White Paper



Strategic Planning: A New State of the Art

Most would agree that planning is important for any organization. Most have also experienced the difficulties of the planning process. Strategic planning requires a substantial effort but provides very limited benefits. Most distressing of all is the high failure rate of strategic plans [1]. While science has mapped a billion stars in our universe, it has not provided a reliable map for guiding our businesses.

In this white paper, we will briefly review the history of strategic planning to identify road blocks to its progress. We will then highlight an emerging path of research that has led to a strategic planning process that is both easier *and* more effective.

A Brief History of Where We've Been

Strategic planning practitioners have followed a number of different roads in their journey to find better planning methods. Although none of those roads have led to the desired destination, each has something to offer. To better understand the current and emerging state of the art, this section briefly presents insights and limitations of each – including intuitive, data-driven, collaborative, systems-based, and visual mapping.

Instincts and Intuition

Before the 20th Century, formal planning was not a common practice. Business owners made decisions based on personal experience and "gut" feelings. The underlying assumption in those days was that intuition would be a reliable tool for decision making. Today, many managers (especially entrepreneurs in small firms) still rely on that method. And, due to the inherent limitations of intuition, about 50% of those startups fail within the first year [2]. Despite those failures, many avoid planning because:

- They lack familiarity with the process;
- There are few rewards for successful plans but plenty of punishments for failure;
- The organization lacks coherence, so there is "no time" for planning;
- They have a false sense of confidence (like the one leading to the failure of Nokia).

Data-Driven Decision Making

By the middle of the 20th Century, strategic planning had become common among larger firms based on the idea that having more data would enable better decisions. Despite the availability of nearly limitless data the results have not been impressive. For example, the very popular SWOT analysis has been found to be ineffective for supporting decisions and organizational success [3].

Data is seductive, in part, because there is so much of it. The amount of available data today is unknown, although it seems inconceivably large. By one estimate, Google stores 10-15 exabytes (roughly equal to the storage of 30 million PCs) ^[4]. We keep digging keeper and deeper, hoping to find something of value.



So, some larger firms are going further and deeper, striving to deploy "big data" [5]. Even though the inherent difficulty of data-driven analysis means that executives need to spend about 10% of their time focusing on strategic

planning activities ^[6]. It seems doubtful, however, that a purely data-driven approach will be worth the immense effort because, "Data are buried in administrative systems, data governance standards are lacking, data are often unreliable, and data can cause unintended consequences" ^[7].

While data is necessary for good decision making, the challenge seems to be sorting out what data matters most. Unfortunately, advances in information technology (such as low cost electronic devices) are just making more data available. It is not addressing the challenge of helping leaders make better decisions.

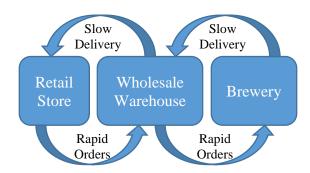
Collaboration and Consensus

By the end of the 20th Century, insights from management studies, Systems Thinking, psychology, Organization Development, and Industrial/Organizational Psychology suggested the benefits of improved communication and collaboration across all levels of the firm [8]. With brainstorming, dot voting, dialog, and other techniques the collaborative approach was supposed to surface the shared wisdom of the group and build support for common goals.

While collaboration can draw the best out of teams, it is not guaranteed to do so. Often, the most dominant personalities control the conversation and evaluating the quality of the resulting decisions can be difficult. In short, collaborative efforts have not lived up to the expectations. Efforts to build better cultures and strategically re-organize to meet market challenges have been successful less than 20% of the time [9-11].

Systems Thinking

Another promising direction for strategic planning that has not reached its desired destination is Systems Thinking [12]. An example of a systems model is MIT's "Beer Game" (highlighting the confusion created between rapid orders and delayed deliveries) which was also popularized in a book by one of the school's professors, Peter Senge. While useful [13], especially for improving the thinking skills of individuals and teams [14], it is also full of jargon and difficult to apply [15] even for the experts [16]!



That high level of complexity tends to make this approach impractical for busy leaders who would prefer to spend time thinking and talking about the business, rather than learning graduate-school-level systems modelling techniques.

Mapping the problem

A variety of visual mapping methods have been developed and deployed to help us "understand what we understand." These include mind mapping [17], concept mapping [18], and others.



