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TESSEI: The '7-Minute Miracle' – An Insight into the Realisation of the '*Shinkansen* Theatre'

Article by Teruo Yabe 矢部輝夫

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Article for Background Reading

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Author	Teruo Yabe 矢部輝夫
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The author Teruo Yabe is a former executive of the *Shinkansen* cleaning company TESSEI. A subsidiary of the East Japan Railway Company (JR-EAST), TESSEI is responsible for the cleaning of the *Shinkansen* carriages at the Tokyo Station terminus – all in the space of just a few minutes before the trains set off again. During his time at TESSEI, the author succeeded in reforming the company and bringing about a revolution in its corporate culture. Along the way, it was possible to improve and consistently standardise the work processes. Looking back, he feels that the biggest hurdle was the attitude of the staff. The breakthrough came by changing this attitude.

Cleaning was seen by the employees themselves as inferior work, and what the Japanese refer to with the abbreviation '3K': dirty, difficult, dangerous¹. Yabe quickly reinterpreted this abbreviation into the feeling that customers should have about the work of TESSEI employees: 'gratitude, inspiration, impressiveness'². This brought about a change in perspective and a paradigm shift. The key concept of 'hospitality' (*omotenashi*) allowed the staff to feel pride in their work. Only when this attitude changed did it become possible to cooperate constructively and operate with high efficiency.

"Before I came to TESSEI, the general perception of the work was 'cleaning'. My message was: Of course cleaning is part of it, but so is helping passengers with their problems and creating a friendly atmosphere when setting off. By using the term 'all-round service', I wanted to say that we should aim for an all-round service for Shinkansen passengers." Teruo Yabe³

The report clearly demonstrates that leadership is the biggest lever in corporate reform. It also shows the need to have a good mix of top-down and bottom-up measures during the implementation process.

There are around 900 employees working at TESSEI. Every day, they clean 171,000 seats on 179 trains. (company website, as of 2020). The company enjoys cult status in Japan, where even Arnold Schwarzenegger has visited it, and there is both a comic and a musical (!) about the company.

¹ 「汚い、きつい、危険」(kitanai, kitsui, kiken) Yabe himself chose 'dirty, difficult, dangerous' as the English translation – probably in order to create an '3D' analogy for the '3K' in Japanese. Actually, 'exhausting' or 'physically demanding' would be more precise than 'difficult' for きつい(kitsui).

² 「感謝、感激、感動」(kansha, kangēki, kandō) Yabe himself chose 'gratitude, inspiration, impressiveness' as the English translation. Actually, 'enthusiasm' or 'excitement' would be more precise than 'impressiveness' for 感動(kandō).

³ From an email from the author dated 3 May 2021.

TESSEI: The '7-Minute Miracle'⁴ – An Insight into the Realisation of the 'Shinkansen Theatre'

It's not 'Cleaning Time'; it's 'Showtime at the Shinkansen Theatre!'



TERUO YABE – PRESIDENT OF THE 'OMOTENASHI'⁵ CREATION COMPANY⁶

There was an Overall Feeling in the Workplace: "Nobody Appreciates Us."

In 2005, I left the East Japan Railway (JR-EAST) and took up my position as General Manager of Corporate Planning at the Railway Maintenance Company (the predecessor company of TESSEI)⁶. To be honest, at Japan Railways in those days, you didn't really hear anything good about this company: staff turnover was high, and accidents and injuries were not uncommon. I remember going to my new job with an uneasy feeling.

I spent the first month 'looking and learning'⁷ – in other words, observing and getting to know the workplace. I was surprised to see how hard the staff were working – they were mostly men and women of

a somewhat advanced age. It was very different from how I imagined it. In actuality, many of the workers cared about the passengers and took their job seriously. I wondered why people changed jobs so often and why there were so many customer complaints.⁸

We had a lot of interactions and at the end of the month I went out with my new colleagues. Here I was approached by an older worker:

"Yabe-san, the people at headquarters, they don't know anything!"

