



Recipe III: The Stairway Model

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On Strategy
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10 RECIPES FOR ANALYTICAL SUCCESS

III The Stairway Model

Ingredients:

- ✓ *Industry competition*
- ✓ *National, multi-domestic/regional and global strategies*
- ✓ *International change agents*

This recipe is about industry competition²⁴ and strategy in an international context. Studies of competition typically employ a structural view. The number of buyers and sellers, relative positions (market share), etc., constitute fundamental variables of competition and are classified into the traditional categories of monopoly, oligopoly and perfect competition. Competition also has a “softer” side to it, as we discussed in Part I of the book using a sports metaphor. Together with Maria Bengtsson, I proposed that two industries with similar structures could exhibit very different patterns of competition, what we labeled the “climate of competition”²⁵.

Imagine the “middle box” of Porter’s Five Forces Model. Somehow, the geographical boundaries around that box must be drawn (the other boundaries are less critical since neighboring industries are included in the five forces). As a simplification, competition can range from local in nature (national or sub-national), to multi-domestic (with some degree of international trade and investment), to global. Michael Porter in his 1980 book defined global competition as:

“A global industry is one in which the strategic positions of competitors in major geographic or national markets are fundamentally affected by their overall global positions”. “To analyze competition in a global industry, it is necessary to examine industry economics and competitors in the various geographic or national markets jointly rather than individually”.

M. E. Porter, Competitive Strategy (1980)

After spending time teaching competition and thinking about how competition changes over time, I developed the notion of an “archipelago”, i.e., islands of competition separated by different barriers.



Figure 1. Fragmented Competition

Competition on each island would have different characteristics, both structurally and in terms of climate (e.g., norms). Some markets would be more fragmented than others; bargaining positions would differ across islands etc. Some of the more pertinent barriers would be:

- Trade barriers (tariff and non-tariff) and FDI barriers
- Technical standards and environmental standards
- Transport costs and the degree to which products are perishable
- Local regulations, customs and norms
- Local brands and tastes
- Traditional IO barriers to entry
- Differences in norms, history and culture of doing business
- Geographic cartels (explicit or implicit)

As long as these fragmenting forces are more pronounced, we expect a low degree of international competition. Firms might decide to internationalize and enter a foreign market (green-field or via M&A), but the fragmenting forces would force the firm to play different games on the two different “chessboards”. For the islands to merge in terms of competition, the fragmenting forces must be diminished, for example, through the harmonization of standards (e.g., between different states in the U.S., between nations in the EU, or through global standards) and emerging global consumer/user tastes. Through the actions of firms who are building interdependencies across the islands, integration will also occur. Integrating forces include intra-firm trading (e.g. components), heavy investments into new markets followed by integration of functions such as R&D, assembly operations, manufacturing, logistics, services and emerging global strategies.

Depending on how these forces play out, some industries will move along a scale of local/national, regional/multi-domestic, and global. Some firms are moving to the right on the scale shown in the following figure, while others are moving in the opposite direction, for example, as new, fragmenting environmental standards emerge. Some industries have moved towards the global state, while others stay on as multi-domestic.

It is not easy to identify exactly where a particular industry falls on the y-axis. To simplify things, we use three levels of competition, and to figure out where your particular industry is on this scale, I recommend you to use the following basic tool.

First, we divide the world into five large economic blocks based on GDP: EU (23% of world GDP), U.S. (22%), China (12%), Japan (8%) and Latin America (7%). These blocks – or islands – constitute over two-thirds of the world market, and they are a good approximation of world market positions. Then, list the five major competitors in your industry for each of the islands (see Figure 3). Here we use the example of the telecom infrastructure sector.

Top 5 Market Share	EU	US	CH	JP	LA
1	Ericsson	Ericsson	Huawei	NEC	Ericsson
2	Nokia	Alcatel Lucent	ZTE	Ericsson	Huawei
3	Huawei	NEC	Ericsson	Nokia	Alcatel Lucent
4	Alcatel Lucent	Nokia	Nokia	Alcatel Lucent	Nokia
5	ZTE	Huawei	Alcatel Lucent	Huawei	ZTE

Figure 3. Global Market Matrix in the Telecom Infrastructure Industry (2015)

The highest possible number of firms that can be listed in the Global Market Matrix is 25, i.e., when there are no overlaps across islands, and the lowest possible number is 5, when the top five firms control all islands. In extreme cases, there might be fewer than 5 firms controlling all world markets. In the case of a global monopoly (which I do not think really exists today except in extremely narrow niches), there is, of course, only one firm shown on the entire matrix. In a case where the world market is controlled by fewer than 5 firms, you should categorize the industry as being in the global group. In the spring of 2015, Nokia announced that it would acquire Alcatel-Lucent, and if/when this happens (and the firms are integrated), there will only be five firms left on the telecom infrastructure matrix.

