

Hoshin Kanri and Flight Levels® Get Siemens Ready For The Future

Not many companies have increased sales and profits during the COVID-19 pandemic. However, one business segment of Siemens AG has managed to do just that: after 15 very successful years with their existing business model, even more orders were received during the pandemic months. Undoubtedly, it was a reason to celebrate, but the management of this business unit felt a little uneasy. Even before the pandemic outbreak, the C-level had concluded that the business model could not be sustained in the long term and would not be enough to keep developing new variations of the old products. What was needed was a new portfolio.

They already had a strategy for the new portfolio, but the implementation was not picking up speed. As the management could not figure it out, Roland Pürzer and Sabine Pauly were commissioned as agile coaches to support the business unit in implementing the strategy and thus increase business agility.

The future strategy gets lost in the daily grind

An initial analysis by the Agile Coaches revealed that those responsible in this business unit had already done many things right. There was a clear strategy, both for the existing business and for future topics. The current portfolio was managed in an agile manner, and the business lines had already positioned themselves in value streams in recent years - perhaps not yet perfectly, but they were heading in the right direction. At the same time, an agile transformation anchored in the strategy had been systematically launched, following all the rules of the art: not in the hidden, classic project management mode with a scheduled rollout, but with agile coaches, coordinators, and interim goals. This business unit had had coordination committees in place for some time. In spite of the transformation, the business unit retained these coordination committees. So, there was a fully functional and well-organized Flight Level 2. The fact that the future topics did not take off must have had another cause.

Roland and Sabine, therefore, took a closer look at the strategy picture. In principle, there were four strategies: one for the existing business, one for the future fields, one for the agile transformation, and, finally, the C-level also had to work on strategy that contributed

to organizational topics such as delivery capability, advance development, or sales.

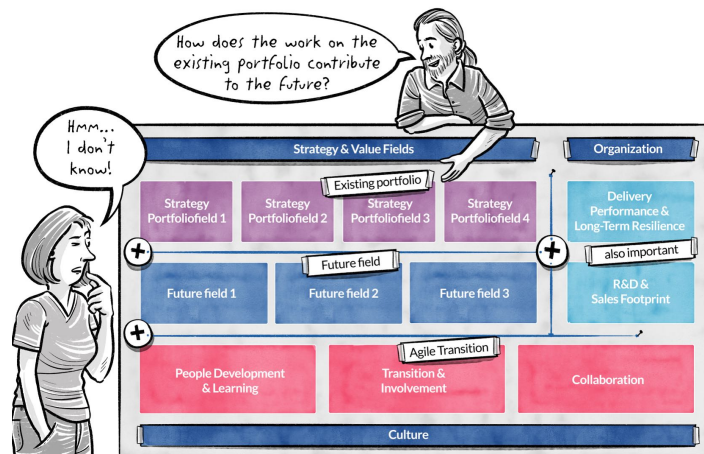


Figure 1: Strategic picture of the business unit

In the existing business, the four value streams were tailored directly to the current portfolio. There was no problem here at all: the objectives were worked out in detail in the form of roadmaps. The product managers acted as one could only wish for: They proactively seized business opportunities, further developed the strategy ready for approval for the management circle, and actively communicated with their teams about implementation. The connection between Flight Levels 2 and 3 was as strong as it could be: In a sophisticated and lean milestone process, interim targets were set and consistently pursued. This well-functioning system has been successful for 15 years. Nobody would have dared to disrupt it by insisting on future issues during a pandemic.

This is why it was much more difficult with the three future fields. Although there was a strategy and wonderfully formulated goals, there were no clear guidelines, milestones, or prioritization rules. As a result, it was impossible to see from year to year how close the business unit had come to achieving its future goals. It was also completely unclear whether and how the four value streams from the existing business connected to the future fields and should contribute to the targets. And to make matters even more complicated, the goals of the agile transition were decoupled entirely from the strategic business goals. It was not visible to the departments what contribution the agile transformation made to the development of the future fields. "Sen-

ding the second management level the message that a lot had to change within the next ten years was not a problem at all - they were actually very receptive to it," says Roland Pürzer. "But they got bogged down in day-to-day business, and in the quarterly reviews on future topics, it was then explained why something else was more important at the time."

Roland and Sabine's interviews with the management team revealed why the strategy for the future fields was pursued inconsistently. There were different views on whether the changes were really that urgent, which is why completely different objectives were considered important. Those who supported the future strategy communicated this consistently to their teams - and the others did not. In cases of doubt, the teams continued to work on what they knew, and the future issues were left behind.