That was a eureka moment for me: The people doing the work thought that they were being overlooked by the head office and by their own company, or that they had no idea about their work at all. Indeed, communication in the system was only top-down – and that was in the form of directives. There was a long distance from the management to the 'genba'⁹.



⁴ 「7分間の奇跡」 '7-minute miracle' is the affectionate term that has come to be used in Japan when referring to the cleaning process for the Shinkansen carriages at the Tokyo Railway Station. These are cleaned within a period of 6 to 7 minutes before the trains set off again.

⁵ 「おもてなし」 Even though it does not appear in this text, 'hospitality' is a key concept behind the reform at TESSEI, which succeeded in instilling pride in the work of its staff. In turn, this change in attitude enabled constructive cooperation and, as a result, highly efficient operations became possible. The author Teruo Yabe was General Manager of the 'Omotenashi Creation' Department at TESSEI and subsequently named his own company after it.

⁶ 鉄道整備株式会社 The Railway Maintenance Company was established in 1952. The company name was changed to 'JR-East Japan Techno Heart TESSEI' in 2012 on the occasion of the company's 60th anniversary (株式会社 JR 東日本テクノ ハート TESSEI). 'Techno Heart' in this context signifies 'Creating hospitality with technology and heart'. Source: tessei.co.jp/company1.html (2021)

⁷ 見習い Actually 'learning by looking' or 'copying'. This is the traditional concept of training in Japanese crafts, as well as in geisha training or martial arts.

⁸ In the case study 'Trouble at Tessei' (2015), the situation is described as follows: "As of 2005, the majority of Tessei's employees worked part time. The average worker was 53 years old, had held a number of previous jobs, and often had encountered difficulties on their career path. [...] Turnover was a major challenge. Tessei hired 20-30 part-time employees per month, as many were unable to endure the hard work that the job entailed. Safety was another important issue. The number of on-the-job accidents reported by Tessei employees had risen sharply from 2001 to 2005. Complaints from customers were also on the rise. Commonly reported issues included untidy bathrooms and forgotten items left behind on the Shinkansen that were not returned."

⁹ 現場 'Genba' generally refers to the place where things happen. In the context of kaizen, it usually means at the production site or the place where the work happens.

Giving the Work a New Context ('Reframing')

Having summarized my impressions from the first month in a report, I made a proposal at the management meeting and then launched the reforms. The main issue was how to break the deadlock and get the staff to open up. At every training session from then on, when staff or part-timers came together, I delivered this message:

"Dear colleagues, you may believe that the world of cleaning in which you work is rightly hidden in the dark, but you are wrong!"¹⁰

"Without your work, the East Japan Railway Shinkansen trains wouldn't move an inch. After all, you are the technicians who maintain the JR-East trains with a service known as cleaning."

It was almost like in an anime cartoon when the main character's eyes suddenly start glowing: I could see the change on the faces of the workers. The words had an effect: All of a sudden, a light was being shone upon their work, which they had thought was going unnoticed. I suppose it was that kind of sensation. Hearts began to open. And from then on, we started implementing a series of measures that would increase employee satisfaction.

As we were proceeding with these measures, one employee announced during a presentation:

"Our workplace is a theatre!"

"The passengers have the starring role, while we are the supporting cast. And together we perform wonderful scenes on the stage of the Shinkansen Theatre. This is what we should strive for!"

That really surprised me. I myself would never have thought of phrasing it that way. The fact that these words came from a member of staff is what makes

them so significant. Something called 'reframing' had occurred, where one's own work was redefined: From then on, it was no longer 'cleaning time' but rather 'showtime at the *Shinkansen* theatre'.

Under no Circumstances Should They Consider Themselves as 'Cleaners'.

