



STRATEGY 4.0

Moving from “Crystal Ball” strategies to big data and the use of predictive analytics for strategic planning

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INTRODUCTION

Have you ever asked yourself why is it that strategic planning feels like the fantastical stories of a midway fortune teller? Is it that like the stories of a fortune teller, where they peered into a crystal ball foresaw the future and then told us to trust and it will happen, only to look back years later and see very little came true. This concept of strategic planning through the lens of a crystal ball may be funny, entertaining and even reflective of what you've experienced in your work place, but it shouldn't be considered strategic planning. Real strategic planning has evolved and is now taking its cues from Industry 4.0 and capitalizing on the use of big data and predictive analytics to enable organizations to capitalize on unforeseen future competitive advantages. The paradigm has shifted from "What we think will happen?" to "Designing what will happen!". Today successful strategies are designed with three key pillars in mind that include Visual Harvesting, Cognitive Diversity and Predictive Analytics.

Three Pillars

Strategic Planning in its most basic form is the process of designing a structured framework that allows the organization to make tactical decisions and moves that lead, to a successful destination. Without a strategy, the organization is exposed to a higher risk of repeating its past mistakes or to quote Sun Tzu *“tactics without strategy is the noise before defeat”*. By integrating three pillars into the strategic planning process, Visual Harvesting, Cognitive Diversity and Predictive Analytics, an organization can successfully design a future destination, the tactics to reach that destination and identify the tools needed to hyper-focus their team to allocate the right resources at the right time to reach their desired destination.



Visual Harvesting

Is the process of visualizations, big picture thinking, strong facilitation along with contextual knowledge and understanding. Numerous university and scientific studies have shown that 90% of information transmitted to the brain is visual and 65% of the population are visual learners. Images and sketches engage more stakeholders and ensures longer retention by the viewer. So how do we integrate visual harvesting into the strategic planning process? According to Dan Roam the author of the best-selling book, The Back of The Napkin “Our visually driven world now demands that pictures step to the front. But this is not a new phenomenon; pictures have always been at the heart of great breakthroughs in science, economics, technology, politics, and business. What is new is that you can’t ignore the visual anymore.” Therefore, using visual harvesting is key to describing an organization’s present state “where we are today” and a future state “our destination”. This can be accomplished by using simple stick figures and doodles to visualization tools like mind maps and Wardley maps.

Visuals and images are processed 60,000 x faster in the brain than text.

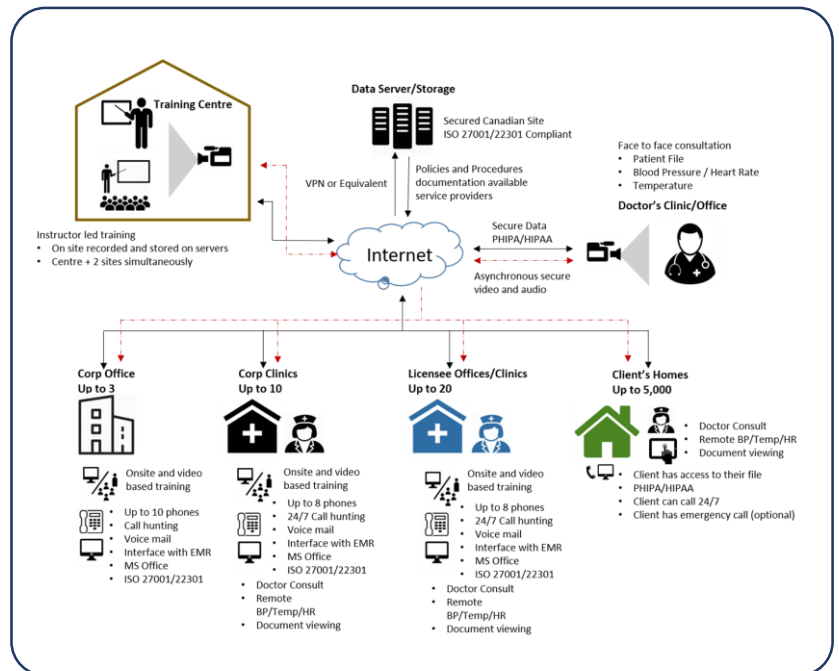
An Example:

- A plane figure with four equal straight sides and four right angles



Which one said square to you first?

Visual harvest depicting an ISO 27001, PHIPA compliant e-health network for treating patients in their home.



Cognitive Diversity

To achieve a cognitive diversity in a team you must seek input from three unique groups during the planning phase.