Old, but good: Hoshin Kanri brings clarity to the future

The retrospectives and coaching sessions with Roland and Sabine had made it clear to the management team that the future strategy would only be effective if the approach changed immediately. The following statement was made literally: "We clearly need a participative strategy process with PDCA cycles." To ensure that the strategy is supported throughout the entire business unit, the C-level wanted to involve the product managers and product owners even more closely in strategy development: The strategy should be evaluated not just once but several times a year. For a long time, Siemens had already had a suitable tool for this: Hoshin Kanri.

Literally translated, Hoshin Kanri means "compass needle management", whereby the compass needle is understood as an illustration of strategy development and management as the implementation of the strategy. Like Flight Levels®, Hoshin Kanri aims to involve all hierarchical levels through horizontal and vertical communication processes (catchball and deployment), making it easier to ensure that strategy and implementation are actually aligned. The Hoshin Kanri process consists of seven steps:

- 1) In the case of the business unit, it was interesting to see what **trends** would determine the industry in terms of automation over the next 10 to 15 years.
- 2) Based on these trends, several **scenarios** were developed that could affect the business unit.
- 3) Based on the scenarios, the management team and product management considered various **options** for the business unit,
- 4) which were aligned with the existing vision and mission (**North Star**).

- 5) The selected options for action determined the **breakthrough target** to be achieved within the next three to five years. This breakthrough target would permanently change the business unit and was the starting point
- 6) for the annual targets set in the so-called **deployment workshop**. In this workshop, the key players from the individual departments, value streams, and functions meet and agree on what is to be achieved in the coming year, how to achieve it, and
- 7) how the annual target can be broken down into achievable sub-goals, which are checked in **PDCA cycles**.

All goals, actions, and performance indicators developed in these steps are usually summarized in a matrix that can be used as a communication and monitoring tool (although it was not used in this business unit - more on this later).

A perfect match: Hoshin Kanri and Flight Levels®

When Roland first heard about SOFI - the interface between Flight Levels® and a company's existing strategy development tools - it was clear to him that the Siemens business unit had two complementary tools at its fingertips to help future topics get off the ground. Three similarities between Hoshin Kanri's process and the five core activities of Flight Levels (see Figure 2) immediately struck him:

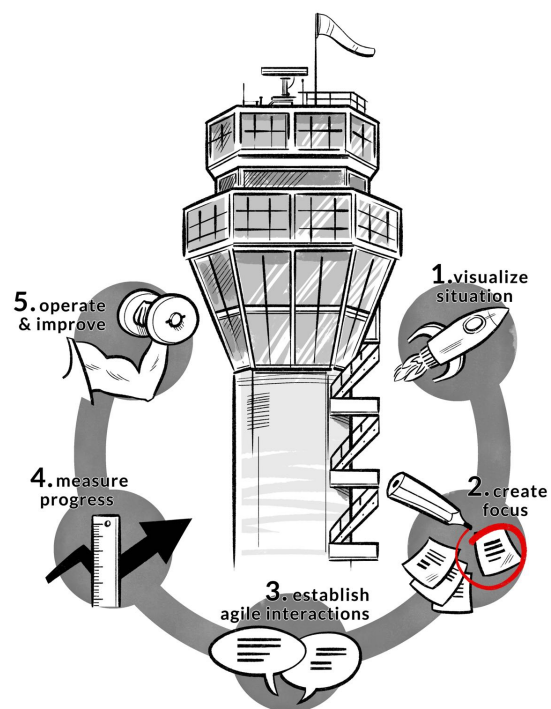


Figure 2: The five core activities of Flight Levels®

- Both tools emphasize **focus**. Even in the first phases of Hoshin Kanri, a conscious decision must be made about what to focus on because not every option for action is a good option for action. The people involved must agree on which trends will be really relevant. This is why only four of the 39 trends identified in this business unit will be pursued further. This is a challenging negotiation process.

