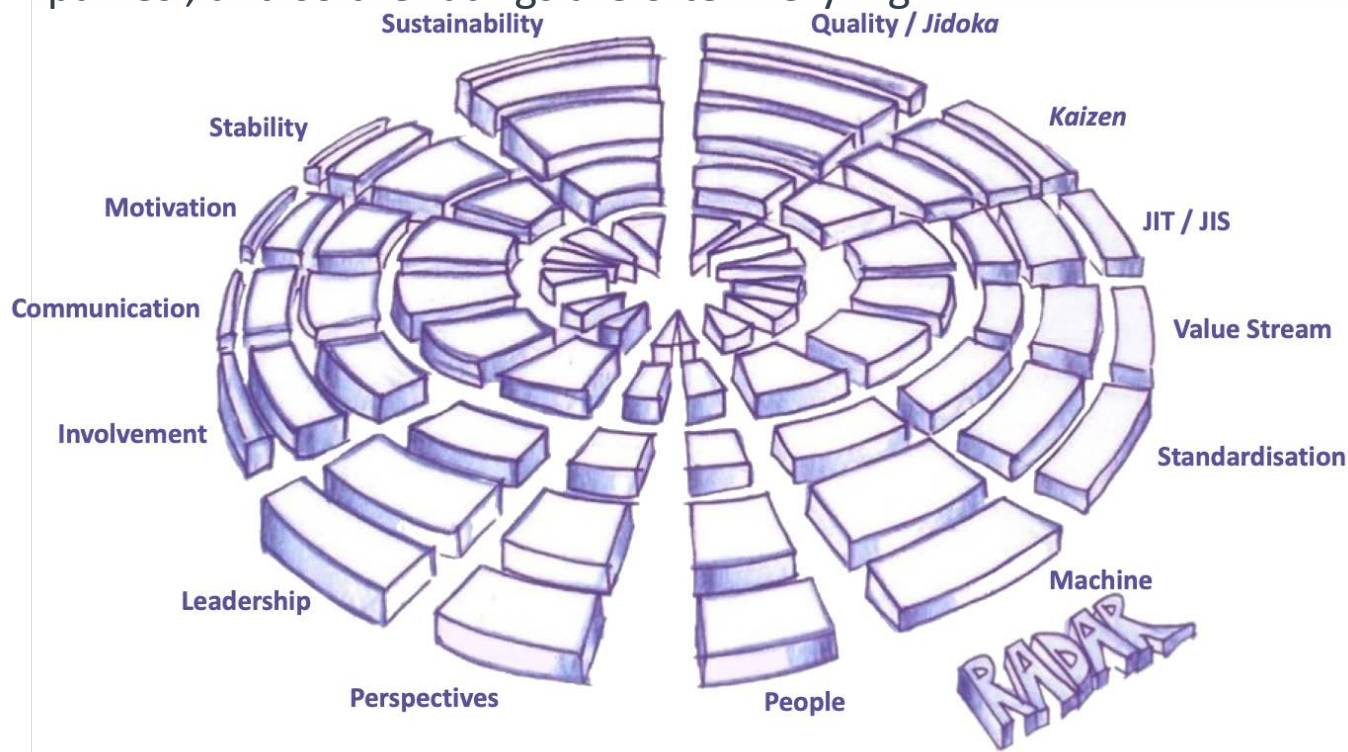
The KAIZEN BALANCE MATRIX – Operational Excellence Through an Even Balance of Management and Leadership

Detailed explanations of the Executive Summary

The 'LEAN-RADAR'

measures the strengths of a company

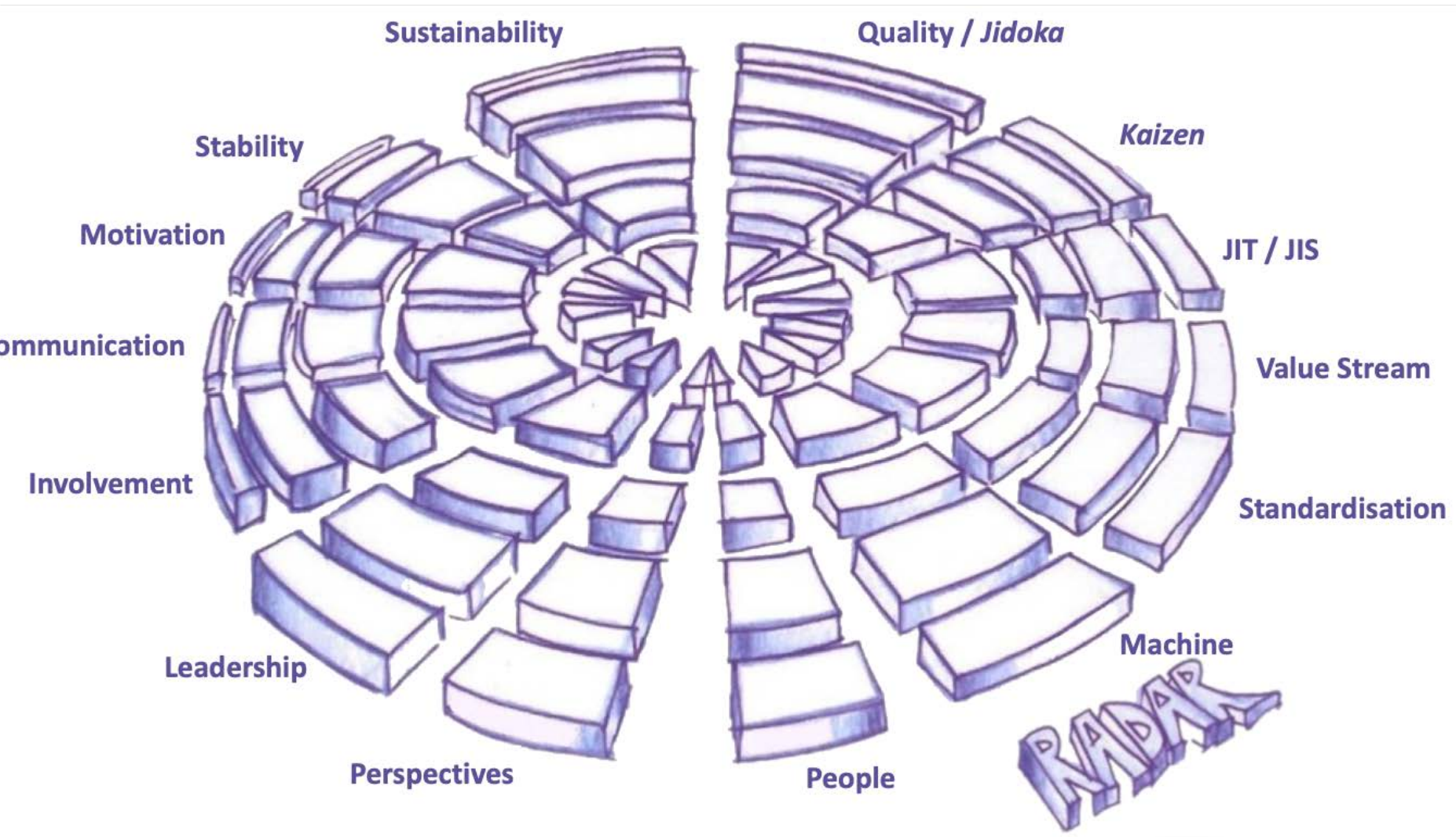
During our 'Japan Seminars' we visit companies in Japan; these are then discussed in terms of the lean production concept. The characteristics and strengths of each manufacturing system are determined and entered on the 'LEAN-RADAR'. We visit 'lean flagship companies', and so the ratings are often very high.



LEAN-RADAR with kind permission of AKKA Consulting GmbH © AKKA Consulting GmbH

Change Management

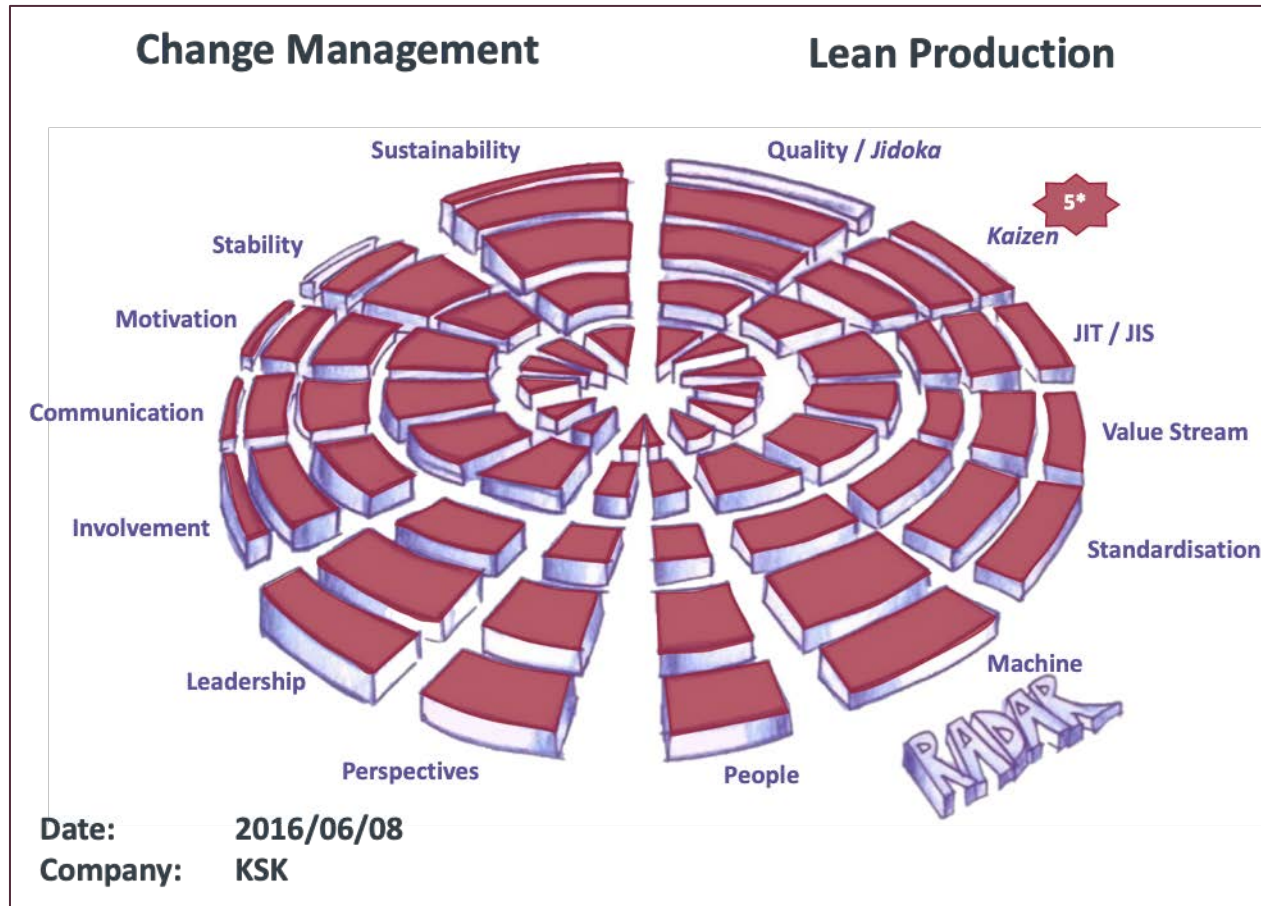
Lean Production



LEAN-RADAR: © AKKA Consulting GmbH

Lean flagship companies in Japan: KSK plant in Kanuma

Operational Excellence can be seen on the 'LEAN-RADAR'



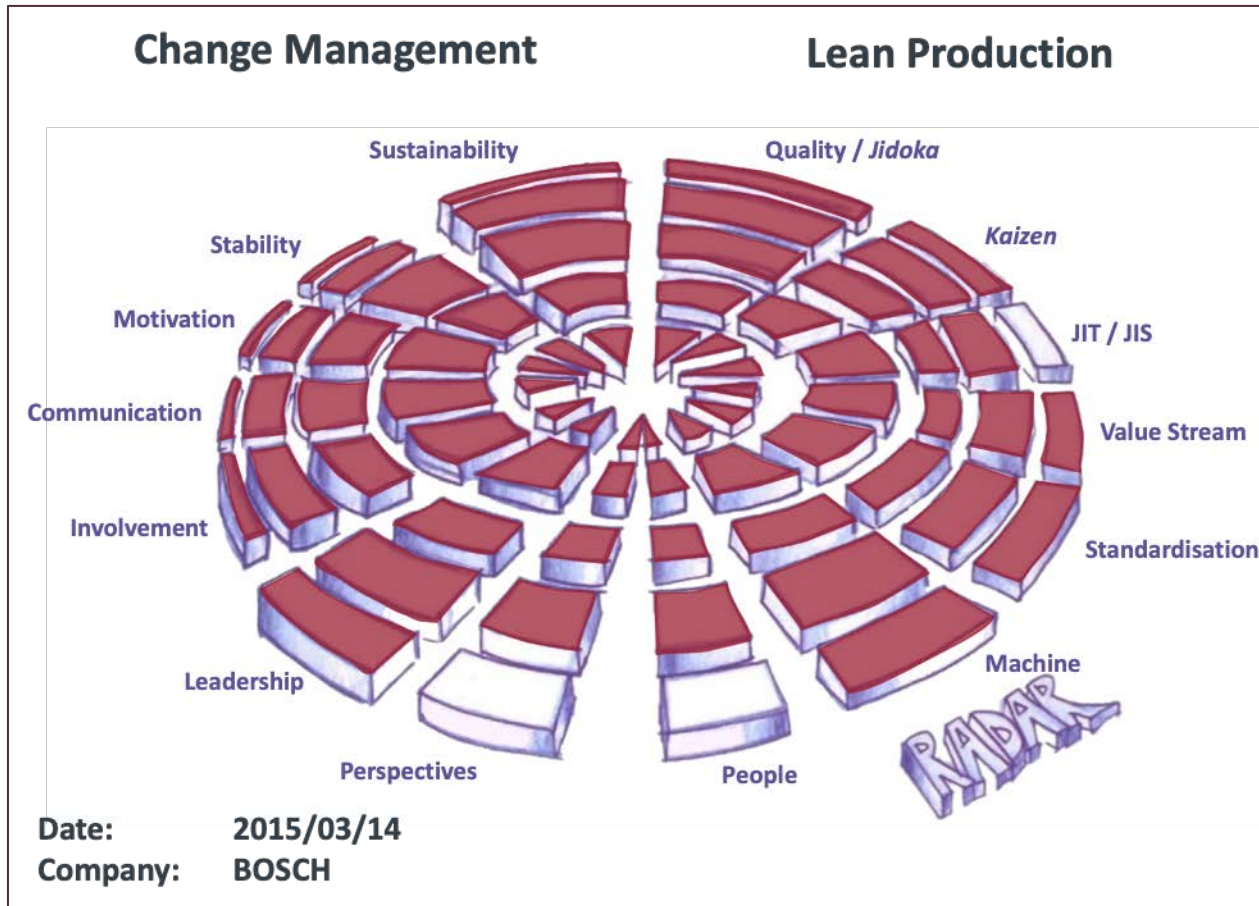
Grading on the radar from 1 to 5, the further out, the better; top grade = 5.