We then classify the industry according to the values you receive:

Global competition 5–11 competitors cover the world
(or fewer than 5 firms)

Regional/Multi-Domestic competition 12–18 competitors cover the world

National competition 19–25 competitors cover the world

The second dimension of the Stairway Model represents the strategies pursued by the firms. We know from IO research that industry structures impose boundaries on strategic choice. In Michael Porter’s words:

*“My view is that there is some set of fundamental traits of an industry which are unchanging and which place some bounds on the strategies firms may choose over the life of the industry. Within these bounds, there are broad ranges of possible strategies, and these change over time as innovations in selling and producing the product occur”.*²⁶

So we have this mix of *voluntary* forces that come into play when firms decide on a strategy with little or no regard for external forces

or signals, and *shaping* forces, whereby industry structures shape strategic direction (compare the metaphor of rails in the Railway Model).

To arrive at a value for the strategy dimension, use the Global Market Matrix provided above and calculate for your particular firm:

Global strategy	Present in 5 columns in the matrix
Regional/Multi-Domestic strategy	Present in 2–4 columns in the matrix
National strategy	Present in 1 column in the matrix

Thus, a firm with a global strategy must be present in all five markets and be ranked as one of top five competitors in each of those markets.

The simple expectation is that firms will tend to fall on the 45-degree line cross-cutting the middle of the following figure. Industries characterized by national competition will favor national strategies, and so on. However, in every industry, we find outliers. In the following figure, we see a multi-domestic industry (12–18 competitors cover the industry matrix) with three players: one with a national strategy, one with a multi-domestic strategy (as expected), and one with a global strategy.

Positions on either side of the 45-degree line are either a result of bad strategy, which will correspond to disappointing profitability (which in this case applies to both the national and the global firm), or a result of innovative and successful strategies, where the distance to the “average” strategy results in some form of economic advantage. Such advantages can, for example, be based on synergies, economies of scale or a business model which addresses customer needs in a manner that is superior to competitors.

Over time, industry positions will change, as will strategic positions. Consider the following example. If a firm embarks on an international strategy in a national industry, this will have implications on both the revenue and cost sides. The issues of why you would do it, what you would bring and what you would meet are all covered in



Figure 4. The Stairway Model Exhibiting a Regional/Multi-Domestic Industry

the Radio Model. If the WHY question can be answered with some economic benefits (scale, synergies, etc.), then one might expect that the strategy will be copied by other firms, and as a result, competition in the industry will shift to a higher level of internationalization – a “stair step” is created. Successful change agents, working outside the “structural rules of competition,” will thus help build a stairway, hence the name of the model. Due to changes in trade rules and other regulations, technological shifts, etc., the direction of movement on the stairway can also be reversed, shifting to a lower level. We have seen in many industries that segments of an industry move up the stairway, while other segments remain at a lower level of internationalization.



Figure 5. The Stairway Model Including a Change Agent

This is exactly what I observed in the home appliance industry (see Part I) while completing work on my dissertation; Electrolux was the outlier playing a lead role in shifting the whole industry up the stairs, and the strategy was based on superior economies of scale, particularly at the plant level. Competing firms eventually had to follow suit or they risked disappearing.

If we turn back to the telecom infrastructure business, we observe a handful of firms competing on the five islands. The matrix has a total of 6 firms (soon to be 5), which makes it a global industry. Ericsson has five positions and so forth. The stairway model as of 2015 is presented in Figure 6.

One of the helpful features of this recipe is that you avoid falling into the trap of equating big firms with global competitiveness. If you make a simple list of the largest producers in almost any industry – it can be insurance, trucks or processed food – you often end up with some Chinese or Russian firms. The size of these firms is typically a result of their monopoly position – “national champions” – in their enormous home markets. If that firm only shows up in the home market in the Global Market Matrix, i.e., if it receives a value of one, then the place on the list of top world producers gives the wrong impression. In fact, the firm is not competitive in international markets; otherwise it would have showed up in several markets and consequently would have received a higher value. How often have you come across the Japan Post Insurance company, the largest insurance company in the world; Russian Railways (RZD), which runs the largest rail network in the world; or China National Tobacco, the world’s largest tobacco company? Or how many of you have sipped Dynasty or Changyu? They’re a couple of the top-selling wine brands in the world, but you have to go to China to find them on the shelves.

