



## Strategy Review

Climate change, Corona, Tesla and the consequences

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The aluminium foundry industry has changed noticeably for everyone since the fourth quarter of 2018.

After years of permanent growth (worldwide cast aluminium production 2000 approx. 8 million t → 2017 approx. 18 million t), there was a decline in production figures in the 4th quarter of 2018 for the first time in 50 years (except for the crises 1994/95 and 2008/09).

At this point, the ever-increasing discussion about global climate change had a significant influence. The automotive industry with its classic combustion engines was generally quickly identified as a major root cause. E-mobility was suddenly on everyone's lips. As a result, the production figures of the previous bread and butter parts (powertrain) of the aluminium foundry industry declined sharply.

In the midst of the decline in production, which was developing into a crisis for the foundries, the corona pandemic came at the beginning of 2020 and thus became a real crisis catalyst.

Favored by the discussions on climate change, the American automobile company Tesla increasingly became the focus of global interest. The politically and socially increasing pressure to reduce CO<sub>2</sub>, the resulting economic successes (share price, company results) and the partly existing technology dominance (battery, software and hardware technology) were the main pillars of the new Tesla success.

With Tesla's success, processes and technologies used there attracted new attention. A well-known development in the automotive and foundry industry for years towards ever larger structural parts and thus larger casting machines reached a new dimension through the "courageous" Tesla strategy. Gigacasting was born and was accepted and "copied" surprisingly quickly by the entire automotive industry as a guarantee of success.

Even if the improvement in the sales and earnings situation that has started in the meantime has eased the situation of the foundries somewhat, the environment and the challenges have not changed.

## Climate change, Corona, Tesla and the consequences

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The following can be stated as an interim conclusion:

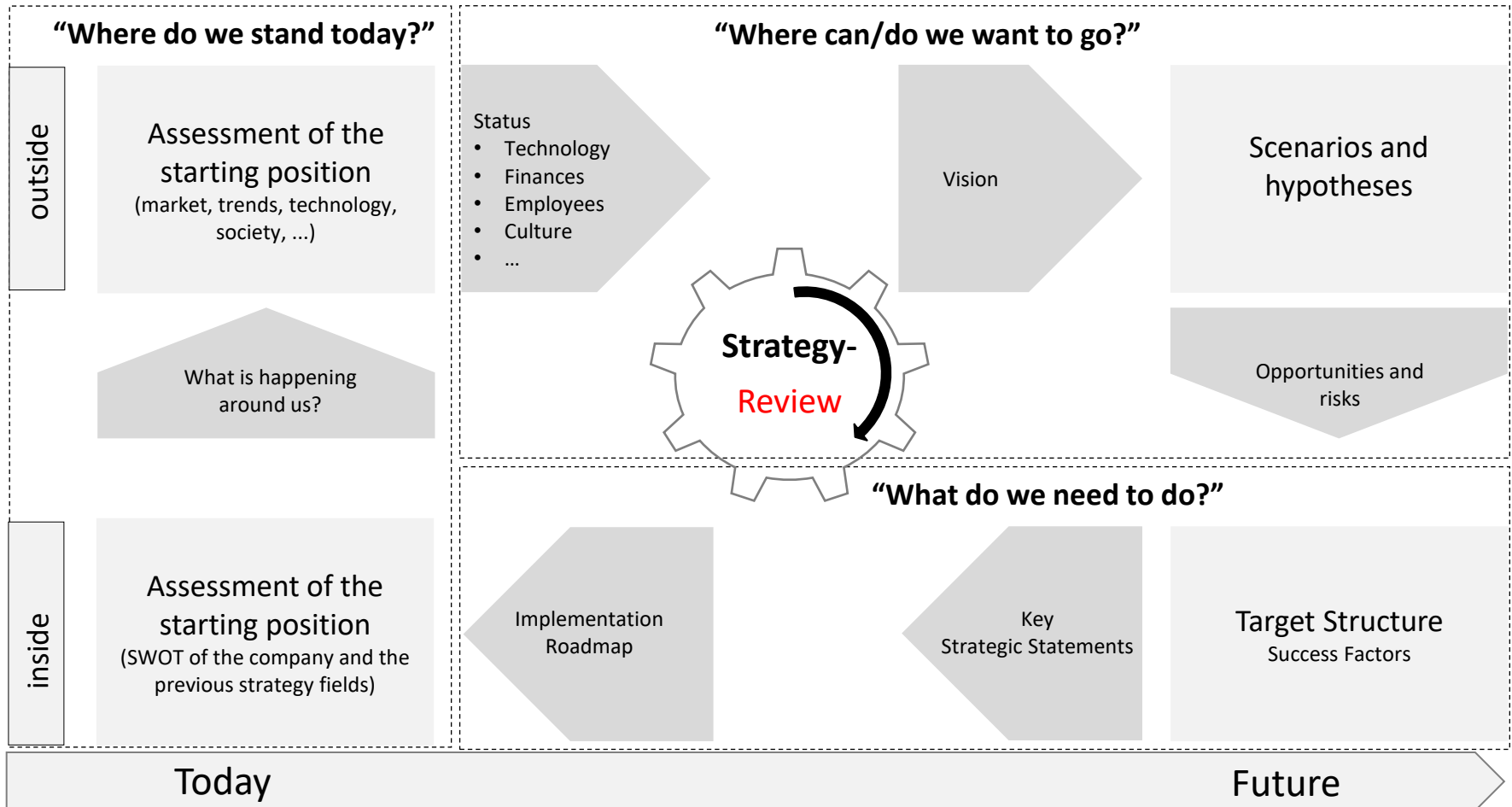
- The financial figures in the foundry industry during Corona were bad, but not as bad as expected.
- The corona pandemic has given many foundries a break, but not the necessary technological and economic development.
- The transformation to new drives (e-mobility) has increased the trend towards lightweight construction and the opportunities for cast aluminium, but not facilitated it.
- The castings, machines, investments and opportunities are getting bigger, but so are the risks.
- The OEMs and Tier 1 are (again) investing in the aluminium foundry industry (giga-casting), the traditional customer foundries are still very cautious.
- Speed and flexibility beat tradition. Asia beats Europe?

