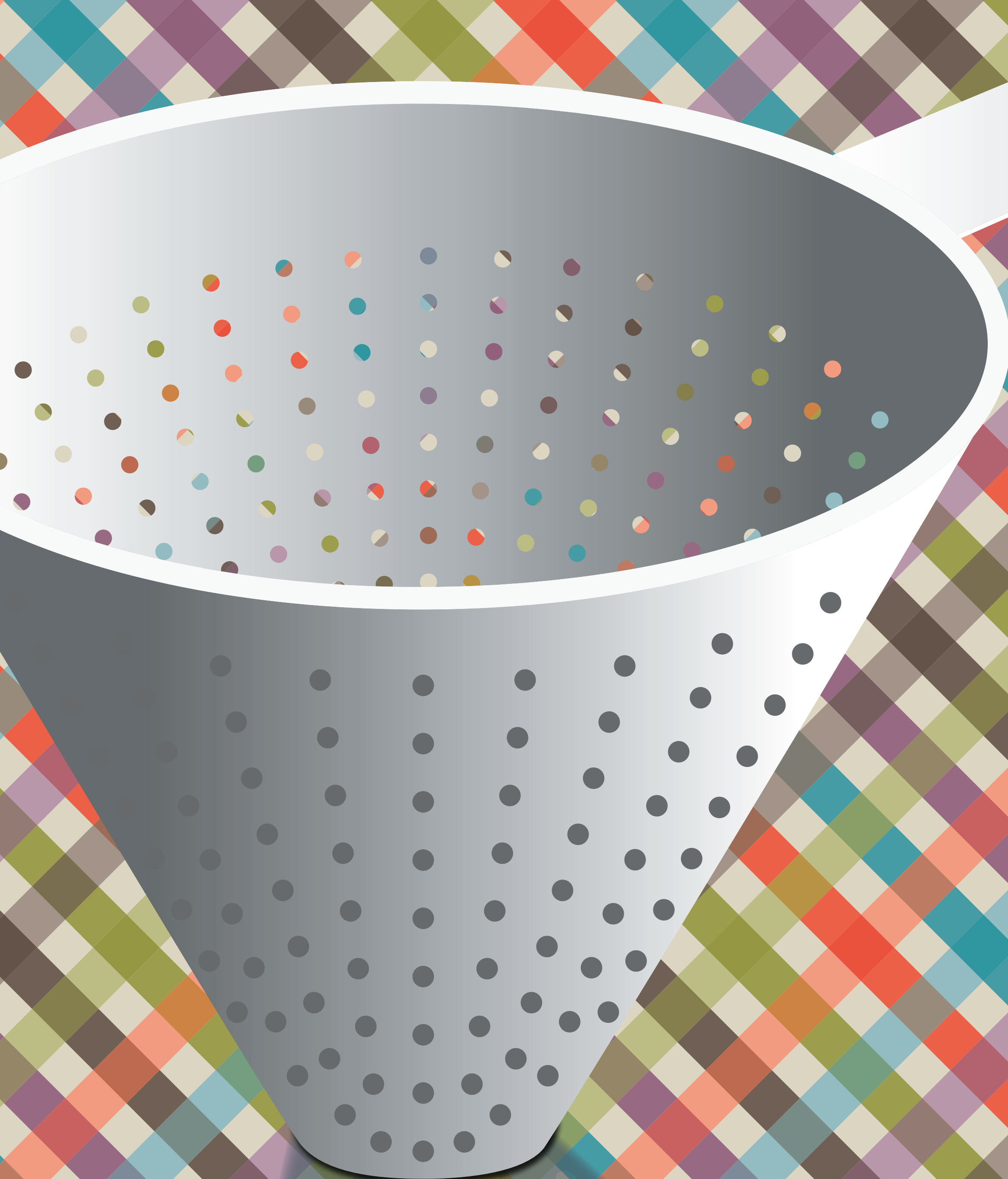

Recipe I: The Railway Model

Örjan Sölvell

On Strategy & Competitiveness

10 RECIPES FOR ANALYTICAL SUCCESS

I The Railway Model

Ingredients

- ✓ *Tracks*
- ✓ *Stations*
- ✓ *Trains*
- ✓ *Train operators*

This first recipe is based on a conceptual model that we developed when teaching strategy in the early 1980s. I was trying to develop some type of metaphor to convey what strategy is, and it ended up revolving around trains and railways. The ideas go back to when I was co-teaching a course on strategy with Professor Gunnar Hedlund, my boss at the time. We were running seminars with Swedish executives, and we taught a joint course on international strategy at the Helsinki School of Economics in 1986. He convinced me that firms make decisions at certain points – let's call them strategic decisions – that lock the firm into a certain trajectory, often for very long time periods. This is, of course, particularly true for firms making investments in major systems or large capital expenditures, for example, within process industries. Should we invest in a new paper machine or go some other route? If the board and management ultimately decide to invest a few billion SEK in a new machine, this will almost certainly lock the company into a particular trajectory for decades. And given this ”strategic” decision, thousands of smaller – in military jargon, “tactical” – decisions are pretty much set in stone as well.

As we discussed this lock-in effect with managers and students, I began to use the metaphor of trains and railways. Somehow, a firm encounters moments when they are “at a station” and other moments when they are “on the tracks”. And just as the passenger waiting on the train platform must do, firms can choose to go in quite different directions: north or south, east or west? Investing in the paper machine or not? Build a new hotel or not? Outsource production or not? Then, once you have boarded the train, it takes a whole lot of effort to change direction. You need to get off at the next station, purchase a new ticket and wait for a train heading in the other direction. In keeping with this metaphor, I also used to talk about managers as train operators; most of the job consists of speeding up or slowing down the train, i.e., making tactical decisions that are far from being strategic. Thus, while driving the train between stations, there is really no room for strategy due to the lock-in effect of the tracks. Stations are few and far apart, as Henry Mintzberg pointed out in his earlier writings; firms may change their strategy once every two or three decades. A classic strategy case illustrating this is the “Crown Cork & Seal” case[12], in which after more than three decades of following a clear strategy, the question of where to go next arises when the firm changes leadership.