What I then did was primarily aimed at stopping the staff from seeing themselves as a 'cleaning lady' or 'cleaning man'. I resolved to do everything I could to prevent this perception. One way to do this was through work clothes. Up to that point, they had only worn standard uniforms for cleaners, but I started getting all kinds of catalogues, from catering to the entertainment industry. From then on, they would sometimes wear Hawaiian shirts, or they would dress up as Santa Claus. As the clothes changed, so too did the mindset. They should not think of themselves as 'cleaners' but as 'members of the *Shinkansen* theatre'. And I used any means necessary to achieve this.

I heard that one time a 62-year-old female colleague had taken her work clothes home with her. When she put them on in front of her grandchild, the child remarked:

*"Grandma, you look great!
It really suits you! Cool!"*

She had a smile on her face when she told me that story. It made me very happy too. I immediately passed it on to our communications department and spread it around the company. I thought it was important to share such an anecdote with all the employees right away.

I had asked people to come to me with their requests regarding the uniforms. One of our seniors approached me and said she would like to appear in a kind of Lady Gaga look as 'Lady *Baba*'¹¹ In the end, however, I decided not to take her up on that offer.

¹⁰ The text literally states, "[...] you may think the world of cleaning where you work is a dark place, [...]" In the translation, the 'dark place' (暗い場所) was

interpreted as an area that is hidden from the view of passengers as one does not want to expose what is done there.

¹¹ 'Baba' means old woman in Japanese.



"The Passengers and Colleagues Notice Me!"

Then we launched a programme called 'Angel Re-ports'. A team has about 20 members, and one person from the team was appointed as an 'angel reporter'. This person was asked to report back on all the things they saw or heard while carrying out their work. I made it a rule to report only 'good things'. We didn't need to hear about any bad things. I wanted to create the feeling: "Somebody is taking notice!"

This is exactly the opposite of that suspicious feeling: "Someone is watching me!" That is what gives rise to unfounded fears, and that is why the rule stipulated that only positive things should be reported. Moreover, we didn't specify what we meant by 'good things'. I would say, "Report back on what you yourself think is good." In my opinion, as soon as you set a standard for what is good and what is bad, the distinction becomes difficult and it gets complicated. So I left the criteria to the angel reporters; I was only interested in discovering as many 'good things' as possible.

"Mr / Mrs X always gets to work a little earlier and arranges the tools so that everyone can work well."

"Mr / Mrs Y has only been with the company for three months, but they are so committed that it motivates us all."

We started to accumulate these kinds of messages. We chose the nicest ones and distributed them

among the staff. And that led to communication: "There's something about me here!" or "Hey, here's a report about you!" In the early days, there were about 400 of these reports a year. By 2015, the number had grown to more than 10,000 reports annually.¹²

Nowadays, when representatives from company management turn to me for advice, I often hear:

"There is no culture of praise in our company."

To which I then reply:

"Isn't it true in your case that praise only comes from management and executives?"

It is, of course, important that management and executives show appreciation, but that has its limits. After all, in some places, the commitment of a worker may not be visible to the management. But the colleagues who work in the same place do notice it. That's why it's important for them to recognise and praise each other's work. This strengthens team cohesion and creates a bond between the employees.

The important thing was not to impose a standard for assessment. Around that time, a company contacted me and told me that they were going to introduce the Angel Reports at their workplace. Apparently they tried to do this but they couldn't get it to work. The reason was that they had given a definition, a classifier along the lines of: "You get 500 yen for this kind of thing". This led to unhappiness in the workplace and some people said: "That's unfair" or "That's biased".

The management needs things to be precise and exact, and they like to have some kind of benchmark for orientation. But if you make the rules too detailed, it just doesn't work. Our goal was to create the feeling: 'My performance is being recognised'. From this point of view, we were definitely right to take the

¹² In 2015, TESSEI employed about 900 people, including 30 'angel reporters'. In terms of the numbers, this means that there were eleven (!) such reports annually per employee. Although this includes some duplication, the figure indicates that a culture of mutual recognition had indeed emerged (from

the author's emails of 3 and 10 May 2021). Current employment figures (2020): 904 employees, 37% part-time, 34% female. Source: Company website tessei.co.jp/company1.html (2021)

approach of 'only positives' and 'let's leave the standards to the angel reporters'.