The current “calm” does not protect foundries from the consequences of climate change, Corona and Tesla.

An **individual strategy review** is **essential** for all foundries.

## Climate change, Corona, Tesla and the consequences

“Where do we stand today?”, “Where can/do we want to go?” and “What do we need to do?” are the essential questions that must be answered in the context of inside and outside view, today and future, in all foundries.



## “Where do we stand today?” SWOT analysis (Ø die casting foundry in Germany, JMC assessment)

The assessment of the initial situation of one's own company from the classic internal point of view forms the basis for the question “Where do we stand today?”.

**The competition for the markets of the future (chassis & structural parts) will not be won against the other foundries. When it comes to chassis and structural parts, the foundries compete with other materials and processes. Cooperation along the value network is the formula for success.**

### Strengths:

- Competent, outstanding foundry technology network (foundries, tool makers, machine manufacturers, universities, ....)
- Functioning customer relationship and proximity to major OEM's/Tier1
- Excellent process and development know-how (employees)
- .....

### Weaknesses:

- Machinery (age) and site layout (... Job Shop Principle)
- Industrial environment in Germany (taxes, wage costs, energy costs)
- Earnings and financial situation (liquidity, cash flow)
- Investments in recent years
- Sluggish willingness to change
- .....

### Opportunities:

- Use cooperation along the existing and exceptionally competent value creation network as an opportunity
- Politicians, associations, trade unions, banks, universities and OEMs must assume their special responsibility and create improved framework conditions
- Make better use of know-how (advantage)
- Making the substitution of further car parts by Al casting technologically and economically attractive for OEMs
- .....

### Risks:

- The complexity of the current challenges (over) demands the predominantly medium-sized companies
- Everyone in the value chain tries to solve the challenges alone
- The financial after-effects of the crisis are more protracted and greater than currently expected
- ....

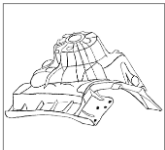
**“Where do we stand today?”** Market, Trends, Technology, Society,...

When assessing the initial situation from an external perspective, the question **“What is happening around us?”** is of central importance in addition to the question **“Where do we stand today?”**



Extra time (Crisis)

- Cash Flow for investments?
- ....



Technology Development

- Structural parts require rethinking
- ....



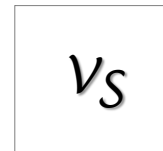
Transformation

- E-mobility changes the customer and product portfolio
- ....



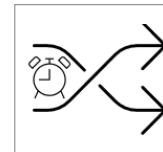
Giga-Casting

- 6100 t, 8400 t, 14000 t? ... Where is the journey going?
- ....



OEM and Tier1 as a “new” competition

- Partners become competitors
- ....



Speed and flexibility beat tradition. Asia beats Europe?