Relationship map from: https://kumu.io

One of the most influential has been cognitive mapping [cf. 19]. While useful for viewing and discussing a large number of concepts simultaneously, there has been no objective method for measuring those maps to show that one map (or plan) is "better" than another. Thus, there is no clear way to "improve" our maps (we cannot manage what we cannot measure) and we must resort to unreliable intuition.

To summarize this brief history, the strategic planning road has been a rocky one; both for those making the plans, and those subjected to the implementation. Only a small percentage of strategic plans actually succeed [20] while individual decisions (based on those plans)

succeed only about 50% of the time [17]. It seems that managers and leaders might as well be tossing a coin. Clearly, we need a new direction.

Taking an Alternative Route

Rather than base their recommendations on the presumed benefits of intuition, data, or collaboration for making effective decisions, a few researchers were seeking (and finding) solid proof.



One team of researchers investigated "mental models" and developed a way to measure the conceptual "structure" of those models. They were able to show that individuals and teams with more structured understanding of their situations were able to make better decisions to reach their goals. Their results hold true for management teams [21] and political leaders [22]. Even students were able to obtain higher test scores when their understanding of the classroom material was more structured [23]. Without getting into too many details, the concept of structure may be easily understood by comparing a giant spreadsheet of messy data to a well-designed pie chart. Structure makes information easy to understand.

Another group of researchers used a similar approach to analyze formal knowledge – investigating everything from the laws of physics to theoretical models of the social sciences [24]. Their breakthrough means we can now measure the structure of models as "knowledge maps" and even predict the chances that those maps might be successfully implemented for reaching goals and

objectives. That method makes it possible to measure different plans and determine which one represents the best understanding for action planning – a game changer. By objectively measuring their structure, we can improve our plans – and so provide a new competitive edge.

Insights from these alternative routes of research allow us to overcome the greatest weaknesses of past methods for strategic planning.

The Better Road

Following years of painstaking research, the many roads of strategic planning are merging. In one award-winning academic paper [25], a clear and simple approach for creating more useful maps arrived with "ASK MATT;" a table-top process for creating a highly useful knowledge map. Integrating previous methods of strategic planning, that process supports collaboration, by including key stakeholders; intuition, by surfacing the deep, tacit, expertise of participants; data, by including relevant information from a variety of reports in a clearly comprehensible format; systems thinking, by using an innovative mapping structure – but without the confusing jargon. Finally, ASK MATT is a relatively easy process; requiring hours instead of days to create an effective map.

Because the map identifies causal relationships between concrete variables, it is extremely easy to identify action steps for reaching goals and objectives, as well as finding leverage points

State of the Art Strategic Planning

- Improves communication & collaboration
- Overcomes information overload
- Reveals gaps in plans using simple scoring
- Exposes tacit (hidden) thinking within the team for better dialogue
- Shows leverage points for better problem solving, decision making and goal setting
- Sets more effective measures and targets

where small efforts can lead to large results while limiting unanticipated consequences.

Is there a limitation to this method of structural mapping? Certainly. Some speculative philosophers attempt to create maps based on the assumption that "everything is connected to everything." And, while that may be true on some metaphysical level, it is not very useful for navigation. You need to find a service station *before* you go on a long journey – not after you have run out of gas. A good mapping process takes those kinds of issues into account to ensure that your team makes a more useful map.

A Simpler, More Effective Solution

Experience shows that this state of the art mapping process is well suited for strategic planning. ASK MATT has been applied with excellent results across the United States and overseas. Satisfied clients from a variety of industries include leadership teams, managers at all levels, coalitions, boards of directors, workteams, and more.

Although designed for knowledge mapping, our experience suggests that the process may bring additional benefits including:

- Improved communication and collaboration between for teams:
- Accelerated knowledge transfer for leadership succession planning;
- More effective coaching and problemsolving dialog;
- Easier implementation and troubleshooting of plans.

Finally, causal maps are great tools for presenting strategic plans to other stakeholders such as boards of directors, employees, customers, and even community groups.

Research continues in this area, extending and improving the state of the art and we are driven to find new and nuanced methods for evaluating and improving our strategic planning process. In doing so, we are striving to support the efforts of leaders reaching for a new future in strategic planning and organizational success.

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