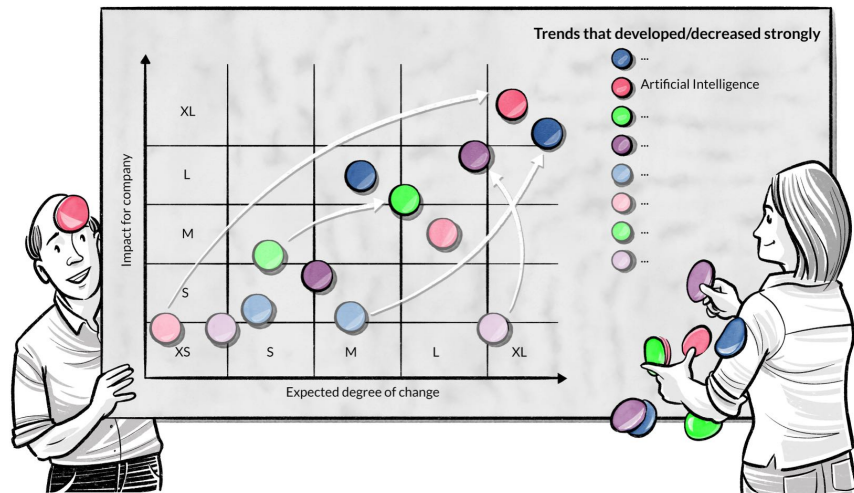


Figure 3: Development of the relevant trends

- **Communication and inter-action** are key at both Hoshin Kanri and Flight Levels®. The business unit's deployments are workshops lasting several days once a year. On the one hand, work is carried out across different areas of expertise: Product owners, management, finance, system architects, etc., discuss which department contributions help achieve the annual targets. The individual specialists then meet to clarify who needs what from whom to achieve the goals. This is a good basis for filling Flight Level 2 with suitable artifacts.
- **Progress** is measured implicitly in the Hoshin Kanri process. As mentioned, the relevant trends are recorded, described, and evaluated for the company in the first step. Now, you can do two things with this basic information:
 - A comparison is made every one to two years with the current situation. Was the trend correctly assessed or not? If not, the company can change course early to achieve its future goals.
 - Before the future goals are even implemented, the scenarios can be used to create a targeted catalog of questions that can be used to obtain feedback from partners, suppliers, key customers, etc. "We think that we will have to build our devices differently in the future because ... What do you think?" "

In this case, progress is measured by reviewing trends, refining target formulations, and constantly developing new sets of questions. "For this business unit, for example, there is a nice comparison of trends that shows exactly how urgent the topic of AI has become," reports Roland (see Figure 3: dark colors show the current assessment of individual trends, the lighter colored circles show how they were assessed in the past).

In addition, the Hoshin Kanri process serves all elements of the Flight Levels® SOFI (Stories, Outcomes, Flight Items):

- The trends, scenarios, and options for action together form the "why" - the **stories** - of the strategy. In the Siemens business unit, these inputs were compiled on a storyboard, and a walkthrough was developed. This enabled each manager to communicate the strategy to their staff clearly and consistently: For the next years, what trends are there, what options for action are important to us, and what do we need to do to deal with them properly?
- When Hoshin Kanri formulates breakthrough goals for the next three to five years, these are referred to simply as **outcomes** in Flight Levels® terminology. In the Siemens business unit, a template was used to formulate the individual outcomes (Figure 4 shows an updated version of this template):

What is SOFI?

A wide variety of tools are used in companies to develop strategies. But no matter which tools are used when working with Flight Levels®, existing strategies can generally be brought together using three interfaces. In the Flight Levels® world, we refer to these interfaces as stories, outcomes, and flight items (SOFI). These interfaces are information and context descriptions that can be extracted from the materials available in an organization in almost 100 percent of cases.

- **Stories** describe the context of a company's business intentions and desired outcomes (e.g., vision, Wardley Maps, Business Model Canvas).
- **Outcomes** are values a company wants to achieve for itself and its customers within a certain period.
- **Flight items**, which are derived directly from the strategy, are work tasks that must be completed for the organization to come closer to the desired outcomes.