Let us take a quick look at Swedish companies that emerged a long time ago. Many of them are still active in the same markets, such as Bonnier in publishing (established in 1837), Telia in telecom services (1853), SEB in banking (1856), Sandvik in steel and materials (1862), Atlas Copco in compressors and pneumatic tools (1873), Ericsson in telecom infrastructure and services (1876), Alfa Laval in separators (1883), ABB in electricity generation and transmission equipment (ASEA in 1883), Skanska in construction (1887), LKAB in mining (1890), SKF in bearings (1907), Vattenfall in electricity generation (1909), Scania in trucks (1911), AstraZeneca in pharmaceuticals (1913), Volvo in cars and trucks (1927), Electrolux in home appliances (1929), SCA in paper products (1929), Saab in aircraft (1937), SAS in airline services (1946), H&M in clothing retail (1947), and so on. Stability – that is, staying on the tracks – seems to have been a recipe for success for these and many other companies. But eventually most firms come to a station and decide to change course (often in connection with a major crisis). Not all will manage the change and some will go out of business, but below I list some examples of companies that have actually navigated the change process successfully.

Company	**From**	**To**	**Period**
Stora Enso	Steel	Forestry, paper	Late 19th century–1970s
Toyota	Weaving Machines	Automotive	1890s–1950s
Intel	Memory chips	Microprocessors	1980s
IBM	Mainframes	IT services	1990s
Apple	Desktops	Mobile platforms	2000s
Ericsson	Fixed telephony	Mobile and IP telephony	1990s–2010s

These radical changes of “tracks” did not come about easily. For example, it took about 100 years for Stora Kopparbergs Bergslags AB (today Stora Enso) to shift from steel to paper. The Intel case has been used in strategy classes at HBS for many years.[13] The new strategy (microprocessors) emanated from middle management – who saw the next station rapidly approaching – and not by great strategists in the upper echelons of executive management, a point made by Patrick Regnér in his Ph.D. dissertation at IIB.[14]

To emphasize the point that changing tracks is not an easy task, I just want to remind you about Nokia (which sought to shift into smartphones) and Kodak (into digital photography), and in Sweden, we have the classic case of the great company Facit, which failed in its attempt to shift from electromechanical to electronic office machinery in the 1980s.

