

The Philosophy of Integrative Thinking **Martin, Roger (1999)**

While conventional managerial wisdom often pursues predictable and measurable clarity, the integrative stance embraces an uncommonly high tolerance for, even attraction to change, openness, flexibility and disequilibrium. Integrative decision making typically involves a predictable cascade of four interrelated steps that constitute a heuristic process:

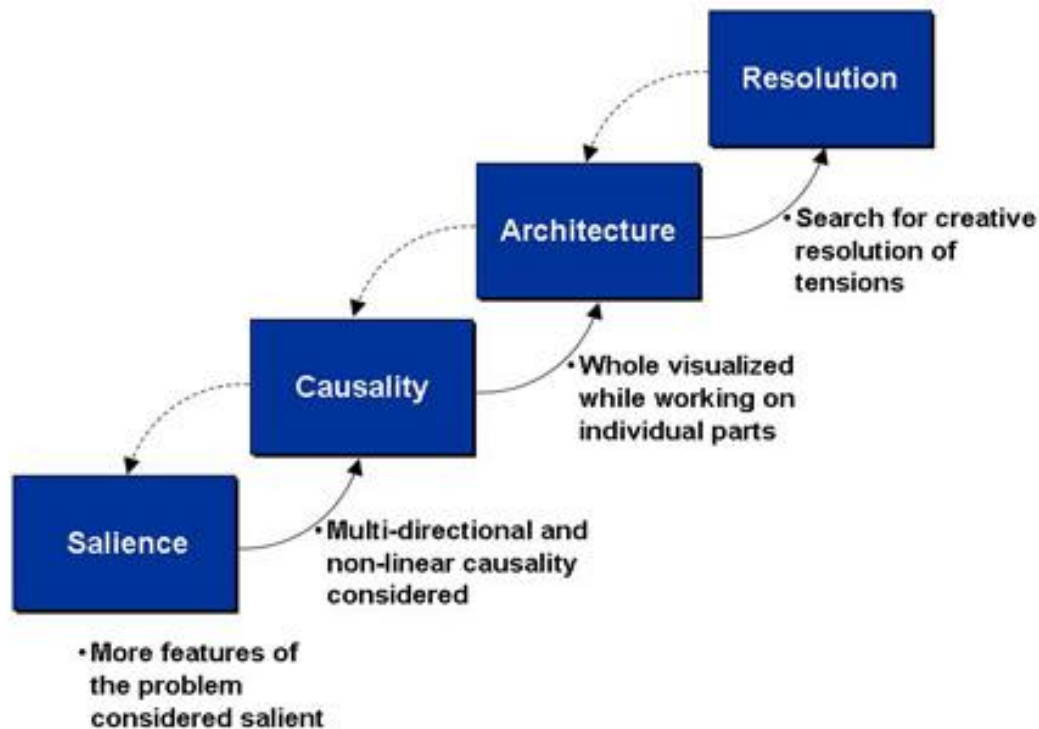
The first consideration is **salience**: Which information or variables are relevant to the choice? For example, when evaluating the impact of a plant closure, a manager may fail to consider the public policy impact of the closure, because it is difficult to predict and integrate the reactions of politicians, media and the community into the decision. Yet answers produced through consideration of fewer variables are misleading and irrelevant at best.

The second step for the integrative thinker is to develop an understanding of **causality** -- the causal relationships that connect the variables and choices under consideration. Integrative thinkers create causal maps that link together the variables considered salient in the first step. In addition to considering fewer variables when assessing salience, less-integrative thinkers tend to view the causal relationships between factors to be linear and one-directional. For example, "Their price-cutting hurts our profitability." The integrative thinker seeks and explores non-linear and multidirectional causal relationships, e.g. "Their price-cutting hurts our profitability, but our new product launch provoked their price cutting." The integrative thinker deals with ambiguity by creating multiple causal models and developing many alternative theories. She embraces and explores mysterious elements, even though the causal relevance is not easily identified.

The next step in integrative thinking is **architecture** -- deciding how to build your model so that all the things that matter get done. Less-integrative thinkers will often try to reduce this to a manageable process by ignoring complexity and tackling one component of the overall problem first, treating it as an isolated element. After solving this 'sub-problem', they move on to the next without the benefit of a rich causal map that can guide choices about sequence. The weakness of this approach is that it doesn't consider the interrelationships between the sub-problems. The integrative thinker recognizes that many salient variables and the whole causal map must be kept in mind during the entire problem-solving exercise. The integrative thinker cuts into the problem by bringing some parts of it to the foreground and moving others to the background -- like a landscape painter -- keeping the whole causal map in mind while focusing on different parts at different times.

The last but most critical integrative step is **resolution**. Once the salient variables are identified, the causal map is built, and the model is framed, choices must ultimately be made. At this point, attitude is critical. The less-integrative thinker will be inclined to see the challenge as a 'bind': "I can do x or y, although neither is truly satisfactory" -- and will focus on developing a strategy for coping with the bind. A more integrative thinker would not see the challenge as an insurmountable bind, but rather as a tension to be creatively and flexibly managed. Rather than accept an 'either/or' choice, the integrative thinker will seek a creative resolution of the tension, even if it requires a delay and continual rethinking and restructuring of the problem and its logic (i.e. steps 1-3).

The Practices of Integrative Thinkers



The Importance of Integrative Thinking

Many managers spend their careers taking actions that produce outcomes that are perplexing and unsatisfying. There are consistent gaps between aspirations and outcomes, which I will define as 'error' - a gap between the aspiration of the actor in question and the outcome they achieve with their chosen set of actions.