LEAN-RADAR: © AKKA Consulting GmbH

© KEIHIN SEIMITSU KOGYO (KSK): Use of the data with kind permission of KSK

Lean flagship companies in Japan: BOSCH TgP (Tochigi plant)

Operational Excellence can be seen on the 'LEAN-RADAR'



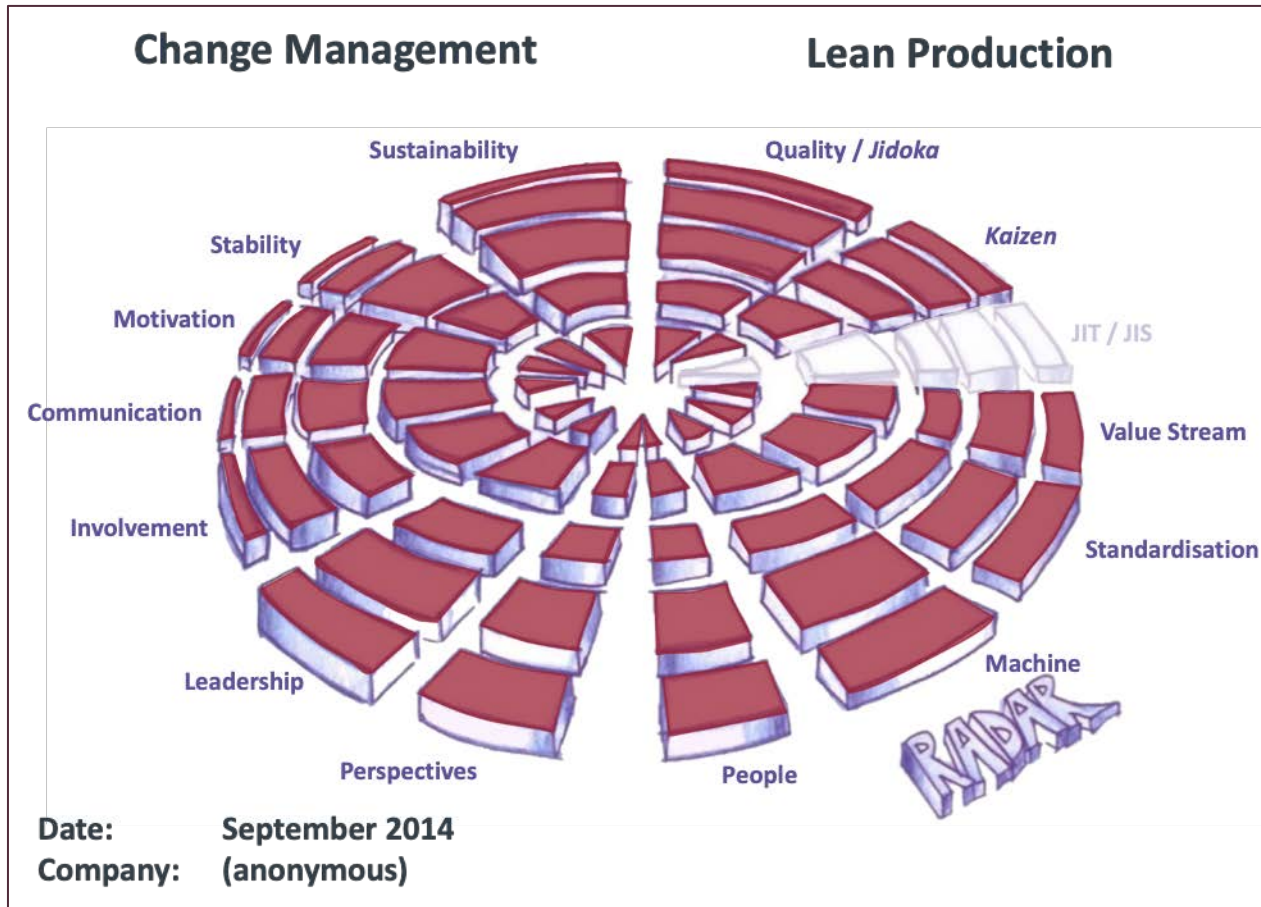
Grading on the radar from 1 to 5, the further out, the better; top grade = 5.

LEAN-RADAR: © AKKA Consulting GmbH

© BOSCH: Use of the data with kind permission of BOSCH Japan

Lean flagship companies in Japan: [Company X Plant Y]

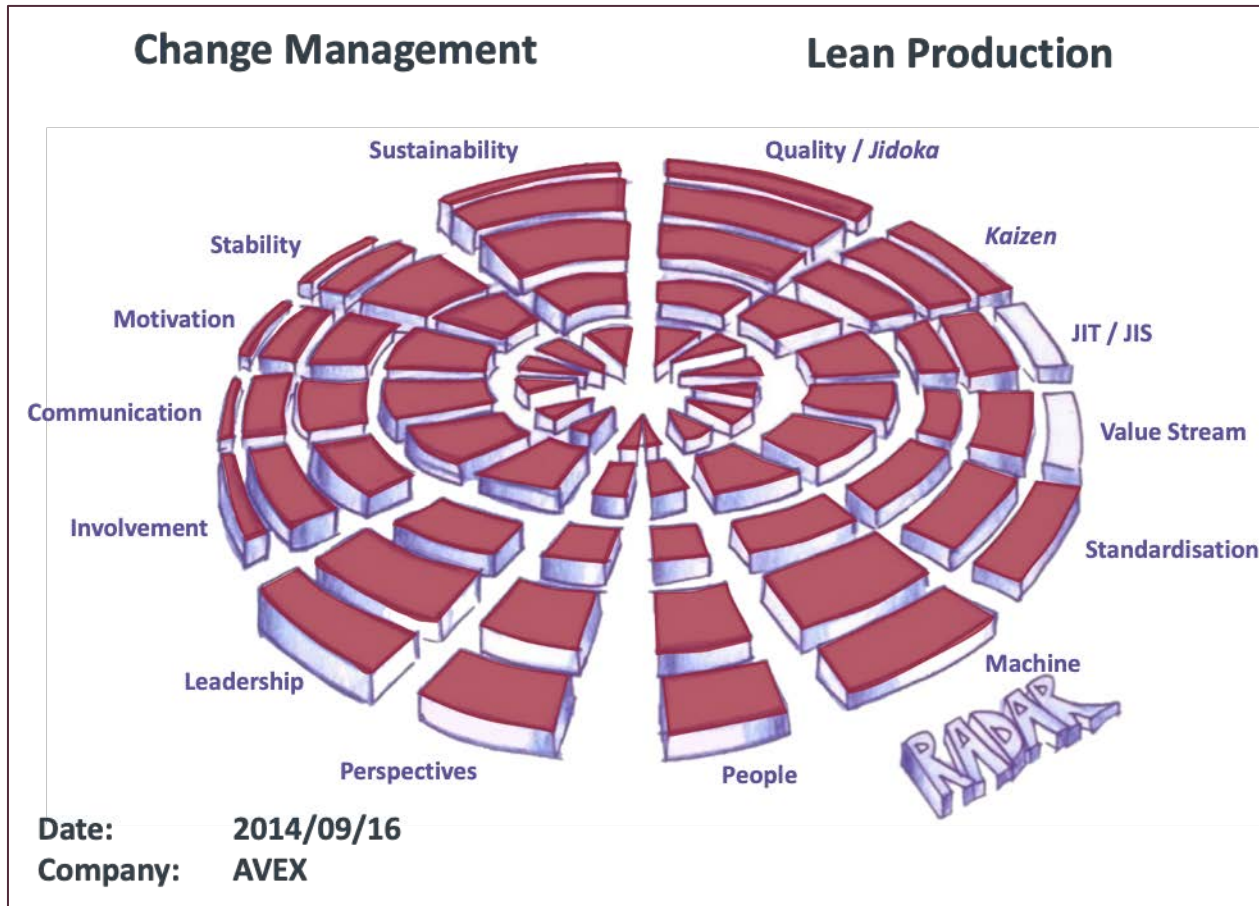
Operational Excellence can be seen on the 'LEAN-RADAR'



Grading on the radar from 1 to 5, the further out, the better; top grade = 5.

Lean flagship companies in Japan: AVEX plant Tado

Operational Excellence can be seen on the 'LEAN-RADAR'

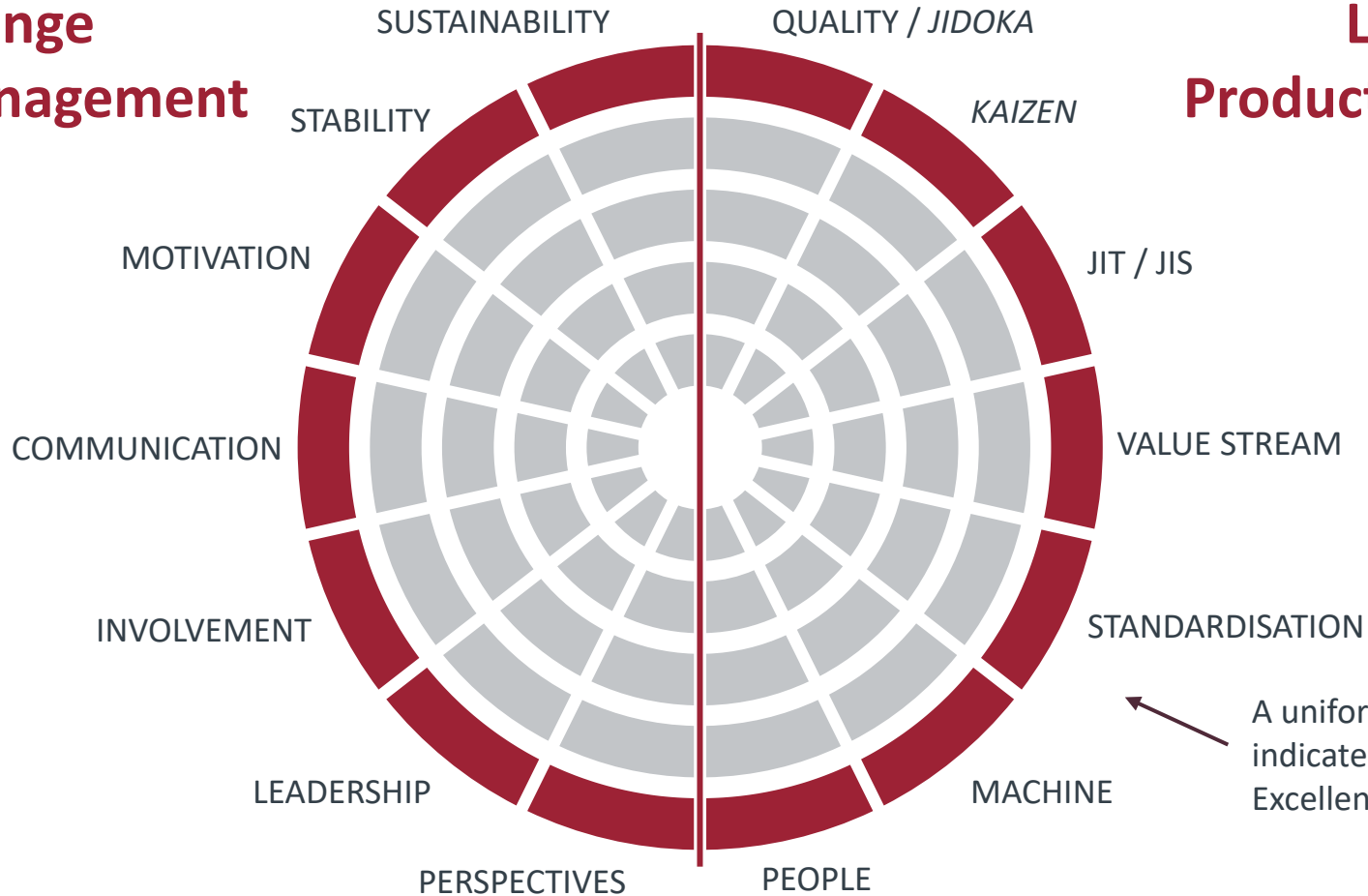


Grading on the radar from 1 to 5, the further out, the better; top grade = 5.

Manufacturing excellence is shown on the right side. As you can see: The companies are equally effective in change management.