- Investments in Asia

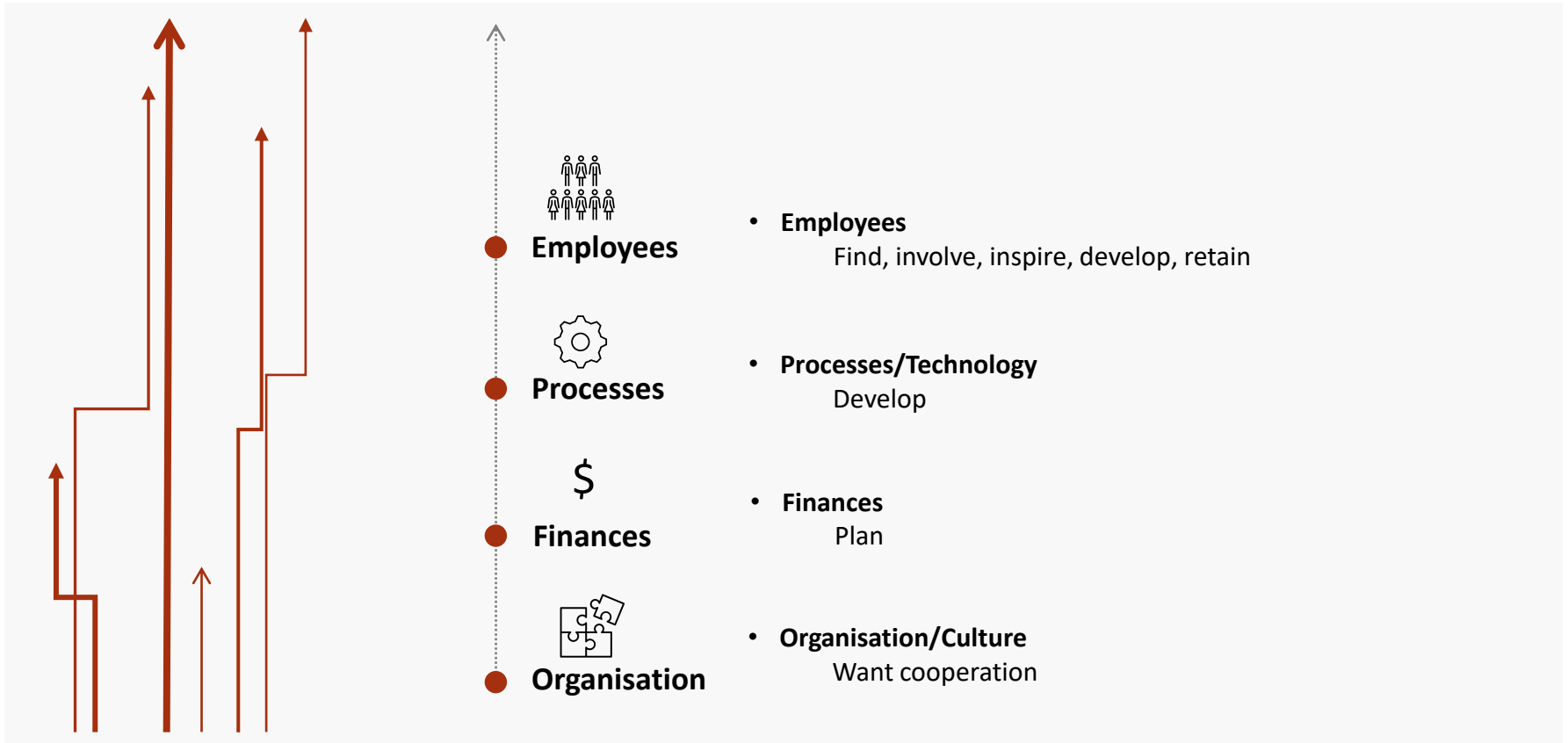
## “Where can/do we want to go?”

When answering the question “Where do we want to go?”, we must also answer the question “Where can we go?”



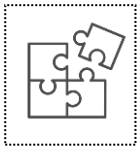
### Strategy

Visionary not Follower



## “What do we need to do?”

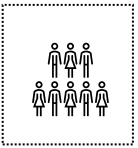
The basis for success is the answer to the question “What do we need to do?”



Organisation

- Organisation/Culture

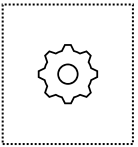
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Employees

- Employees

- ....