If you buy into this metaphor, there are some important questions you should ask yourself:

- What locks my firm or organization into a certain path? How would you describe the rails?
- Are we at a station now, or are we just running on the tracks?
- Is there a station coming up soon?
- What do we do at the next station? Should we make a change of course or keep rolling full-steam ahead?
- Is the entire management team really on the same train? If not, what do we do about it?

If we start to look at the rails, one can imagine these to be of both of an internal and external nature. Internal lock-ins involve:

- *Corporate culture* – ”This is the way we do things here” or ”We have always done it this way” – organizational antibodies at work.
- *Routines and organizational processes* (e.g., budgets), locking in managers and staff.
- *Investments in machinery with limited alternative uses* (e.g., IT systems in a bank or large-scale machinery in process industries).
- *Being a division of a larger firm* (or a firm in a holding company or equity fund) where strategies are set one level above your organization.
- *Being a subsidiary of a multinational firm*, where strategic decisions are made at the company headquarters.
- *Psychological and mental barriers of all sorts* locking in managers who are supposed to be open-minded and open to new ideas.

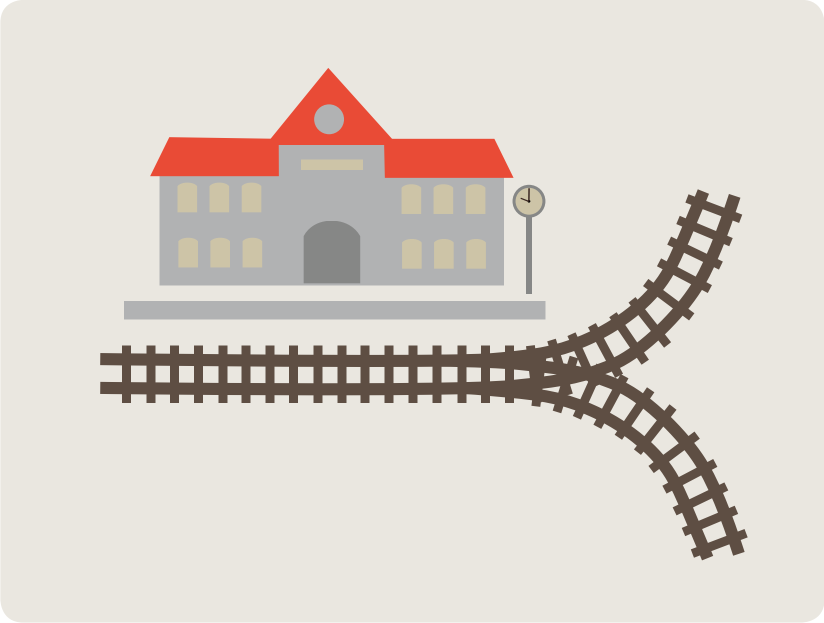

Figure 1. The Railway Model: Tracks Create Lock-In and Stations Open Up for Strategic Choice

External lock-ins involve:

- *Industry structure* (number and size distribution of incumbents, economies of scale and scope, degree of product differentiation, strategic groups)
- *Industry norms* ("This is how we do business in this industry") and industry history
- *Industry standards* (public or private standards, patent pool arrangements)
- *Five Competitive Forces* (in addition to industry rivalry, also includes buyers, suppliers, threat of entry and substitutes)
- *Regulations and laws* surrounding your industry
- *Embeddedness in a cluster* with surrounding related firms and organizations being on the same tracks

Michael Porter offers a range of tools with which to analyze constraints from the surrounding industry structure, as well as the broader set of the five competitive forces[15]. Many industries are highly regulated, such as power plants, hedge funds or insurance businesses. Firms in those industries are locked on to the tracks, and if they are not, they soon will be out of business. Environmental and safety regulations also limit strategic choice in almost every industry. Even in unregulated industries, norms (a central field in institutional theory[16]) and competitive forces constitute a type of straitjacket limiting the possible actions of boards and management teams. However, perhaps one should not overstate the constraints of this "straitjacket", as was the case with sociologist Max Weber. He once wrote about the "iron cage" imprisoning individuals in large bureaucracies. Of course, over time, these lock-in effects will be weaker or stronger. Industries in turmoil, e.g., driven by technological shifts, re-regulation, or demand shifts, allow for almost any strategy and acts of "wild" entrepreneurship. These are periods when there is no "dominant design"[17], which is typical for emerging industries.