Change Management

Lean Production

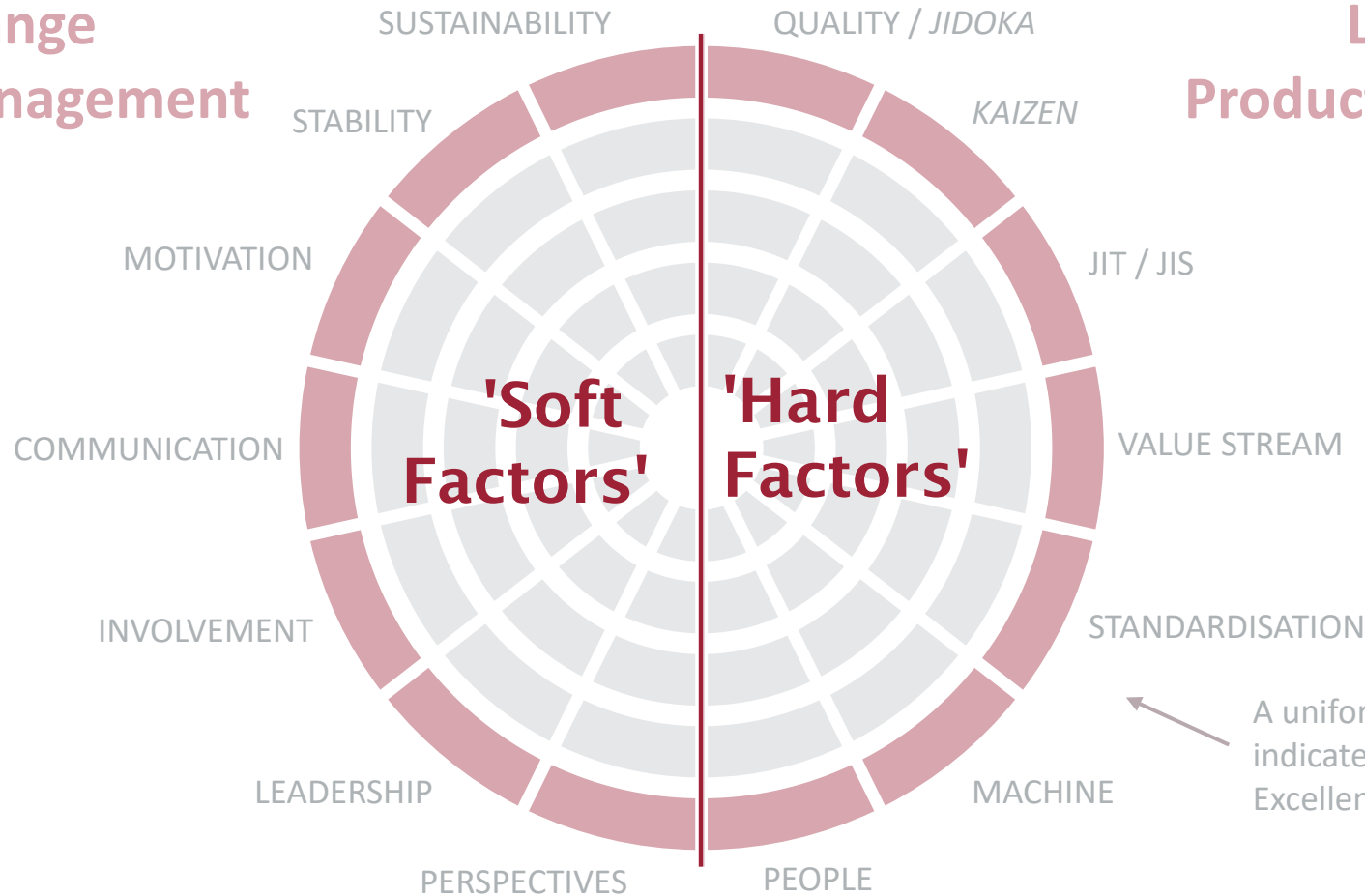


← A uniformly high rating indicates: Operational Excellence achieved.

In other words: The lean flagship companies are effective in both hard and soft factors.

Change Management

Lean Production



← A uniformly high rating indicates: Operational Excellence achieved.

Lean flagship companies in Japan

A question ...

**Just what makes the lean
flagship companies in
Japan so good?**

Answer 1:

Because they have a manufacturing concept.

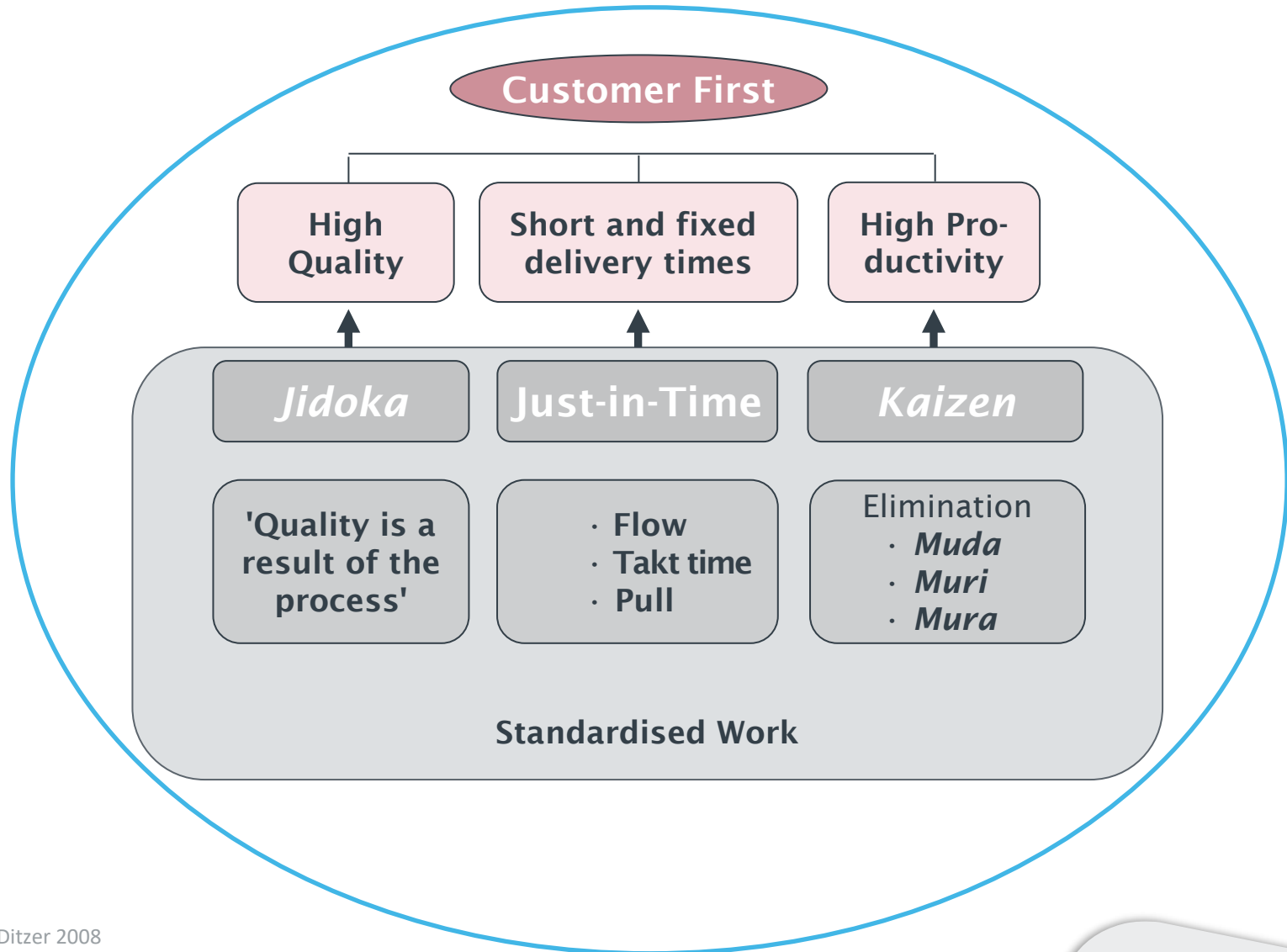
'Lean flagship companies' have all reached a high level of Quality, Cost, Delivery (Operational Excellence). But this is just one result.

These companies have a vision of an ideal production process; they have defined the necessary principles and have introduced a **manufacturing concept**, i.e. a **production system**. The Toyota Production System is a world famous example, consisting of the following pillars:

- *Jidoka* (autonomation)
- Just-in-Time (flow, takt time, pull)
- Standardisation and *KAIZEN*

The specific terms and content can vary depending on the company, but such a **system** is used to determine the desired state (target state), and this is used to provide orientation. The staff are also well-acquainted with this manufacturing concept.

Because they have a manufacturing concept.



Answer 2:

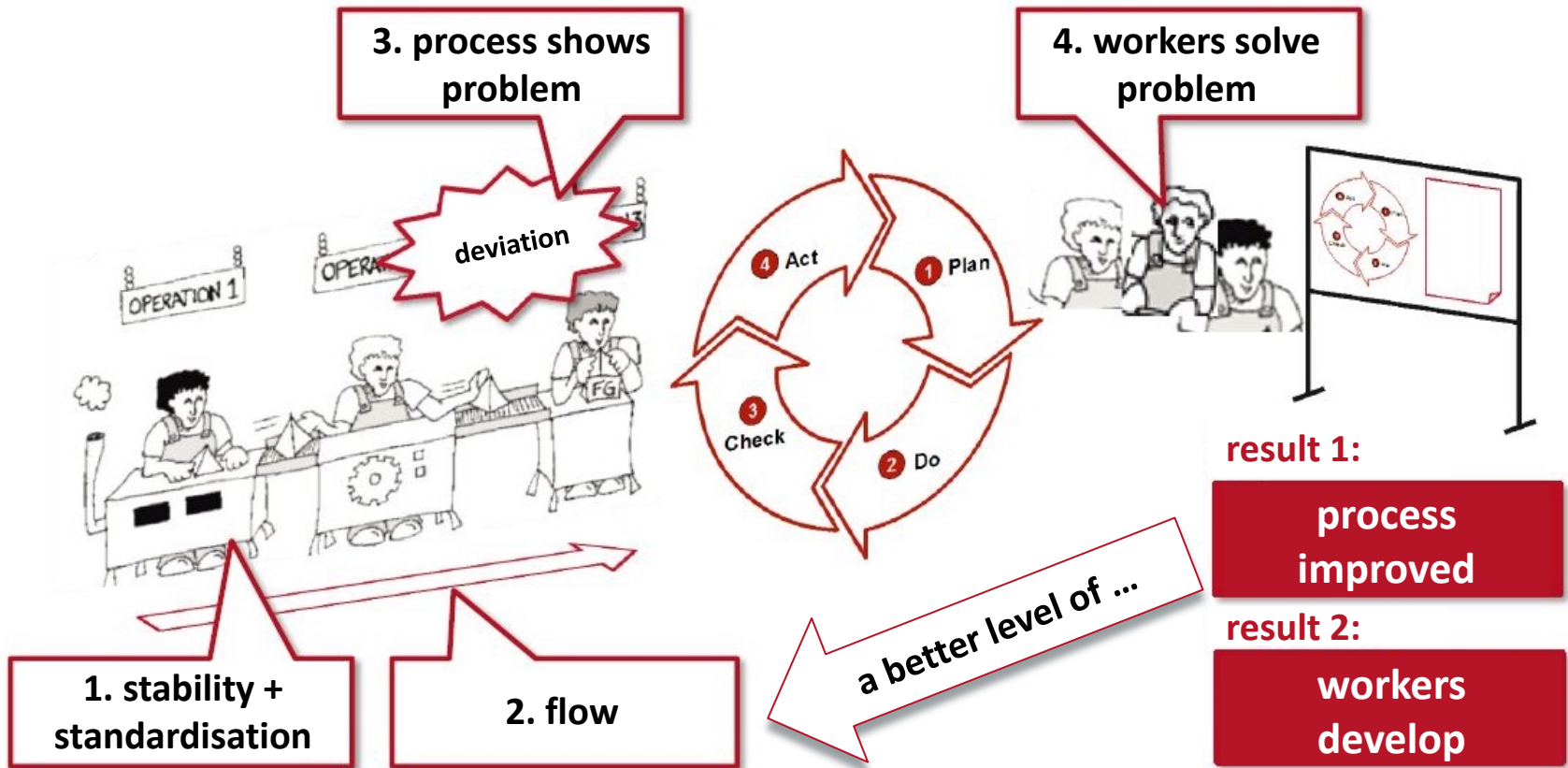
They have practiced continuous improvement for many years.

These companies have spent many years creating their production system and striving to improve it. Improvement activities are crucial when establishing the production system. They have become flagship companies because they have improved their own methods, processes and organization. This is the result of a continuous effort to improve processes, and herein lies the strength of the Japanese flagship companies. They all share the same **aptitude for continuous and long-term improvement.**



© KEIHIN SEIMITSU KOGYO (KSK): Use of the calligraphy with kind permission of KSK

The relationship between the lean manufacturing concept and *KAIZEN*

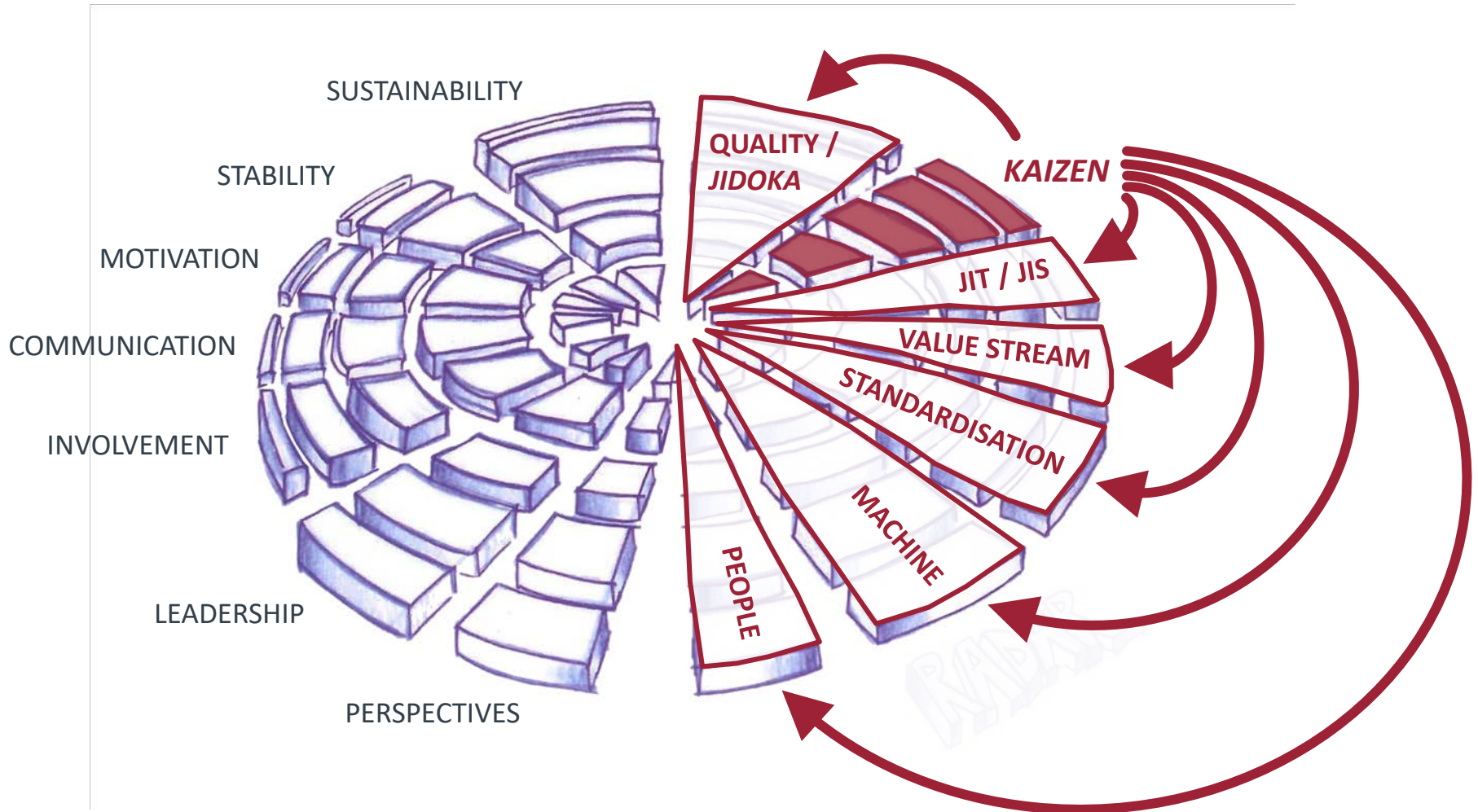


The mechanism of lean production, according to Professor Metternich:
The result is that the processes improve *and* the employees develop.

© Professor J Metternich, TU Darmstadt, *Institut für Produktionsmanagement, Technologie und Werkzeugmaschinen*,
Use of the graphic by kind permission of Professor Metternich.

The relationship between *KAIZEN* and OPERATIONAL EXCELLENCE

The mechanism depicted on the 'LEAN-RADAR'



Lean flagship companies in Japan

Why are these companies so good?

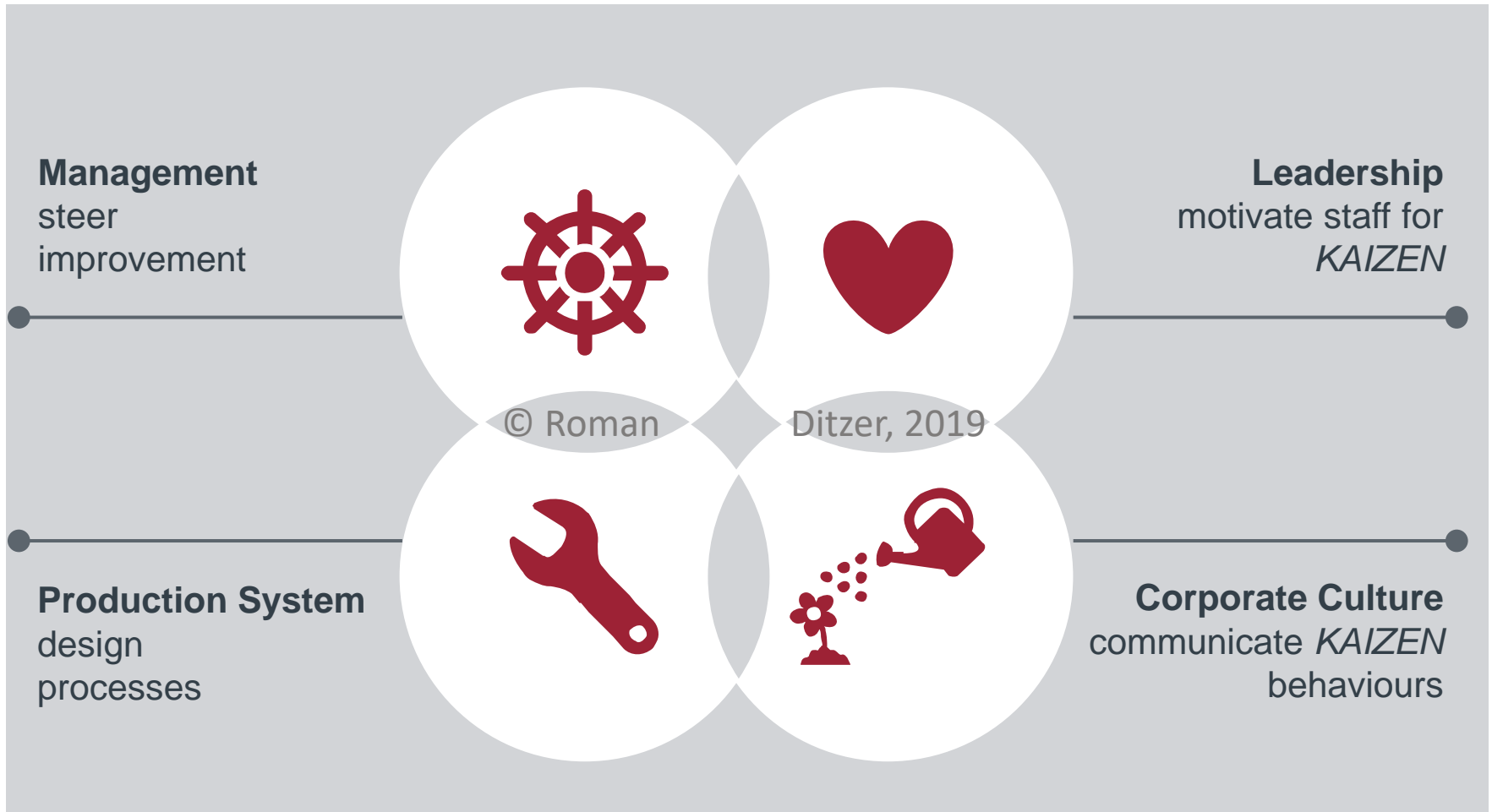
Finding 1:

Because they rigorously conduct *KAIZEN* activities, they have reached a high level of Quality, Cost, Delivery (Operational Excellence).

However: There is no *KAIZEN* without the contribution of the staff.
Next question ...

How do they encourage their staff to continuously participate in these efforts?

Here it's all about management and leadership: First you need to understand the lean improvement system in a holistic way.



Each circle contains tasks for executives / managers. Improving the company entails a variety of challenges.

Management

Strategy (Policy Deployment)
KPIs
Shopfloor Management
Visual Management
Standardised Improvement
Process (PDCA)
Suggestion Scheme ...



© Roman

Leadership

Lean-Vision
Role of Managers
Communication
Employee Guidance
Autonomous Improvement
Activities
KAIZEN Competitions ...



Ditzer, 2019

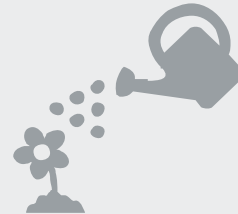
Production System

Lean Processes
Flawless Products
TAKT, FLOW, PULL
Just-in-Time
KAIZEN-capable Facilities
TPM, 5S ...

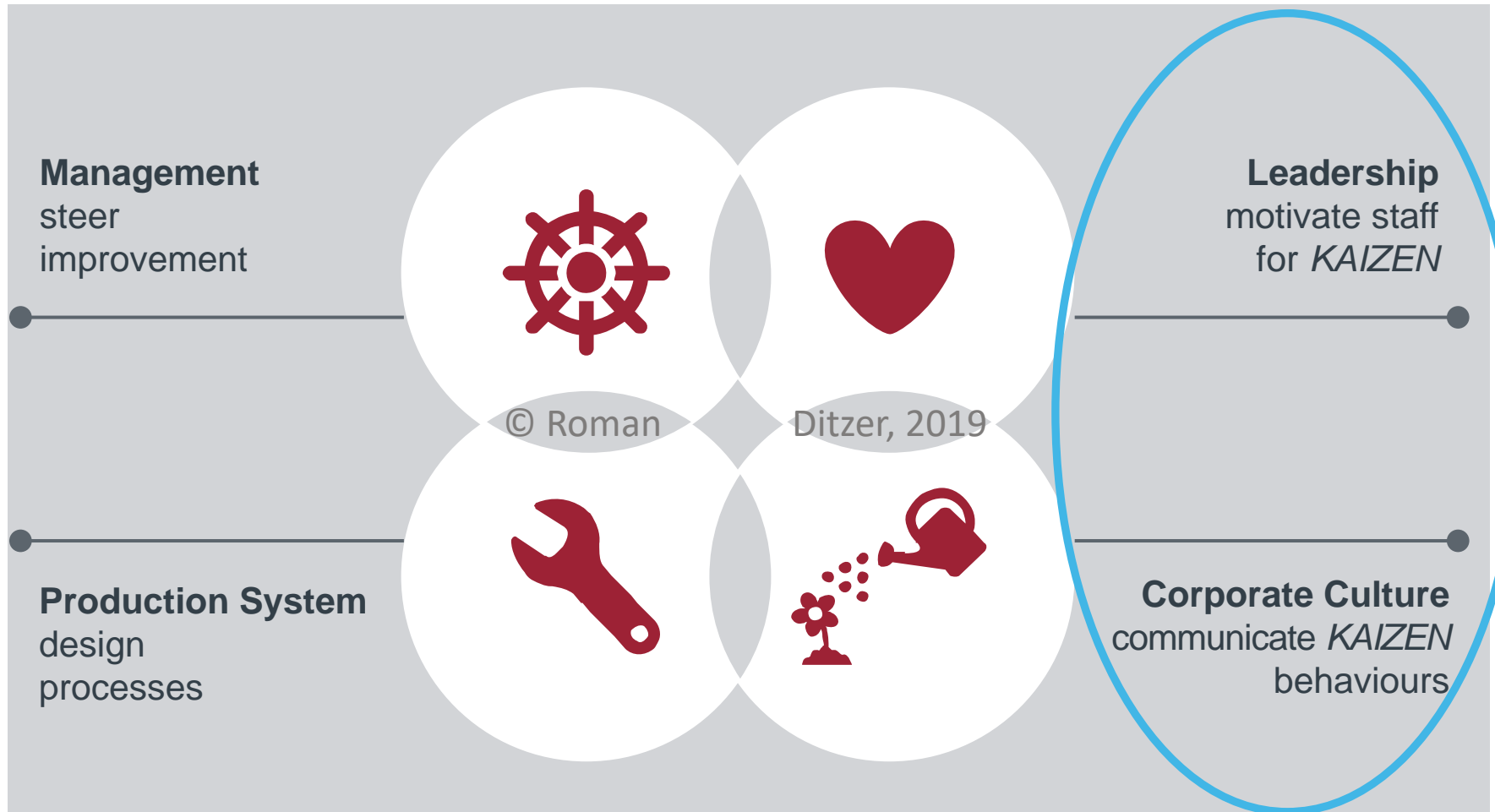


Corporate Culture

Role Model
KAIZEN Mottos
Codified Corporate
Culture
Visualised Rules
Discipline ...



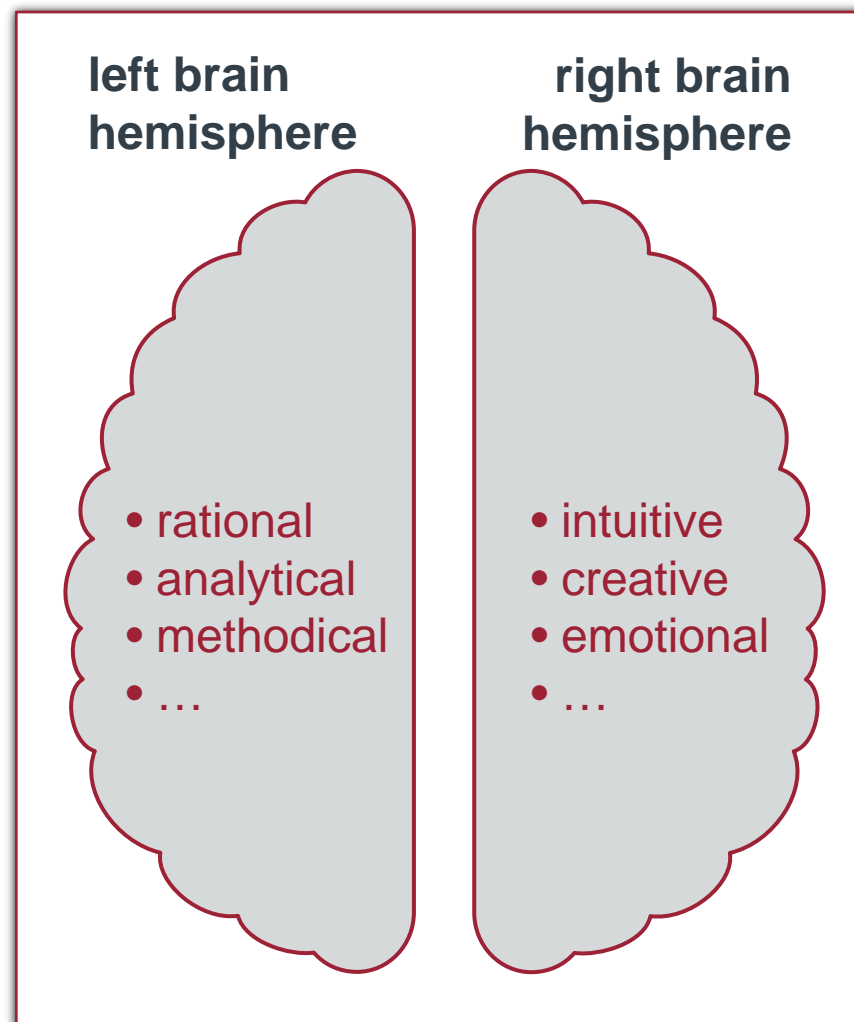
Lean leaders in Japan place greater emphasis on the right side of this system.



'KAIZEN with the right brain hemisphere'

If the company is to improve, it is essential that the staff make a contribution. It is the job of the managers to motivate them to do their part. How can they succeed?

To answer this question, I use the term 'KAIZEN with the right brain hemisphere'. The underlying principle is that *KAIZEN* managers not only address the traits and functions of the left brain, they also consider the right brain hemisphere.



If you layer and overlap the left, right brain hemispheres and the lean improvement system ...

KAIZEN with the left brain hemisphere

Management
steer improvement



© Roman

Production System
design processes



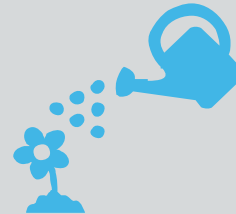
KAIZEN with the right brain hemisphere

Leadership
motivate staff for
KAIZEN



Ditzer, 2019

Corporate Culture
communicate *KAIZEN*
behaviours



Left hemisphere: There are many principles and instruments to carry out lean and *KAIZEN* in a rational and systematic way.

Management

steer improvement:

- Policy Deployment
- Shopfloor Management
- PDCA
- ...

Production System

design processes:

- Just-in-Time
- 0 Defects
- 0 Stocks
- *Kanban* Guidance
- *Andon, Pokayoke*
- ...



© Roman



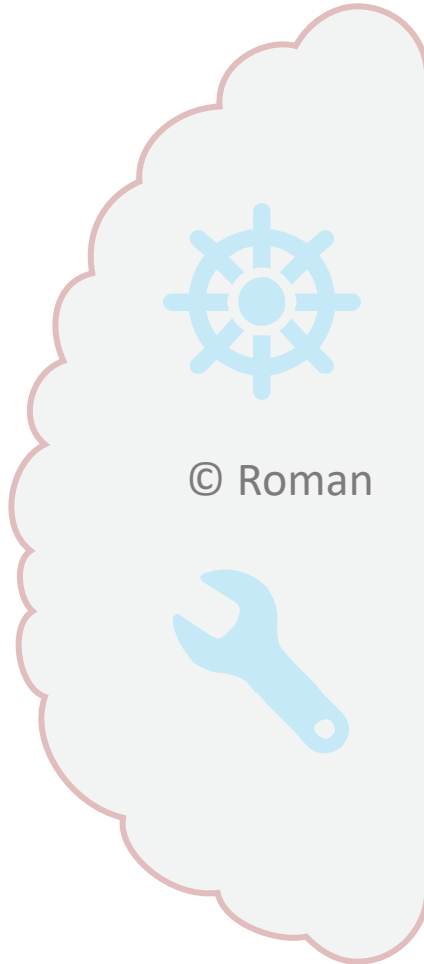
Ditzer, 2019



KAIZEN with the right brain hemisphere

So what is '*KAIZEN* with the right brain hemisphere'?

KAIZEN with the left
brain hemisphere



© Roman



Ditzer, 2019

Leadership
motivate staff for
KAIZEN



Corporate Culture
communicate *KAIZEN*
behaviours

What exactly do managers in lean flagship companies do regarding 'KAIZEN with the right brain hemisphere'?

Humans

are not robots that work in a strictly rational way. In order to increase the motivation for *KAIZEN*, you also have to engage the right brain of your employees.

There is a pro-*KAIZEN* attitude and behaviour. However, a *KAIZEN* culture must first be communicated to the employees.

And this is the task of managers.



Leadership

Lean-Vision

Role of Managers

Communication

Employee Guidance

Autonomous Improvement
Activities

KAIZEN Competitions ...

'KAIZEN with the right side'

Role Model

KAIZEN Mottos

Codified Corporate
Culture

Visualised Rules

Discipline ...

Corporate Culture

See here for further information on 'KAIZEN with the right brain hemisphere':
<https://rdinterlogue.com/de/beratung#ppt>

You will get further insights and specific 'HOW TO' tips at our Japan Seminars.

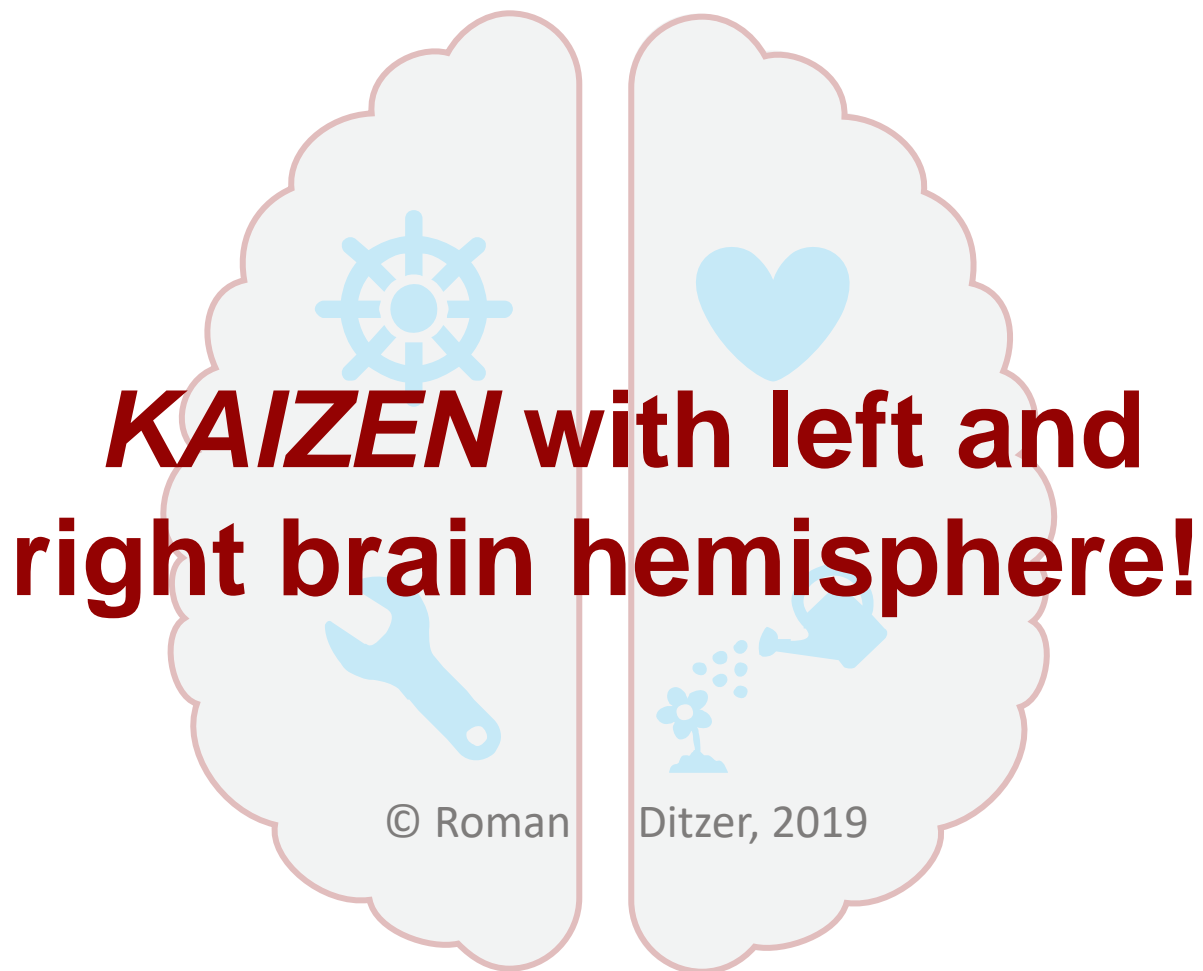
- **Japan-Seminars: See how it works**
- **HOW TO: Workshops, Presentations, Consultation**

Info and dates at:

https://rdinterlogue.com/de/japan_seminar

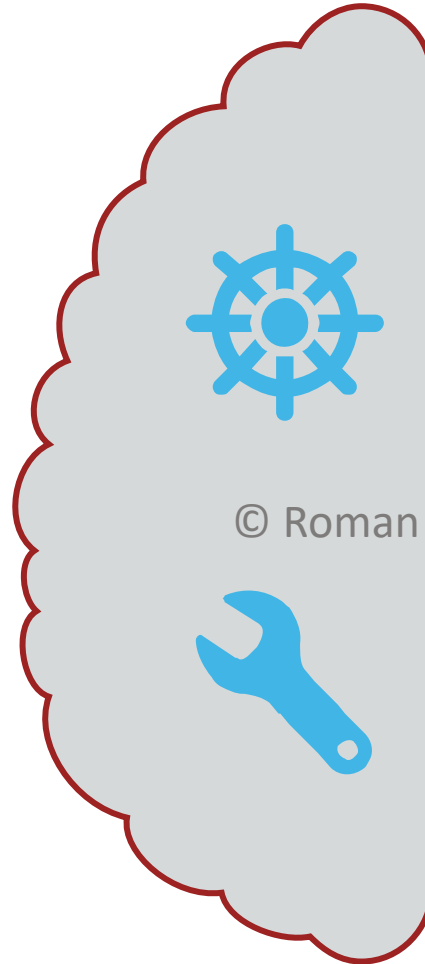
Advertisement

Lean flagship companies operate a balanced *KAIZEN* approach with both the left and right brain hemisphere.



In Europe, on the other hand, we often only use part of our potential ...

'KAIZEN with the left brain hemisphere'



Leadership

Lean-Vision

Role of Managers

Communication

Employee Guidance

Autonomous Improvement Activities

KAIZEN Competitions ...

'KAIZEN with the right brain hemisphere'



Role Model

KAIZEN Mottos

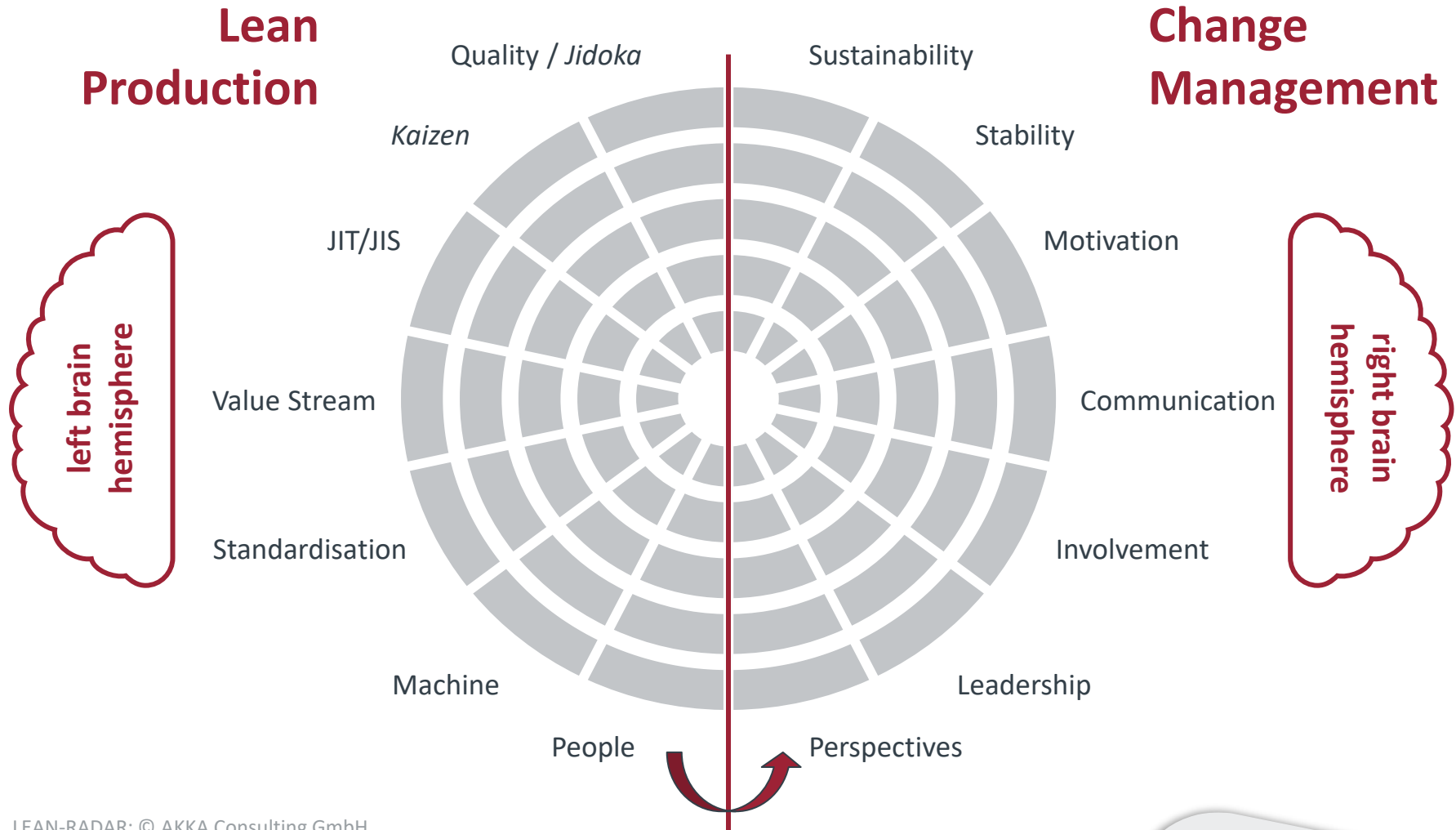
Codified Corporate Culture

Visualised Rules

Discipline ...