"Inherent Bias" refers to the effect of underlying factors or assumptions that skew viewpoints of a subject under discussion.

Source: Wikipedia

"Transactive Memory" is a psychological hypothesis first proposed by Daniel Wegner in 1985 as a response to earlier theories of "group mind" such as groupthink.

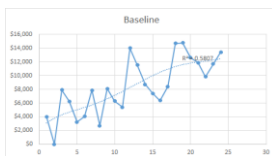
Source: Wikipedia

Relates to differing forms of generative and relational thinking. It's more inclusive, collaborative and open to discussion, as social and inherent biases are removed from the process and people feel empowered to express and try out new and innovative ideas. University studies by CMU and several others into team cognitive diversity has demonstrated the psychological dimensions that represent consistencies in how individuals acquire and process information, and guide their performance on information processing, decision making, problem solving, and creativity tasks. So how do we integrate cognitive diversity into the strategic planning process? Our research and experience has shown that to achieve a cognitive diversity in a team you must seek input from three unique groups during the planning phase. The first group includes executive and operational stakeholders, they work inside the organization completing the day to day tasks. The second group includes key stakeholders, they interact with the organization but don't work inside of it. The third group includes independent stakeholders, they have no ties to the organization and for that reason will challenge status quo thinking of the other two groups. By ensuring cognitive diversity in the planning team you eliminate social and inherent biases and enables greater strategic focus, better strategic consensus, transactive memory, and creativity.

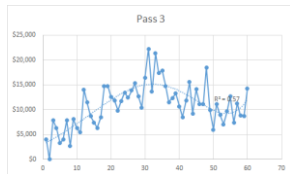
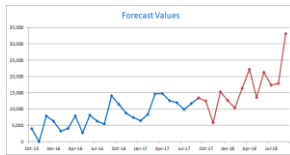
Predictive Analytics

Is a branch of analytics that uses patterns in historical and transactional data to identify future unknown events. This is accomplished through the acquisition and analysis of both structured and unstructured data and the application of data mining, statistical modelling, machine learning and artificial intelligence to identify yet unknown future risks and opportunities associated with a specific

Sample baseline monthly revenue used as input for predictive analytics.



Sample results of future monthly revenue using a triple exponential predictive analytics model



event. From Thomas H Davenport in the Harvard Business Review “No one has the ability to capture and analyze data from the future. However, there is a way to predict the future using data from the past. It’s called predictive analytics, and organizations do it every day.” So how do we integrate predictive analytics into the strategic planning process? Most planning sessions are debates about the uncertainty of discrete outcomes, whereas predictive analytics removes the uncertainty by predicting future outcomes using data mining, deep learning and modelling. To obtain the best results the organization mines internal data then combines it with visual harvests that have been created by a cognitively diverse team.

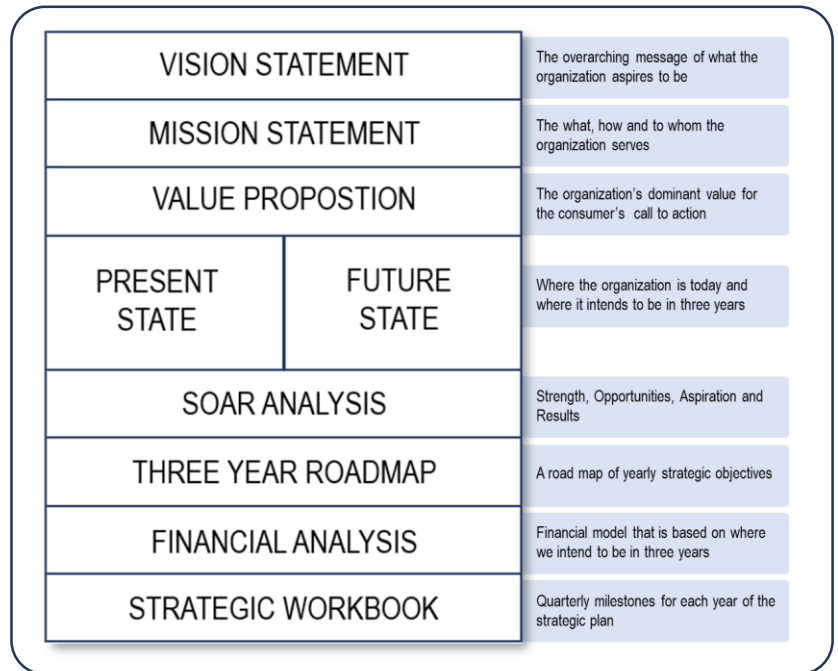
A Simple Model

The following strategic planning model may seem simple and intuitive at first glance and therefore simplistic in its description and application. Be assured that although this model is simple it is not simplistic. SIMPLE does not equal SIMPLISTIC.