Why Harvard Took Notice of the '7-Minute Miracle'



A Phone Call from Harvard University

Around 2010, I got a phone call: "My name is so-and-so from Harvard, can I speak to Mr. Yabe?" At first I thought the call was from an insurance company (laughs). And then I was surprised when it became clear that Harvard University wanted to know more about our approach.

We had already been getting some attention in the railway sector. For example, we had about 20 people from an International Railway Association in Europe who came to visit us for a tour. They were all amazed that such a high-quality service was being provided in a sector where the work is hard and where there are many older workers¹³. From that point on, the course of events went something like this: CNN from America came across the report from the railway association, the corresponding CNN coverage was broadcast worldwide and this then led to the request from Harvard University.

That was shortly after the financial crisis. All over the world, the existing approach to management was being called into question and alternatives were

being sought. It was in this context that our approach began to receive attention. There was a lot of debate about top management and efficient monitoring based on a pyramidal organisational structure. And I think in academic circles at that time, people were also looking for ways to highlight the achievements of staff at the base of the pyramid. We were cited as an example of this.¹⁴



Innovations Produced by the Traditional Culture¹⁵ of Japanese Companies

I believe that the traditional culture of Japanese companies was the basis for allowing the employees to shine – with the help of the 'Shinkansen Theatre'. The idea of a job for life or the seniority principle might be considered old-fashioned these days, but these old systems do produce a particular kind of culture: of dedication to a task over the long term in an environment where one can develop. It is the bonds that are created between people in the teams. Harmony as a common value. Mutual recognition and mutual encouragement. This is the kind of working climate that served as the basis for our reforms.

Our organisation was notable for having a high number of older workers. The service of such

¹³ 高齢者 Literally means 'persons of advanced age'. The author explains: "In Japan, people are generally classed as 'old' if they are 65 or older. At TESSEI there was no exact definition; I personally included anyone who was just under 60 years of age." (from the author's email of 3 May 2021) Translated in the text as 'older', 'elderly employees' or 'senior citizens'.

¹⁴ There is a case study on this by the Harvard Business School (2015) entitled 'Trouble at Tessei'; see sources.

¹⁵ 風土 Actually: geographical peculiarity; landscape; landscape character; climate; weather conditions; here it means 企業風土 'workplace atmosphere' or 'corporate culture'

employees is often required¹⁶. My impression at the time was: older workers are still full of energy! We had workers in their 70s who really worked hard. When we think of innovation, we often think of it as 'coming up with completely new ideas'. I understand the term more in the sense of 'questioning the old to gain a new insight'. The things being developed by young people in Silicon Valley are just as much innovations as when a team of elderly employees at the Tokyo railway station redesigns and improves their daily workflow.¹⁷ Tackling and scrutinising your own work with a new approach. This is what 'questioning the old' means: the older the organisation, the more wisdom it contains, but which may be lying dormant. We shouldn't despair just because something is old, but rather change our perspective to a positive assumption, such as: 'This has history' or 'There's a lot of know-how behind it'. After that, it is a matter of discovering the small potentials¹⁸ and to keep on doing this.



Success Factors for Changing an Organisation

Meanwhile I have commented in many places on the 'Shinkansen Theatre' and the '7-Minute Miracle'. And I am always pleased when managers and personnel directors are impressed and decide to copy and implement the measures. This may be very pleasing,

but many of them end up failing and becoming frustrated. Why is that? I am quite sure that it is because they are simply copying what we did on the surface level. 'Reframing the work', 'changing the mindset with new work clothes', 'creating a culture of mutual appreciation through Angel Reports' are all things that sound nice, but what really matters is how 'thorough' you are when implementing them. There is no miracle cure for changing an organisation; day-to-day consistency is the key to success or failure.¹⁹