Corporate Culture

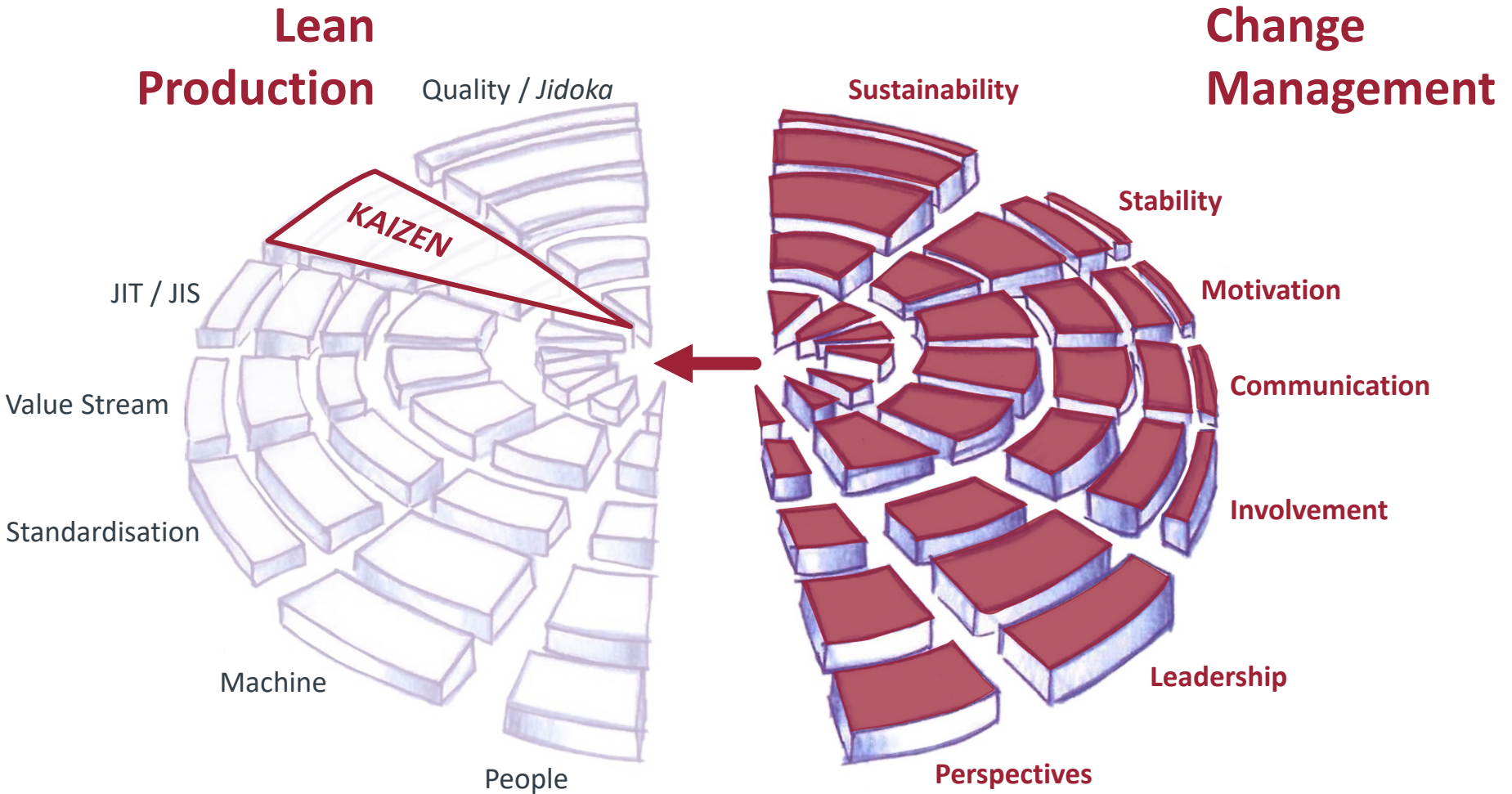
In the original 'LEAN-RADAR', the elements on the left are part of the right brain hemisphere, and so this is why it is rotated here.



LEAN-RADAR: © AKKA Consulting GmbH

The mechanism depicted in the 'LEAN-RADAR'

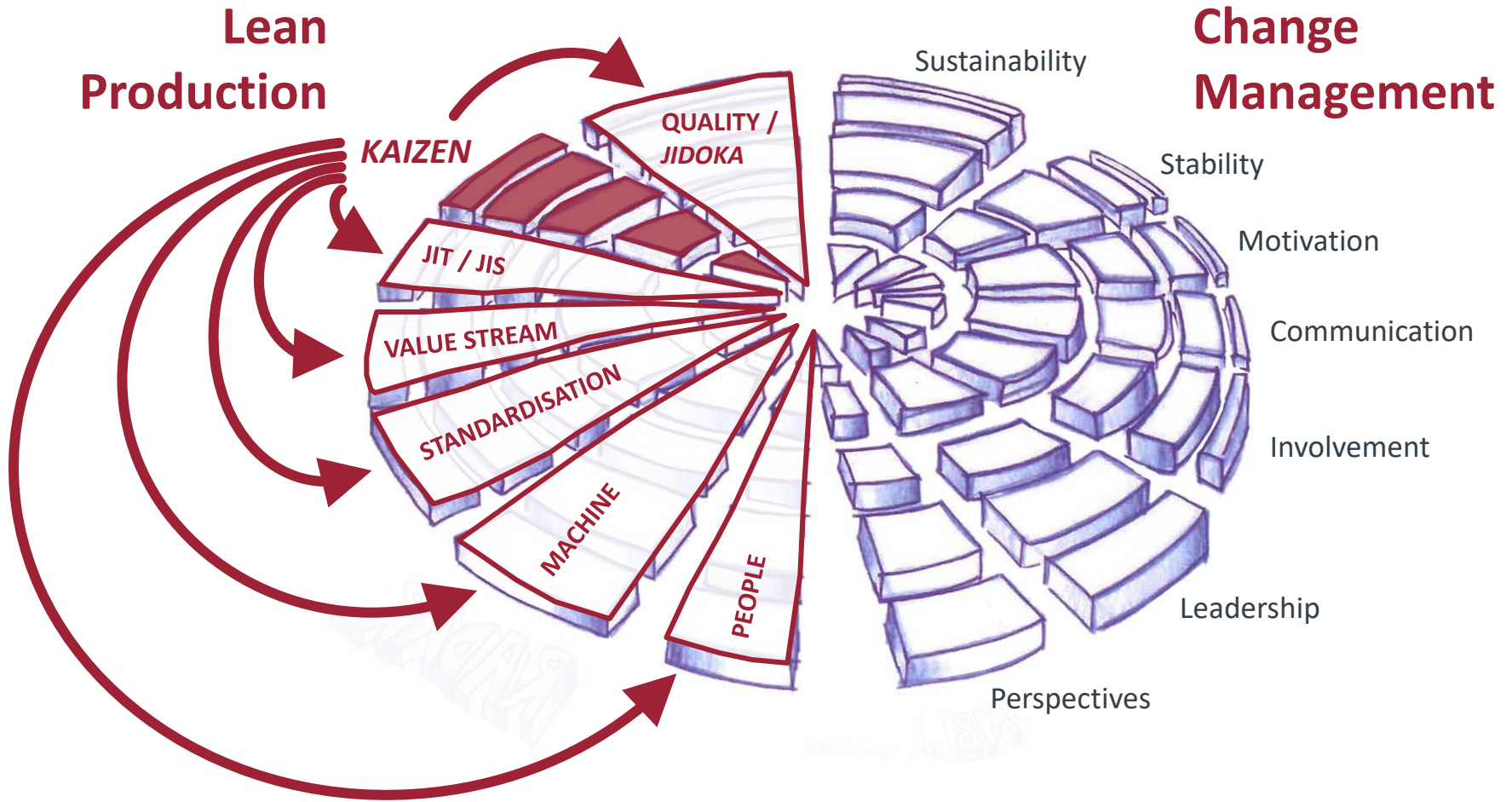
They're good at change management (soft), so they're strong in *KAIZEN*.



LEAN-RADAR: © AKKA Consulting GmbH

The mechanism depicted in the 'LEAN-RADAR'

KAIZEN strength leads to excellence in manufacturing (hard).



Lean flagship companies in Japan

Why are these companies so good??

Finding 2: Operational Excellence cannot be achieved without the soft factors.

Finding 3: This is where managers / executives play a decisive role.

Finding 4: Lean leaders work evenly on *KAIZEN* with left and right brain hemispheres, thus enabling their staff to contribute consistently.

"When I come to a factory for the first time, I pay attention to the eyes of the employees – i.e. whether or not they sparkle."



© Roman Ditzer, 2019

This was said by a former top manager at Toyota. The sparkle in the eyes is a reflection of the motivation. This is also a measure of the management's performance.

When the eyes light up, it is a statement about the abilities ...

... from the shop floor and plant: If the motivation of the workforce is high, it is easier to drive improvements. However, as the former top manager at Toyota points out:

Building an organization and corporate culture like this takes a lot of time and effort!



© Roman Ditzer, 2019

Lean flagship companies in Japan

Why are these companies so good??

Finding 5:

Excellence in value CREATION comes from APPRECIATION.

Appreciation doesn't only entail guidance and coaching on the part of managers, but also empowerment on the part of the organisation.

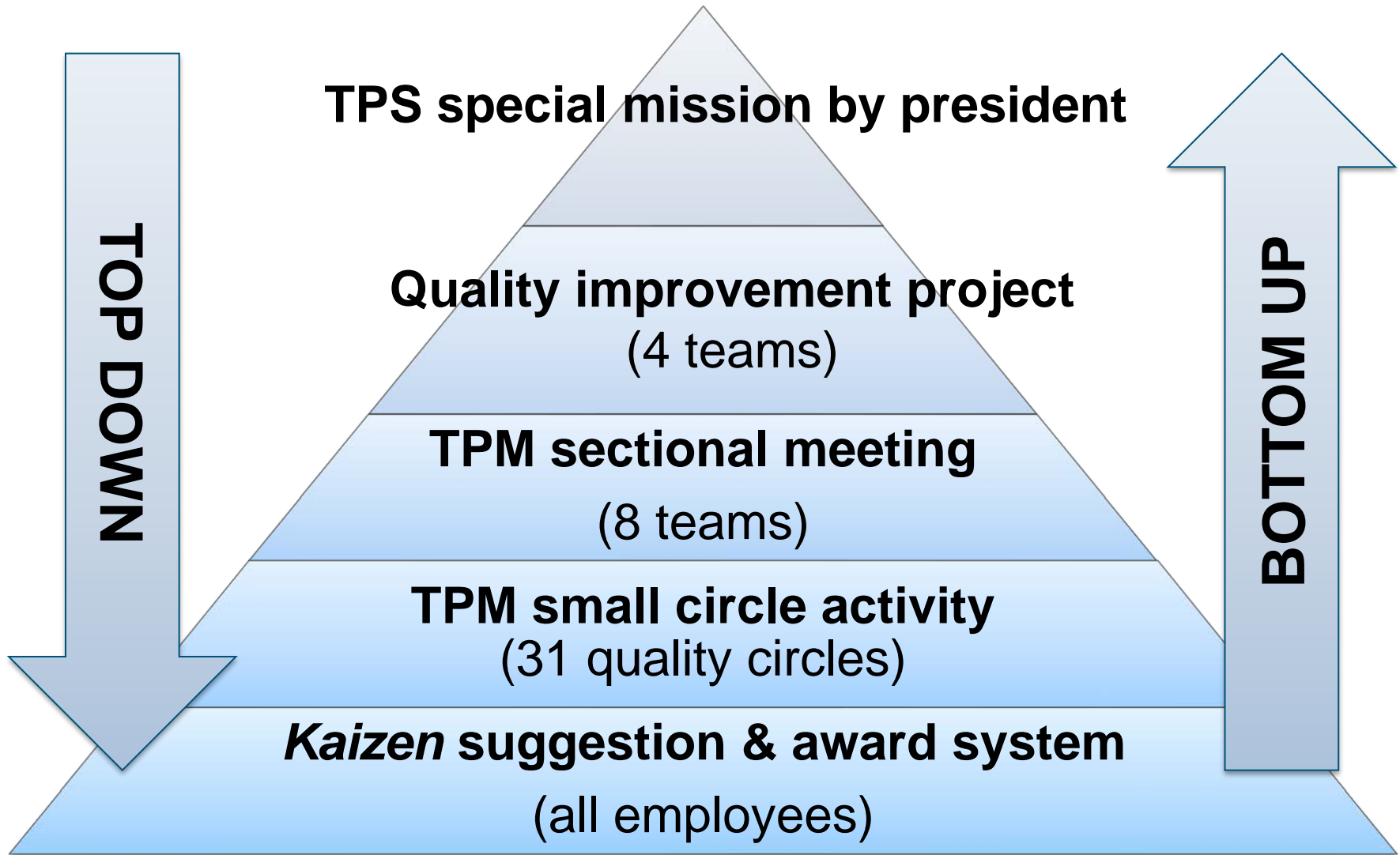
There is another special feature of Lean flagship companies in Japan which cannot be represented on the 'LEAN-RADAR'.