In the purest sense:

- Simplistic = shallow and fast; and
- Simple = deep and long.

An example of simplistic would be “experience is the best teacher”. On the surface a truthful statement however if we examine it further we quickly discover this is only a half truth. All experience teaches us something but teaching without context or new skills does not necessarily make us wiser or smarter, just the benefactor of experiences. Whereas an example of simple would be $E = MC^2$ although simple in its components the result is undeniably equal to years of study, numerous skills and layers of experience.



Strategic planning cannot be achieved through a single planning meeting, or a multi-day retreat these are merely steps in an overall process that includes:

- Socio-economic, buyer and supplier influence analysis;
- Benchmark of the organization against its competitors;
- Terms of reference for the strategic planning group;
- A Visual Harvest of the present state of the organization;
- Testing of the Vision and Mission statements;
- Identification of the core value proposition that supports the vision and mission;
- A Visual Harvest of the future state of the organization;
- Strengths, Opportunities, Aspirations and Results (SOAR) analysis of the organization;
- Data mining of economic indicators and drivers'; and
- Statistical modelling and predictive analytics of future outcomes.

The output is a well-defined strategic plan that forms the basis for several management and organizational tools that include:

- One page visual representation of the strategic plan used for better communication;
- A strategic dashboard and KPIs used by management to monitor the success of the strategic plan;
- A strategic workbook used by various stakeholders in the organization to identify quarterly and yearly goals;
- A strategic framework that empowers staff to make decisions and take measured risks; and
- Strategic data and inputs for developing a business plan of tactics that is tightly coupled to the strategy leading to the future state.

Identification of roles, inputs and deliverables

	Strategist	CEO	Corp. Stakeholders	Key Stakeholders	Ind. Stakeholders	Employees	Customers	Suppliers
TASKS	Input is required from these groups							
Socio-economic, buyer and seller analysis	X	X				X	X	X
Terms of reference for the strategic planning group	X							
Benchmark of the organization against its competitors	X							
A Visual Harvest of the present state of the organization	X	X						
Testing of the Vision and Mission statements	X		X	X	X			
Identification of the core value proposition	X		X	X	X			
A Visual Harvest of the future state of the organization	X		X	X	X			
Strengths, Opportunities, Aspirations and Results (SOAR) analysis	X		X	X	X			
Data mining of economic indicators and drivers	X							
Statistical modelling and predictive analytics of future outcomes.	X							
OUTPUTS	Users of the strategic plan or material							
Strategic Plan	X		X	X	X	X	X	X
Visual representation of the strategic plan/poster	X	X				X	X	X
A strategic dashboard and KPIs	X	X	X					
A strategic workbook used to identify quarterly and yearly goals	X		X	X		X	X	X
A strategic framework to make decisions and take measured risks	X		X	X		X		
A Business planning framework tied to the strategic plan		X	X	X				

All organizations are complex things that include employees, activities, practices, data, inherent biases and capital. However successful strategic planning will align activities and practices, make use of big data, eliminate inherent biases and predict a future desired destination. It's the organization's employees that will execute the plan and it's the same employees that will either buy into the plan or disregard it. To avoid the latter its import to engage and inform employees and this is done by providing clarity. People follow clarity therefore a good strategic plan will identify a new future and *a great strategic plan will inspire employees with the conviction of the destination and its importance*, doing this develops the motivation and determination to get to the end.

About The Strategic Consulting Group

The Strategic Consulting Group's consultants have the hands-on STRATEGIC PLANNING experience to help your organization clearly define and reach their desired goals. Our team provides strategic and practical solutions to help overcome CHALLENGES. We work with a range of private and not for profit organizations across Canada and the USA. Our approach is to develop strategies by using Predictive Analytics, Strategic Visual Harvesting and Cognitive Diversity. Integrating the three, hyper focuses a team, eliminates social influences, inherent biases, and delivers highly predictable and accurate strategic solutions.

From one on one coaching, workshops, retreats and consulting mandates our services are realistic with measurable results, geared to your schedule, needs and challenges.

For additional information please contact:

The Strategic Consulting Group

Email: Info@myscg.ca

Tel: 613-604-9600