Why are errors prevalent? Because the world is a messy place where the links between cause and effect are not clear. Many factors are in play. In this respect, the business world is no different than the world at large. People do not like error. They despise it, because error often feels like losing -- and people hate to lose. Taking action expecting to produce one thing and instead producing a different, less desired outcome feels out-of-control - and people hate to lose control. In the face of feeling out-of-control, people take preventive action. The tactic is to simplify and specialize. That is, to take the messy world they face and simplify it to the point that they feel confident in accomplishing the task at hand.

I call this 'narrow perfectionism' -striving for perfection through narrowing the definition of the task at hand to the point that perfection is guaranteed. This involves simplifying cause and effect relationships to the point that actions produce a guaranteed result. Rather than a clerk defining the outcome as a satisfied customer, he/she defines the outcome as a customer interaction in which each step of the prescribed procedure was dutifully followed. If customers disappear because of indifferent service and the store goes out of business, this is not because of the clerk's error, but rather exogenous factors outside the clerk's control. This is why everyone involved in most disasters -take the Challenger disaster- can explain how they did their job perfectly and they were not causally linked to the disaster. Errors have no 'parents'.

The product of simplification, specialization and narrow perfectionism in the business academy is narrow specialization, primarily by functional area. Business academics research in narrow fields and create models for understanding (and sometimes predicting outcomes in) their particular area. In general, business academics research in one field, often a narrowly defined sub-field and don't attempt to link their models with models outside their field. They then teach their models to students who are predisposed to embrace the narrow perspective they are taught.

Students learn models that explain most of the variance between included variables -and generally don't dig into the unexplained part and the array of variables that could be included if they weren't so difficult to model. The primary skill they develop is the application of models to business case situations that are tailor made for the specific model in question. So in marketing, students are taught a marketing model, which they then apply to numerous marketing cases. Their skill is measured and graded in terms of the degree of skill in applying a marketing model to a marketing case.

The narrow perfectionism of scholars is well matched with the narrow perfectionism of students. The scholars teach students to understand and apply narrow models and the students happily learn models that adhere to their natural human predilection to narrow their perspective to minimize or even eliminate error (by their own definition). As a result, they exit business school understanding an array of narrow models, being able to apply those models, and, to a certain extent, able to choose which of the many models best addresses a given problem they face.

These are not unimportant skills. Since the entire world is predisposed toward narrow perfectionism, they come out honed for such a world. I would argue that great business success does not arise from the application of a narrow model. The supply of MBAs with skill in the application of narrow models is huge -- 100,000 graduate every year with such skills -- so it is unlikely that the labour market clearing price for masters of narrow models is high. Furthermore, one sees massive success most often in either entrepreneurs with little or no formal business training, or business leaders whose success cannot be linked to the application of narrow models.

As a result, business students leave school unequipped by their business education to produce the outcome that many desire - that is, their aspirations are likely to be not matched by the outcome they produce (though in order to guarantee success, they will allow their aspirations to fall to the level of the outcomes they are able to produce -e.g. they may redefine their aspirations to that of becoming a competent and well-paid business professional).

So the problem is that the approach of business scholars and the teaching approach of business schools simultaneously feeds the natural predilections of students and fails to contribute meaningfully to their achievement of their aspirations.

Managers (and recently graduated MBA students) will produce high levels of error with their actions when they can only access the skills of picking and applying narrow models. They will not define themselves as producing error, because they will see the error as caused by factors exogenous to their sphere of influence. The error is produced by the collision of narrow models with a messy world, and the messy world necessitates the use of a 'messy model'.

Integrative thinkers develop and utilize messy models to understand and drive action in a messy world. They build models rather than choose between models. Their models include consideration of customers, employees, competitors, capabilities, cost structures, industry evolution, regulatory environment, etc., not just a subset of the above. Their models capture the complicated, multifaceted and multidirectional causal relationships between the many salient variables. They consider the problem as a whole rather than break it down and farm out the parts. Finally, they creatively resolve tensions to produce a more powerful model rather than

default to choosing one model over another when both are sub-optimal, but one is less so than the other.

Successful business leaders must build their integrative thinking capacity to achieve their success. Most can't explain how they think because their meta-model for action is so complex they are unable to unravel it themselves. However, I have been able to reverse-engineer the meta-model of every successful leader with whom I have worked to satisfy myself (as Professor Emeritus Chris Argyris asserts) that all action is designed, whether the designer believes it or not.

Successful entrepreneurs make excellent examples of implicit integrative thinkers. They create businesses by seeing things others don't see and fashioning business models to exploit these things. By seeing things others don't see, they can overcome tradeoffs others see as unavoidable. However, most struggle to explain what they did, and often think of it as unremarkable because their solution was so obvious to them. It is obvious when the picture is seen broadly and as a whole, rather than narrowly and in pieces.

Business is not the only domain in which integrative thinking is critical. Significant success in many fields is the product of integrative thinking. In fact, research exists that suggests successful artists think in similar ways -- i.e. integratively -- as successful business people.

There is a fundamental question of whether integrative thinking can be taught or not. Are people born integrative thinkers or non-integrative thinkers? Some say yes, but I say no. I would argue that non-integrative thinking is utterly consistent with the natural tendency toward narrow perfectionism. In fact, narrow perfectionism reinforces non-integrative thinking. Their own proclivities drive them away from integrative thinking. In addition, their educational experiences will give them little help in being more integrative in their approaches. So to observe that non-integrative thinkers don't develop integrative thinking skills is no surprise. I would argue that only the most naturally integrative thinkers survive with their thinking approach unscathed to adulthood.