KAIZEN follows a top-down approach as well as a bottom-up approach. This balanced strategy is another reason for the superiority of the lean flagship companies.

top-down
KAIZEN approach

bottom-up
KAIZEN approach

KSK's *Kaizen* top-down and bottom-up activities



© KEIHIN SEIMITSU KOGYO (KSK), Use of the graphic with kind permission of KSK

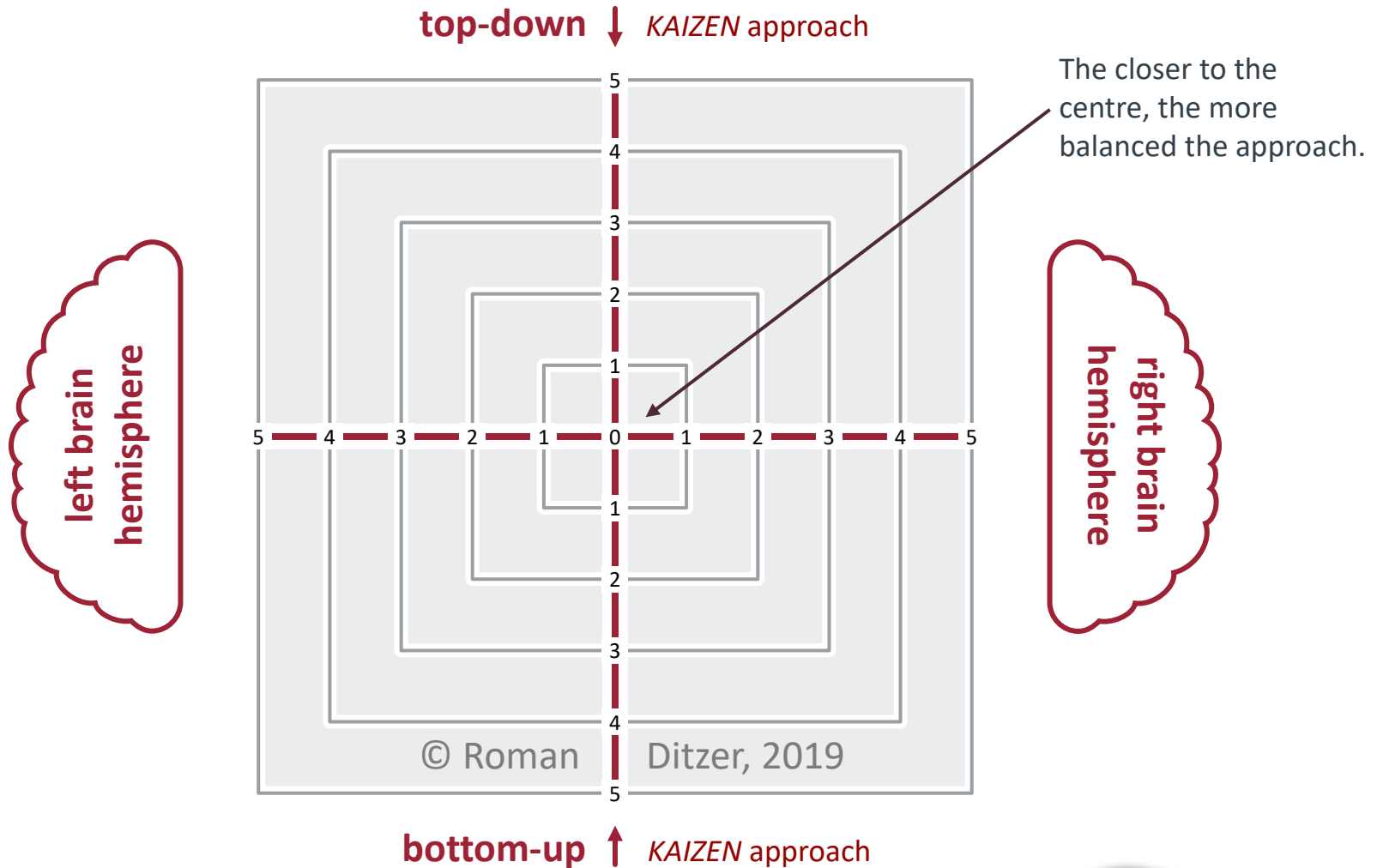
Unlike many Western firms, Japanese companies place great value on bottom-up: This is the reason for their *KAIZEN* success.

top-down
KAIZEN approach

bottom-up
KAIZEN approach

Lean flagship companies 'empower' their staff, giving them the freedom to develop *KAIZEN*. The autonomous *KAIZEN* activities carried out by Quality Circles in Japan are rarely seen in Western companies. Other examples include *KAIZEN* competitions and suggestion schemes (with incentives other than cash bonuses).

A company's *KAIZEN* approach can be visualized in a MATRIX: the '*KAIZEN* Balance MATRIX'.



Where are the Lean flagship companies in Japan positioned on this 'KAIZEN Balance MATRIX'?

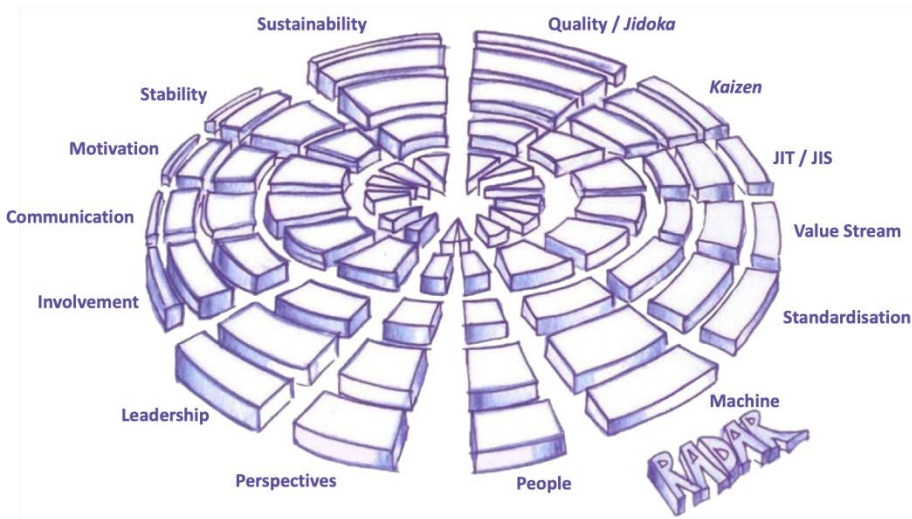
Lean flagship companies in Japan

- systematically operate *KAIZEN* with the left brain hemisphere, while also placing great value on *KAIZEN* with the right brain hemisphere: You practise '*KAIZEN* with left and right brain hemispheres'.
- have a good balance between top-down and bottom-up *KAIZEN* approaches.

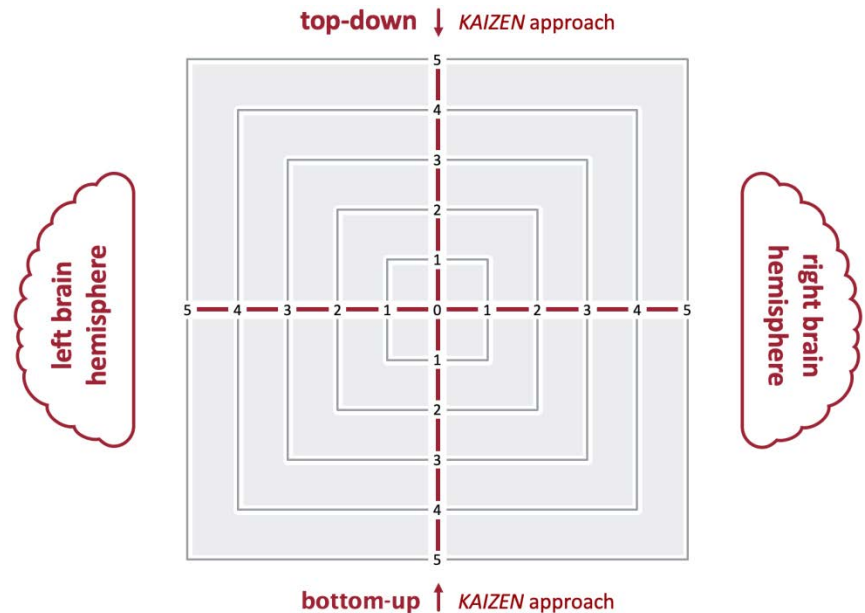
So a **position close to the centre of the MATRIX** can be assumed.

And what is the relationship between 'LEAN-RADAR' and the 'KAIZEN Balance MATRIX'?

LEAN-RADAR

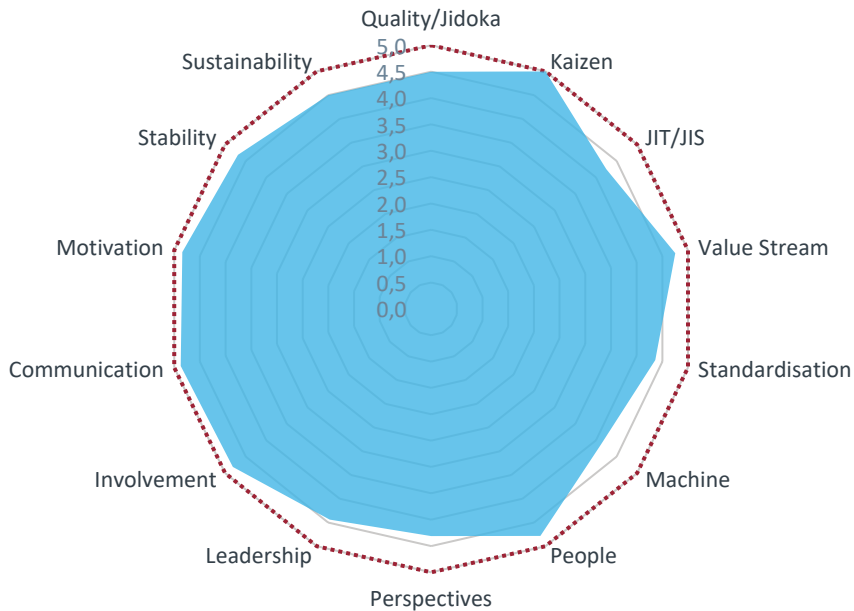


KAIZEN Balance MATRIX

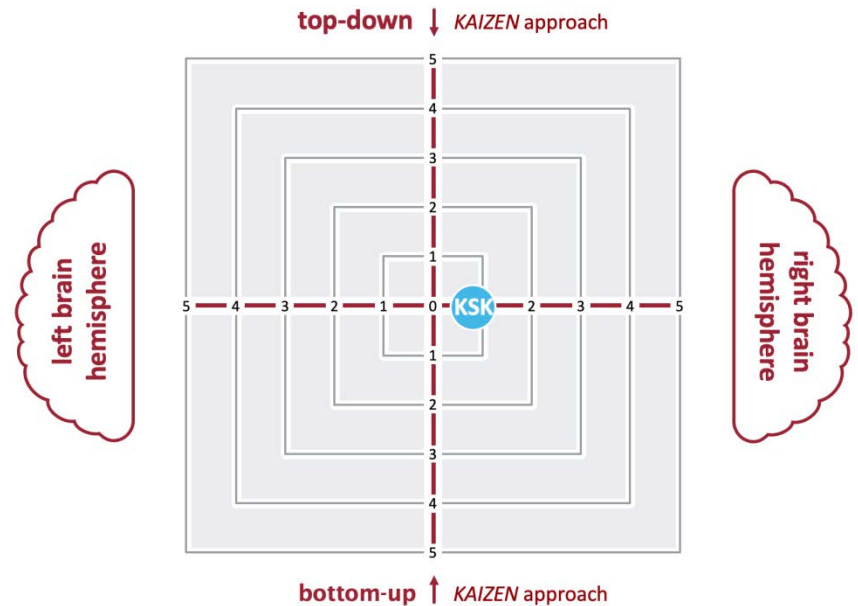


The relationship between 'LEAN-RADAR' and 'KAIZEN Balance MATRIX' using the example of: KSK plant in Kanuma

LEAN-RADAR



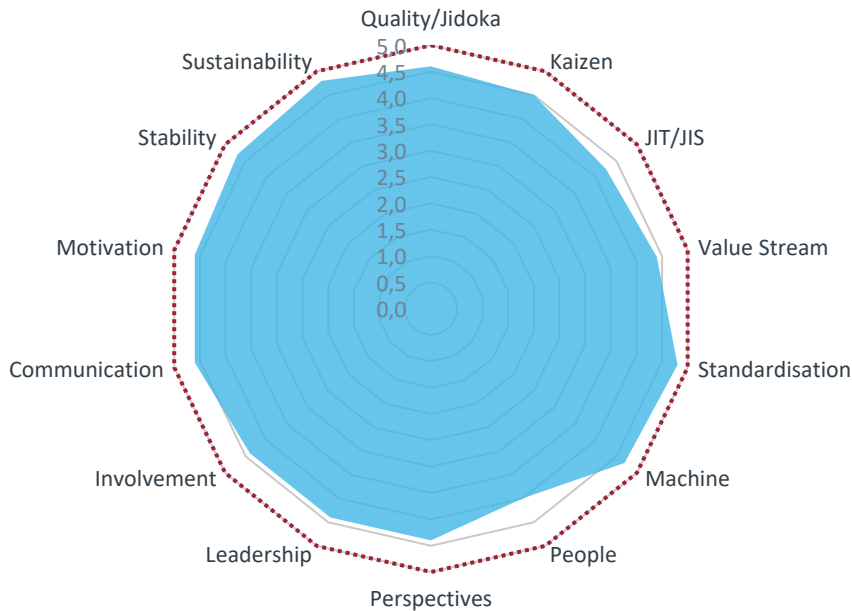
KAIZEN Balance MATRIX



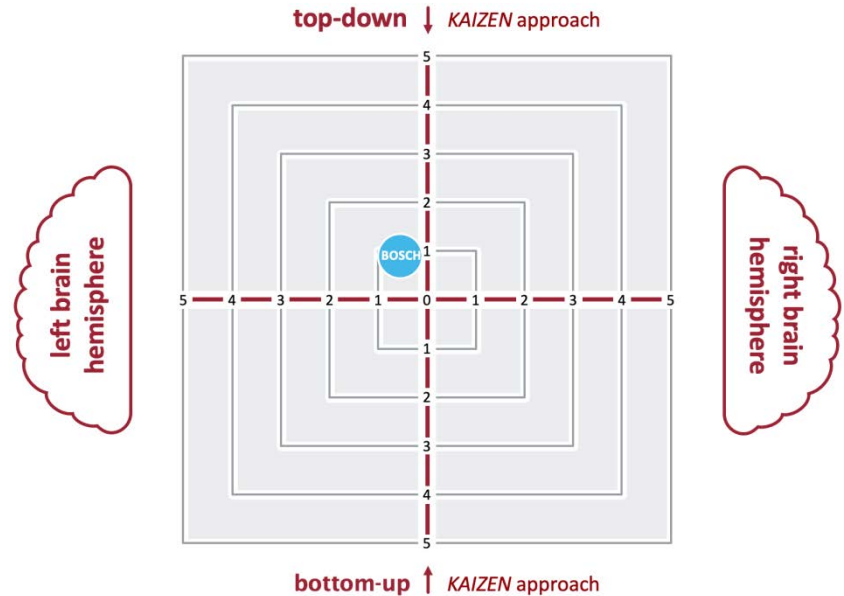
Companies that are rated uniformly high in LEAN-RADAR are close to the centre of the MATRIX (Ø from 8 ratings in LEAN-RADAR, 4 in the MATRIX).