I occasionally hear managers for whom it didn't work say things like: "We were ready to try out new measures, but then we were told: 'we are specialists in this or that'; 'we don't have to go that far'. My response is that it was no different for us. No matter how often you might use the term 'Shinkansen Theatre', it is not so easy to change the mindset of the people. But we were determined to change this perception of ourselves as the 'cleaning crew' and we tried repeatedly with various measures. That kind of change doesn't just happen on its own, so it is important that you don't miss the signs: 'The facial expression is a little different' or 'Feedback is just starting to come in now'. You have to pick up on things like that and share them, and you have to do that constantly. Consciousness does not change easily, but at some point it will. You have to stay on the ball with this belief, otherwise it won't work.

You also have to accept that it's not possible to change everyone. It's not realistic to increase the motivation of all employees equally, nor can you create an organisation where everyone is highly motivated. In a stagnant organisation, perhaps only 5% of the workforce can make a difference in the beginning. The important thing is to find these people and develop them into leaders. It is not a question of favouritism but of strategy; you might call it strategic personnel planning. Time and money are limited, so

¹⁶ Against the backdrop of the 'ageing population' (高齢化社会), which is progressing particularly rapidly in Japan, policymakers have for many years been calling on companies to make greater use of the untapped labour potential of their older employees, and also of women.

¹⁷ The distinction between product innovation and process innovation is also common in business economics.

¹⁸ Here, the author literally speaks of 'small discoveries' (小さな発見), adding: "Small discoveries' is to be understood literally: Discovering things that are in one's own working environment, that one can implement oneself in the

team and solving them with practical intelligence and dedication. This is what is meant by 'Kaizen' in Japan. I believe that if you then create bonds in the workforce through mutual appreciation of this resourcefulness and dedication to work, this can then lead on to a great discovery (pioneering innovation)." (from author's email, 3 May 2021)

¹⁹ Masaaki Matsuo puts it very similarly in his article 'World Class': "There are no magic tricks for maintaining and improving quality. There are only daily and constant improvement activities!" (see sources)

how can you make a difference under these circumstances? Take a close look inside your organisation and find those employees who shine and who have potential.

You then focus your investment on these people and let them become the leaders of your reform. These leaders are the ones who are engaged and striving in their workplaces, and who will change their followers. This is how transformation happens. We had a lot of employees who had a negative view of the change of work clothes or the Angel Reports and other such measures, and they expressed this view. But there were also people who embraced it and who were excited about it. In this type of situation, it is better to go forward together with those who want to change, even if they are few in number, than to be influenced by negative opinions.

I am often asked how I dealt with opposition, and my answer is: "Pay it no heed". It is more important that the people driving the change are in the spotlight, changing perceptions one person at a time. At some point, when their number reaches a certain level, the company culture will change. People can't escape from influences, and they are strongly influenced by their environment. As soon as the minority becomes the majority, those who have always been against it will either change or leave. And that's okay.



Short Curriculum Vitae:

Teruo Yabe 矢部輝夫

President of the 'Omotenashi Creation Company'

Joined Japan State Railways in 1966. Responsible for train and passenger safety matters for 40 years. From 2005, Board Member and General Manager of the Corporate Planning Department at Railway Maintenance Company (now JR-East Techno Heart TESSEI Co., Ltd.). Transformed the *Shinkansen* cleaning company into a 'hospitality service provider' by establishing the idea of 'all-round service'. Retired in 2015 after holding positions as Senior Managing Director and General Manager of the 'Omotenashi Creation' Division. Founded the 'Omotenashi Creation Company', consultancy work.

Internet Sources and Backups²⁰

Article

The above article is published under the title 「7 分間の奇跡」を実現する新幹線劇場誕生秘話 on 27.11.2020 on the website of the company Link and Motivation Group Inc. in the section 'The Meaning of Work'.

Source: lm-tmw.com/the-meaning-of-work/omotenashi-company/ (retrieved on 05.04.2021)

Backup:

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www.interlogue.de

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