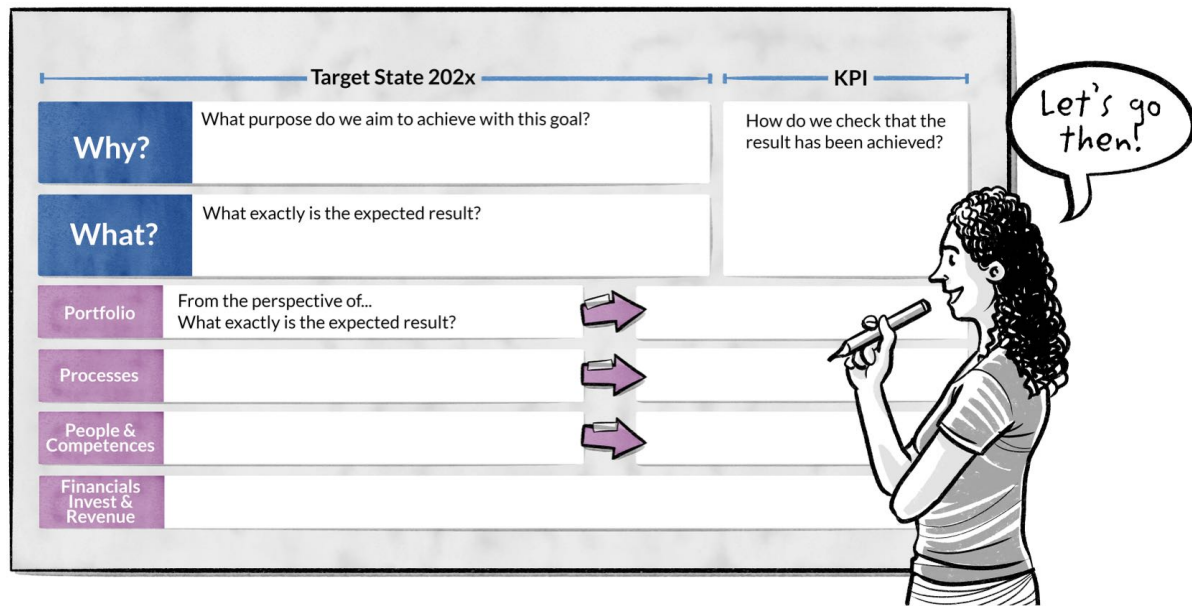


Figure 4: Template for the definition of outcomes

- The connection to the story was established in the "Why" field.
- The "What" area defined the objective and key results for the coming years.
- For a holistic picture, the objective was also clearly defined in a balanced scorecard in the areas of customer value, processes, competencies, and finances. What was needed in these areas to move forward with future topics? At this point, the objectives of the transformation were also incorporated into the business objectives.
- In the deployment workshop, the annual goals are not set top-down but are broken down into contributions (= **Flight Items**) by the key players. If there is a need for clarification and impediments arise, they can already be made visible, followed up on, and clarified here. This has two advantages: Firstly, it becomes clear how flight items are linked to the long-term goals, and secondly, commitment to the flight items is much higher if they are not prescribed from above. There are also direct links to Flight Level 2 and Flight Level 1, as the departments essentially provide their contributions in two ways:
 - Teams work on a (partial) output (e.g., a piece of software) so that the goal can be achieved.
 - An expert or a team is made available so that it is possible to achieve the desired outcome in the first place.

What has been achieved and what is still missing

Flight Levels® states clearly that a good visualization is more than helpful for implementing a strategy. "Hoshin Kanri offers a form of visualization, namely an X-matrix," explains Roland. "Admittedly, this matrix is quite difficult to read, and the progress is not so easy to follow visually. However, it contains everything you need for a simple Flight Level 3 board." The matrix talks about long-term business goals, mid-term objectives, mid-term key results, and high-level initiatives (= flight items). Figure 5 shows a general example of such a matrix. As coaches, Roland and Sabine used the lower left part of the matrix to check whether the teams had slipped through the cracks when developing their annual goals. Roland and Sabine followed up in the workshops if this was the case. In principle, however, a Hoshin Kanri matrix is the ideal basis for a Flight Levels® board with four columns!

When building Flight Level boards, it has been repeatedly proven that they are never built for people but with people. In the spirit of this co-creation, Roland and Sabine created a first extended Flight Level 3 board with the business unit's management team. However, the board did not survive the initial contact with the development team. One reason for this was that not all stakeholders were yet aware of the need for a systematic approach. Instead, the development team wanted a board in Azure DevOps - which in turn fell victim to the constant fire from the management team. As a shaky compromise, a board was set up without tool support but with a connection to Azure DevOps. On this occasion, the short-term goals were broken down

ing topics were divided into groups of six to eight people. In fact, this is not always necessary, and it is sufficient if special issues are clarified in a smaller group of two to three people. There is a much better atmosphere in a group where everyone can contribute something.

- Business agility can only be established at Flight Level 3 if the SOFI is already in place. Flight Levels® are not an instrument for strategy development, but they help implement strategies. They act like a magnifying glass: the visualization on a Flight Level 3 board makes it clear where a strategy has gaps or is not coherent. For example, improvements must or should be made if there is no clear link between outcomes and flight items. These improvements can be evaluated and, if necessary, improved again. Therefore, it is a constant cycle. This means that sometimes agile coaches also have to support strategy deployment.
- Building boards is not the hardest part. The main work is in the coordination processes, which can sometimes be painful and cost a lot of energy.

Regarding the interaction between Hoshin Kanri and Flight Levels®, Roland and Sabine see clear advantages: This combination is particularly suitable for large, diverse business units and is well received by those involved. The artifacts do not have to be generated artificially. They already exist. Where Hoshin Kanri has weaknesses in visualization and agile interactions, Flight Levels® steps in. ■



Roland Pürzer is a Flight Levels Coach® and Lean Development & Engineering Expert (LDEE) and has been working as an agile coach for Siemens AG for almost 5 years. He can look back on a total of around twelve years of Lean practice in supporting numerous development and test projects. The current focus of his

coaching work is on strategy development and agile portfolio management. He sees his personal challenge in encouraging those responsible for strategy work to throw the ball forward.



You've just experienced an fascinating preview of the Flight Level 3 world. There's much more to explore! Head over to flightlevels.io and register for a [Flight Level 3 Design](#) workshop.

There you will gain deeper insights into areas that we have only touched on in this case study. Be part of this journey and ascent with us to a new level of organizational performance!