The relationship between 'LEAN-RADAR' and 'KAIZEN Balance MATRIX' using the example of: BOSCH TgP (Tochigi plant)

LEAN-RADAR



KAIZEN Balance MATRIX



Companies that are rated uniformly high in LEAN-RADAR are close to the centre of the MATRIX (\emptyset from 5 ratings in LEAN-RADAR, 3 in the MATRIX).

Lean flagship companies in Japan

Why are these companies so good??

The interrelation is actually the other way round: because they operate *KAIZEN* with a balanced approach, their rating on the LEAN-RADAR is high (Operational Excellence).

Finding 6:

The right mixture is key – between top-down / bottom-up, and right / left brain hemisphere.

Results from two years of using the MATRIX

Relationship between 'KAIZEN-MATRIX' and 'LEAN-RADAR'

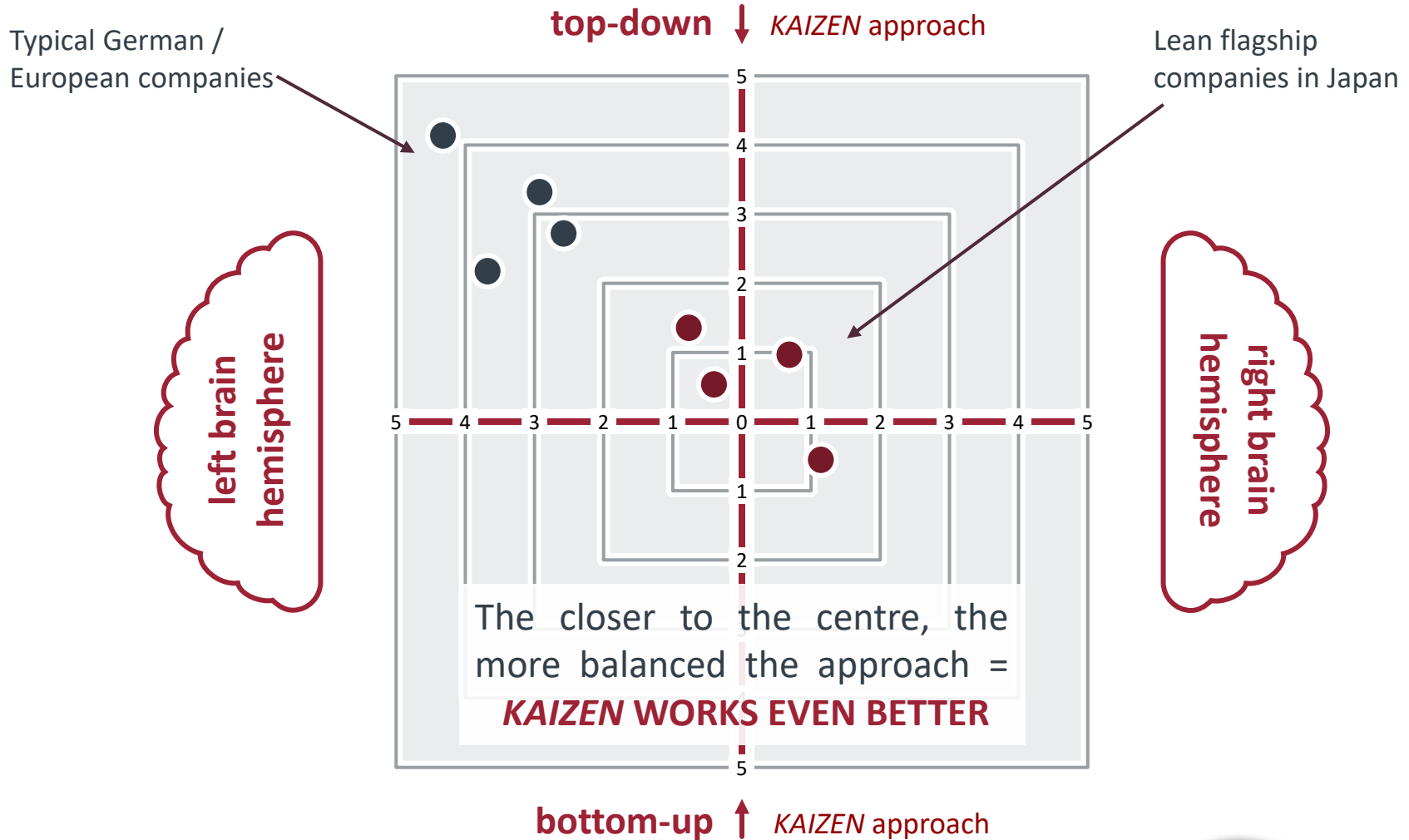
Previous findings

Our Japan seminars make use of both instruments: the *KAIZEN* balance MATRIX and the LEAN-RADAR. Judging by the results to date, the lean flagship companies in Japan are indeed located close to the centre. The best companies also have a high and uniform rating on the LEAN-RADAR.

By way of comparison, the participants also rank their own companies on the MATRIX. The results show that many companies in Germany and Europe have a strong approach when it comes to '*KAIZEN* with the left brain hemisphere', but have weaknesses with '*KAIZEN* with the right brain hemisphere'. Moreover, the top-down approach is dominant, which ultimately leads to a position at the top left of the MATRIX .

Results from two years of using the MATRIX

Typical distribution in the 'KAIZEN Balance MATRIX'



Derived from deviations from the centre of the MATRIX: Measures for strengthening *KAIZEN* and manufacturing

In case of a position at the top left of the MATRIX:

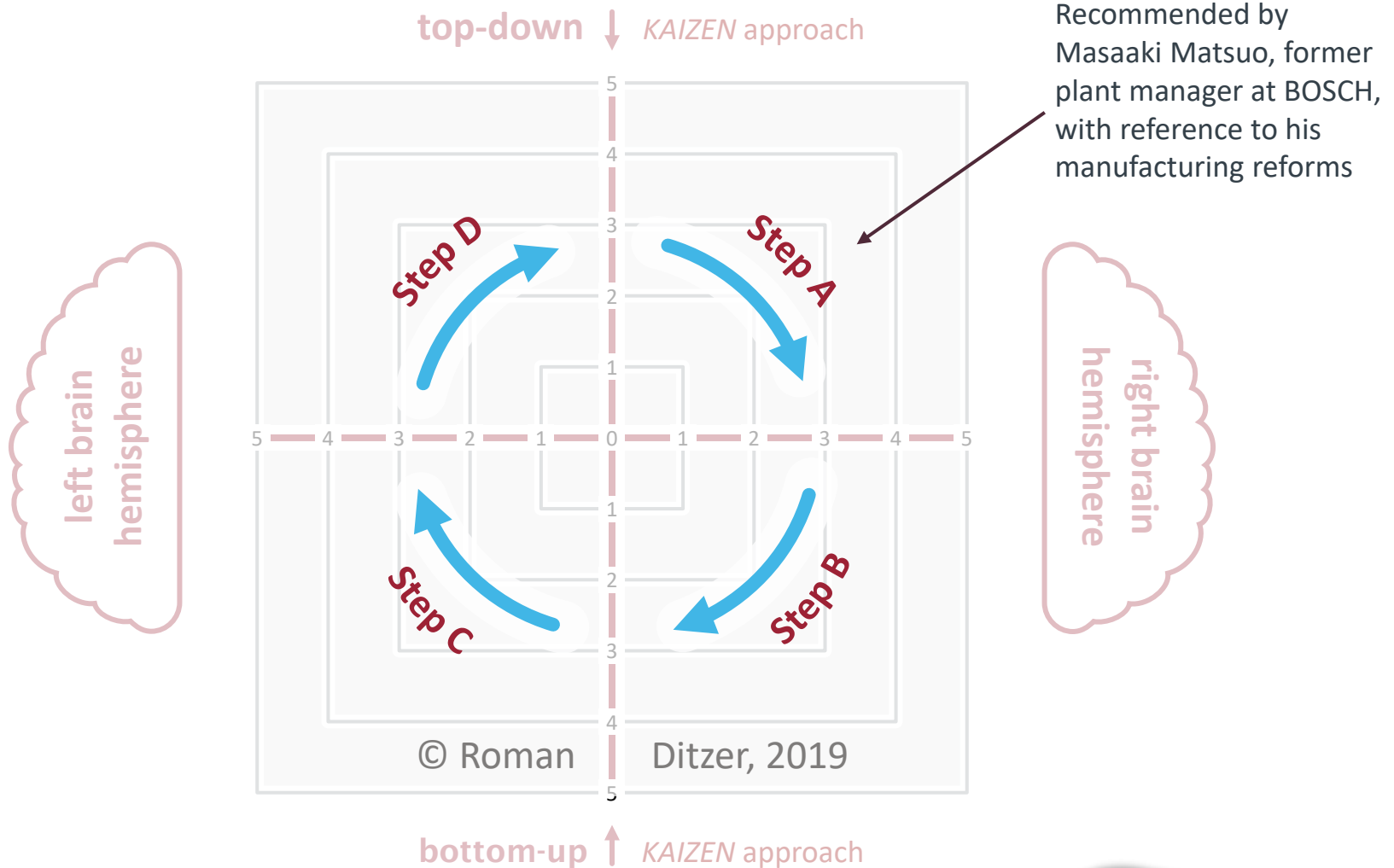
Possible measures at the organisational level:

- Introduction of Quality Circles (as an opportunity for independent *KAIZEN* training)
- Reinforcing the *KAIZEN* qualification (methodological competence for improvement)
- Executive training: '*KAIZEN* with the right brain hemisphere' (coaching, communication ...)
- Holistic approach to decisions
- ...

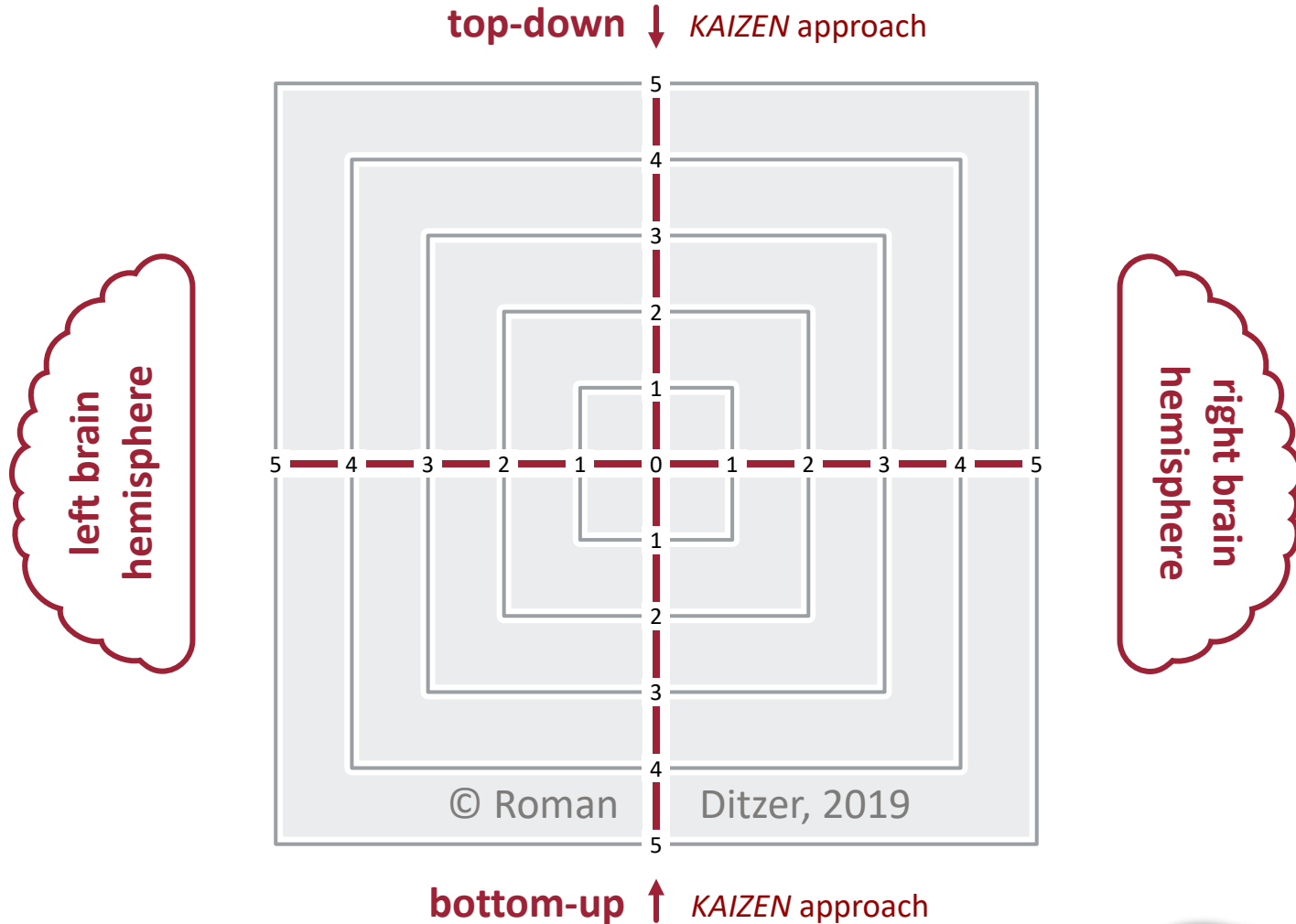
Possible measures at the managerial / executive level:

- More time and commitment to *KAIZEN*
- Increased presence on the shopfloor (*genba*)
- More social interaction with employees
- Developing your own lean vision
- ...

A change in focus is also conceivable when introducing a reform or activating *KAIZEN*.



Locate yourself: Where is your company / organisation on the MATRIX? Are there any conclusions that can be drawn?



Request regarding the handling of these documents

Copyright

These documents are subject to copyright protection. Reproduction and use of pictures, graphics etc. is prohibited.

Many Thanks!
Roman Ditzer

Dr. Roman Ditzer

Office Hamburg
RD interlogue
St. Annenufer 5, c/o K16
20457 Hamburg
www.interlogue.de

Japan Office
RD interlogue Ltd.
www.interlogue.co.jp



RD interlogue

Journeys to the Sources of Excellence