Processes/  
Technology

- Processes/Technology

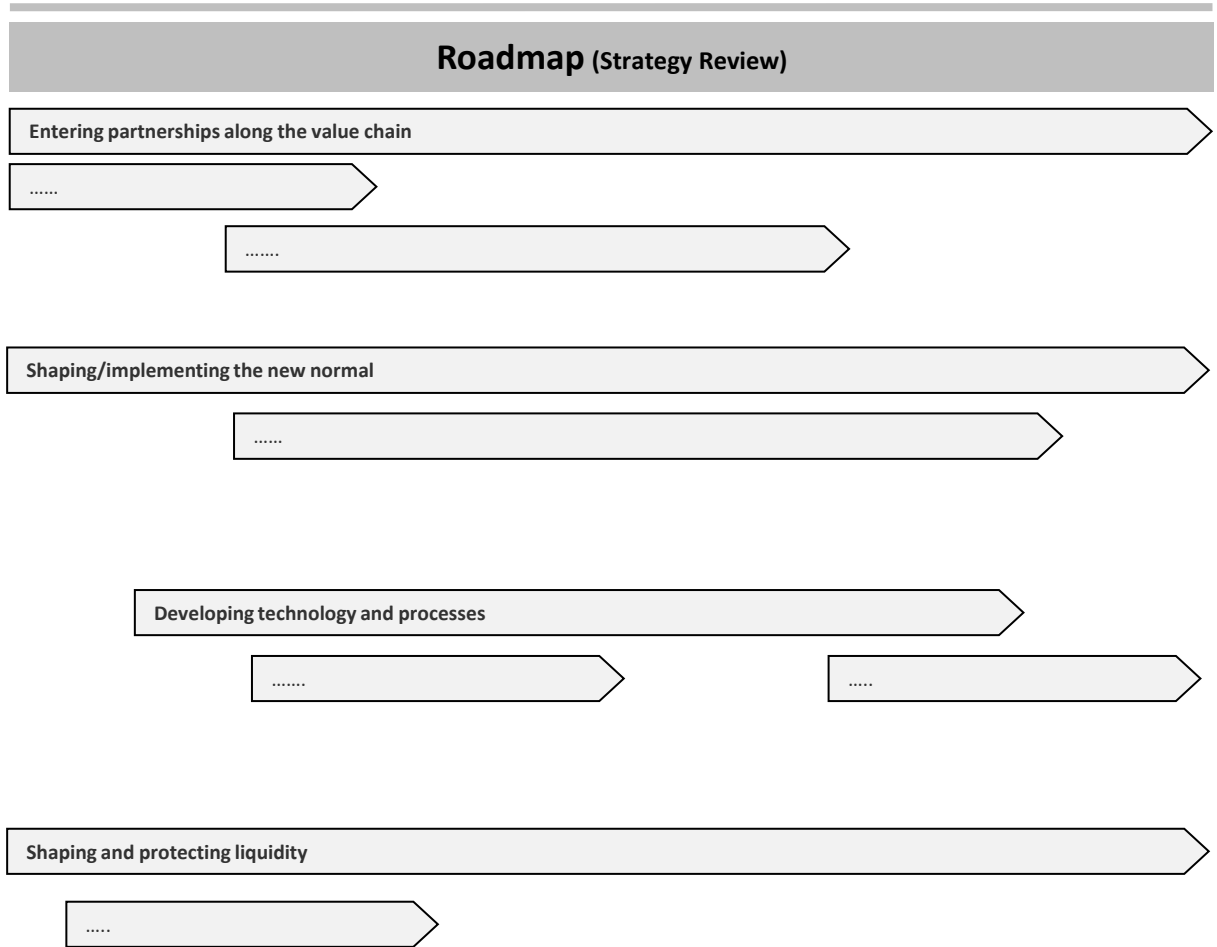
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Finances

- Finances

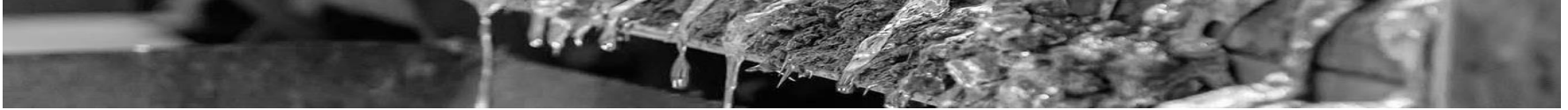
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## To do's

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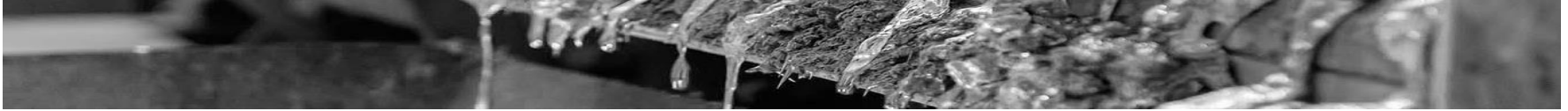


## Foundries must now .....

- .. review the previous strategy.
- .. reassess the complex challenges and changes.
- .. initiate and lead the change process from top management (leadership).

The to do's are individual. We help you to find the right ones.

## To do's



“There is no elevator to success.  
You have to use the stairs.”

- Emil Oesch -



STRATEGY DEVELOPMENT



MANAGEMENT CONSULTING  
INTERIM MANAGEMENT



NETWORKING



COMPANY ANALYSIS