The influential Harvard professor Clayton Christensen[18] has written extensively about why formerly well-run industry leaders have difficulties in adapting to new entrants and new emerging technologies and business models, based on various internal lock-in effects. The rhetorical question he poses is, "Why do great companies fail?"

The prolific American author Upton Sinclair once wrote: "It is difficult to get a man to understand something, when his salary depends upon his not understanding it!" And this is often what happens in great companies – they can see and understand that there is a real competitive threat, but budget systems, bonuses, norms and the like prevent people from really grasping or acting upon it. And even if a firm's leadership does understand new strategies emerging from the outside, there might be other factors barring a shift of strategy. One of my former doctoral students, Stefan Jonsson (now a professor at Uppsala University) wrote his doctoral thesis about why many firms in the Swedish mutual fund market chose not to imitate the successful strategies of new entrants; they ran against the norms of what a real mutual fund is all about[19].

So if we accept that rails constrain firms, when can we expect a station to show up, opening up a window of opportunity?

Stations are often connected to major shifts in a firm or organization. Shifts can relate to changes in ownership, such as when a private equity firm acquires a family-owned company, or when a listed company is merged with another listed company. Change in ownership often means a change in organization and leadership, which opens up the opportunity for a change of tracks. Managers change trains at stations, sometimes of their own volition, or sometimes when they are asked to leave the train because there are differences in opinion as to which tracks to choose. A well-packed backpack can help you to survive at the station while looking for a new train and direction! And before you take up the next job, do not forget to ask where that train is heading – if it is not in line with your own ideas, don't take the job.

My friend Erik Skog, who has a long track record of business experience, once taught me that when people argue that an executive is not doing a good job because the "job is impossible", we should rather turn it around and blame the person for not having asked the right questions and come up with his/her own answers before he or she took on the job. Smart people simply do not take on impossible jobs, and (using a mountain metaphor) smart people simply do not make a wild run for the summit without ensuring that they have enough food and oxygen with them to survive once they get there. Having asked the right questions and having one's own ideas about the answers is essential. On many trains, the board and executive leadership know where the train is heading, but on others, no such understanding exists, and taking the job as the train operator will most surely lead to you crashing the train, reducing it to a smoking pile of rubble. Using the recipes in this book can hopefully help you ask the right questions and guide you as you come to your own conclusions.

Some managers are thoughtful and perceptive enough to spot upcoming stations. Others rarely discern any stations at all. It is critical that you are not always bogged down in your book or iPad (i.e., budgets and plans); if you are, you will certainly miss every station – and the possibility of changing and improving the strategy. The face-down generation should beware!

Here is an easy way of to figure out whether members of your management team are on the same train. Before you start to discuss the strategy item on the agenda, ask everyone to fill out a paper where they state where their train is heading – north or south, east or west? And whether a station is approaching? Don't be surprised to find out that people on your management team are on different trains. By bringing this onto the table, you are off to a good start in your strategy discussions, and you can induce your staff to think more strategically. My little piece of advice is that you should have a good idea of where you and your organization are heading and watch out for train stations. This will probably take a bit of slack in the organization; if people are too busy with their product plans and budget targets, they will never spot any stations, and much talk of "windows of opportunity" will be lost. And watch out – if you miss the station and stay on the same tracks, there might be competitors making a short stop and adjusting their strategy, putting them on new tracks while you remain on the old ones.

When strategy guru Richard Rumelt asked Steve Jobs in 1999 about the future strategy of Apple, Jobs' answer was "to wait for the next big thing"[20]. The iPod station turned up after two years, and the iPhone station a few years later – so keep your eyes open!

I hope you have enjoyed our first recipe. Now, let us turn to the second one, "The Radio Model". This recipe will help you when crafting an entry strategy or analyzing a firm presenting an entry strategy, whether this entails entering into a new product market (horizontal growth), moving upstream or downstream (vertical growth), or moving into a new geographical market (internationalization). The underlying logic is the same, moving from one industry context (regulation, norms, competitive structure and climate) to another.

Your own notes: