# Proposal for Strategy Sessions with the City of Victoria

**Intelligent Management Inc.**

# Methodology

Intelligent Management Inc. (IM) works with organizations to create robust and systemically sound strategies, action plans and implementations. IM works with the expertise and intuition already present in an organization, and guides that competence through a structured, systemic thought process. This process leverages existing knowledge and know-how to craft an innovative, powerful, solution to move the organization forward towards their desired goal.

The method adopts the Thinking Process Tools from the Theory of Constraints, a world-class best practice methodology for management. Dr. Domenico Lepore, founder of Intelligent Management, has been leading strategy and implementations with a wide range of organizations internationally for almost two decades. He developed The Decalogue methodology as a powerful synergy of the Theory of Constraints with the management philosophy of W. Edwards Deming. This methodology enables an organizational design based on projects for increased stability, capacity and continuous improvement.

## The Pattern for Creating A Systemic Strategy

Strategy is about identifying a direction and creating robust solutions to move coherently in that direction. It involves identifying the changes that need to be created.

There are three main phases for this:

- what to change
- what to change to
- how to make the change happen

For each of these phases, there is a powerful Thinking Process Tool from the Theory of Constraints (TOC).

**What to change**

In the first phase of creating a strategy, we have *intuition* about the current state of reality that requires change. This intuition can be effectively captured by listing the Undesirable Effects in our current reality. Once identified, these Undesirable Effects can be summarized into a generic Undesirable Effect. This becomes the starting point for building a Core Conflict Cloud diagram. The building of a Core Conflict leads us to identify the profound needs that drive an organization, and these needs are connected with vision and control. Once these needs are precisely verbalized, we can then derive organically the common goal that satisfies those needs. This provides us with a direction upon which to build a coherent strategy, rather than artificially imposing a goal. We then systematically surface all the underlying assumptions (mental models) that connect the statements we have made. Once completed, the Core Conflict Cloud provides us with a root cause analysis of what is keeping us stuck and a clear verbalization of the goal we desire to accomplish with the organization.

**What to change to**

In this second phase of creating a strategy we identify precise solutions (known as 'injections' in TOC) to move us forward towards the goal. We derive these solutions organically by invalidating the assumptions, or mental models, that underlie the Core Conflict we have already verbalized. These injections point in the right direction and make us see where we want to go more clearly. They are the road signs to the future.

Now we need to connect these injections together into a full-blown road map. This is achieved through *understanding (analysis/development)*. Understanding is the human ability to imagine and plan beyond the contingencies of the present and towards a meaningful future. The Thinking Process Tool called the Future Reality Tree (FRT) supports and enhances our understanding. Using a logic of sufficiency, this tool maps out the solutions in a progressive and integrated pattern towards the goal previously identified in the Core Conflict Cloud.

**How to make the change happen**

At this stage, the Future Reality we desire and the solutions required to achieve it have been meticulously mapped out. We now need to break the solutions down into actionable steps. This is done in two stages. The first stage is completed by building a Prerequisite Tree for every injection in the Future Reality Tree. This Tree is generated by listing all the obstacles that stand between our current situation and the achievement of the injection. These obstacles are then transformed into Intermediate Objectives, and the Intermediate Objectives are mapped out on the basis of which are prerequisites in order to accomplish the Injection.

We can now zoom in further to create steps that can be scheduled as a project for every Intermediate Objective. The tool for this is called the Transition Tree (TRT), and it maps out the precise actions to take, as well as the logic behind them. This makes it the ideal tool not just for individuals but for groups to share. It provides a protocol with detailed instructions, and all the elements that allow a project to be built and scheduled.

**Why we need the Thinking Process Tools**

Change is cognitively challenging and inertia can quickly become the constraint of an organization. Sometimes, when change is required, the pace at which knowledge is being generated is challenging, both mentally and emotionally.

The Thinking Process Tools allow us to identify the changes we need to make and plan those changes in a robust and systematic way. They also help us learn how to see change as not simply something to be feared, but a natural, intrinsic part of our life. When we learn how to use our intuition and intellect to implement consistent action, change is no longer a threat and a hazard; it is a continuous source of new opportunities.

The Thinking Process tools can be learned and applied with great success. Intelligent Management Inc. has been training individuals and organizations with these tools for over 15 years. The diagram below illustrates the cycle of Thinking Process Tools as they are applied to the creation and implementation of a strategy.

Thinking Process Tools Path for The Decalogue

www.intelligentmanagement.ws
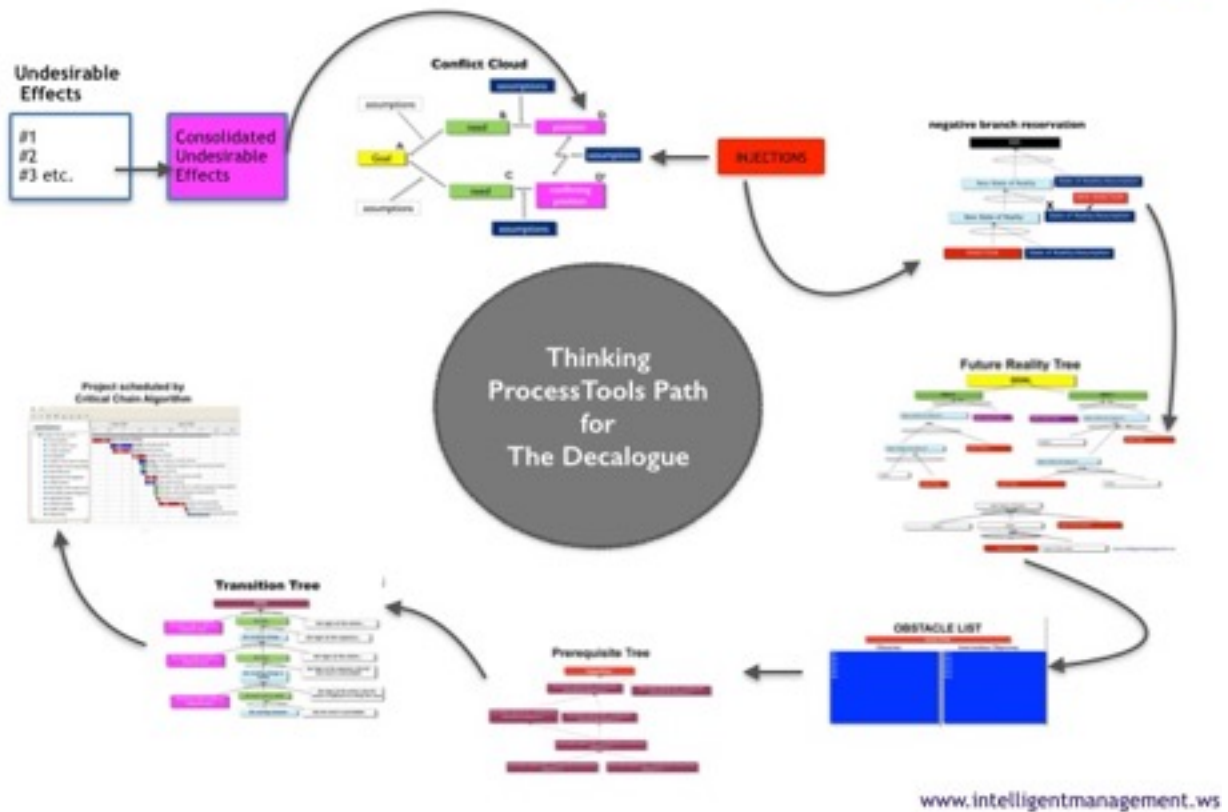
In the above diagram, we illustrate the complete cycle of Thinking Process Tools used to create a strategy and implementation of that strategy.

This cycle starts by identifying the Undesirable Effects that characterize the current reality of an organization. We summarize those into one, generic Undesirable Effect (top pink box), that becomes position D in the Core Conflict cloud. This allows us to verbalize a Desired Reality, that becomes position D' (bottom pink box). We then verbalize the needs (green boxes) that underlie positions D and D'. From these needs we are able to derive a common goal (yellow box.)

We can move forward from the situation of blockage depicted in the Core Conflict Cloud by invalidating the assumptions between positions D and D' with a set of Injections (solutions) - see the red box. We can then connect all the injections with a logic of sufficiency towards the goal identified using the tool called the Future Reality Tree, that maps out all the injections towards the goal. We can check the injections for negative implications with a tool called 'Negative Branch Reservation'.

In order to create actionable steps for the Future Reality Tree, we first build Prerequisite Trees for each injection, starting with a list of obstacles. Obstacles are transformed into Intermediate Objectives and these are mapped out based on prerequisites. We break these down into further detail, creating step-by-step actions with the Transition Tree. This level of detail allows us to create a scheduled project for every Injection. The method used for projects is the Critical Chain Project Management method, based on finite capacity scheduling.

## Working with City Hall to Build a Strategy

## Phase One: What to Change / What to Change To

Sessions with Mayor, Council and senior executives to gather Undesirable Effects in the current reality of City Hall to create a systemic, cognitive 'snapshot' of what is causing a blockage in the organization. The tool used for this is the Core Conflict Cloud, with which we identify the real needs of the organization, and identify any limiting beliefs. IM then supports the organization in generating a breakthrough solution. Once the solution is agreed on, a complete map of the strategy for the new solution is built using the Future Reality Tree.

- **One-on-one sessions between Dr. Lepore and individual Councillors**
- **Plenary session to introduce the methodology**
- **Approx. 50 hours of plenary sessions with the Mayor, Council and senior executives of City Hall to:**
    - **build the Core Conflict (Current Reality Tree) of City Hall**
    - **develop all the 'Injections' (solutions) that address the Core Conflict**
    - **develop a full Future Reality Tree (IM team)**
    - **plenary sessions to present, discuss, and modify as necessary the Future Reality Tree.**

**Fee for Phase One: CAD 55,000 + 5% GST**
50% of fee due on acceptance, and the balance on completion, subject to discussion.

**Intelligent Management provides materials and books. Sessions will be led by Dr. Domenico Lepore and Dr. Angela Montgomery.**

# Reference material for further information on the methodology

The Decalogue methodology was first published by North River Press in the USA as 'Deming and Goldratt: The Decalogue' by Domenico Lepore and Oded Cohen in 1999. It has been translated into several languages and is recommended reading in universities around the world.

Further publications by Dr. Domenico Lepore and Intelligent Management:

'Sechel: Logic, Language and Tools to Manage Any Organization as a Network.' Intelligent Management Inc., 2011.

G. Maci, D. Lepore, S. Pagano and G. Siepe. "Systemic Approach to Management: a case study". (Poster presented at 5th European Conference on Complex Systems, Hebrew University, Givat Ram Campus, Jerusalem, Israel, September 14-19, 2008).

G. Maci, D. Lepore, S. Pagano and G. Siepe. "Managing organizations as a system: the Novamerican case study". (Poster presented at International Workshop and Conference on Network Science, Norwich Research Park, UK, June 23-27 2008).

D. Lepore, G. Siepe, and A. Montgomery. "Managing Complexity in Organizations through a Systemic Network of Projects". Chapter to be published in 2015 in the volume *From Problem Framing to Problem Solving: Applications of Systems Thinking and Soft Operations Research in managing complexity.* Publisher: Springer

**WEBSITE**

Intelligent Management has a very rich website filled with explanations of different aspects of the methodology. We also blog regularly on implementing systemic solutions to complex problems. Our blog can be found here:

http://www.intelligentmanagement.ws/blog-2/

For the Decalogue methodology see:

Intelligent Management Inc. 703-399 Tyee Rd., Victoria, BC V9A 0A8 Tel: 250 580 1783

http://www.intelligentmanagement.ws/about-us/introduction-to-the-decalogue/

For the  Core Conflict cloud see:

http://www.intelligentmanagement.ws/learningcentre/what-are-the-thinking-process-tools/building-the-core-conflict-cloud/

For the Thinking Process Tools see:

http://www.intelligentmanagement.ws/learningcentre/what-are-the-thinking-process-tools/

For a bio of Dr. Domenico Lepore see:

http://www.intelligentmanagement.ws/about-us/dr-domenico-lepore/

Intelligent Management has recently released a *business novel* and accompanying website using narrative to explore a systemic approach to sustainable prosperity with highlights of the methodology in the online Knowledge Base for the book. See:

www.thehumanconstraint.ca

**APPENDIX**

**SUMMARY OF CONTENTS OF** *Sechel: Logic, Language and Tools to Manage Any Organization as a Network*

- The work of an organization and the way it interacts with its environment is systemic in nature. In other words, the organization viewed as a system is not an 'invention' but rather a 'discovery': it is the unveiling of something that is structurally inherent to the life of any organization. Organizations are, and must be, considered as systems. The conventional Hierarchical/functional organizational chart is far from adequate to portray what an organization should do and how it should work.

- The most fundamental feature of any system is the way its components (its processes) interact and are interdependent with each other in the pursuit of a stated and agreed upon goal. Such a network of interdependencies shapes and determines the possibilities of the system towards its goal.

- The most effective way to manage the performances of a system is through the understanding of the variation of its processes. Such understanding must be statistical. Hence, managing a system means, in essence, managing its variations. Any meaningful leadership can only be originated by a profound understanding of the nature of process variation and its impact on the system and its environment. A leader must strive to ensure statistical predictability everywhere in their organization in order to allow meaningful managerial decisions.

- The performances of a system made up of processes with well understood variations can be greatly enhanced if we determine one element to be its "physical" constraint. In such a variation-managed, constrained-based system the performances of the whole are essentially linked to the performances of the constraint. A new measurement system is required based on Throughput, Inventory and Operating Expense and their basic interrelations. The Decalogue provides a simple algorithm and a guideline to guide the management of such a system.

- What is the most logical and practical way to coordinate the work of a constraint-based system? In other words, how can we proficiently organize the network of interdependencies making up our organization? What is the organizational structure most suitable to sustain the systemic endeavour?

- Such a structure is a multi-project environment. Any organization that accepts the idea of system will find in the 'network of projects' the organizational structure that most naturally leverages the power of a system.

- Leading and managing an organization as a network of projects certainly requires a precise algorithm but, just as importantly, it requires from the members of the organization the development of a new way of thinking, faster learning and a much greater ability to act coherently with the new learning. We call this 'enhanced intelligence' *sechel*.

- Tapping into this exclusively human kind of higher intelligence becomes possible when we learn how to connect three basic faculties of the human mind: the ability to generate new ideas (intuition); the ability to analyze the full spectrum of implication of the newly generated ideas and plan accordingly (understanding); the ability to execute coherently and proficiently upon the plan (knowledge).

- These faculties preside over the ability to accomplish change and, more precisely: a) the ability to identify what has to be changed; b) the ability to identify the direction of the change (what to change to); c) the ability to cater for the concerted actions needed to bring about the change.

- The Theory of Constraints (TOC) provides a set of logical tools to address and govern these three phases of change. These tools, allegedly simple and easy to learn, if used properly and methodically affect our ability to connect the above-mentioned faculties of the mind: intuition, understanding and knowledge. They help acquire a better *sechel*.

- The pillars of the conscious and connected organization of the 21st century are then: an increased intelligence (*sechel*), a statistical understanding of the systemic nature of the work of the organization, an organizational structure based on a 'network of projects' that replaces the obsolete hierarchical/functional structure.

- A new leadership is needed to manage in this new scenario. Such a leadership will drive the transformation from the present state to one of optimization: cooperation NOT competition; win-win NOT win-lose; statistical understanding NOT forecast; people development NOT performance appraisal; sustainability NOT short term gains; long term planning and careful execution NOT quarterly results.

- Part Three contains several examples on the application of the knowledge and method described in Parts One and Two. Such examples will be illumi-

nating for those who understand the underpinning theory and of no use to the hasty and unfocused reader.

- Part Four tackles the new frontier of network theory as a basis for managing organizations. This can be achieved on a practical level by designing the organization as a network of projects with a strategic constraint, and by using statistical methods for continuous improvement.

The diagram (see above) maps out the complete implementation cycle using the Thinking Process Tools. This cycle can be used both on a macro and micro scale, to transform an entire organization into a thinking system, or more simply to transform a situation of blockage within an organization into a systemic project for increased Throughput.

This cycle begins with the collection of Undesirable Effects (UDEs), which allows the core conflict, i.e., the cognitive constraint preventing an organization from achieving its full potential, to be verbalized in the form of the conflict cloud. This conflict cloud includes the goal of the organization and the two fundamental needs underpinning the vision and structure of the organization.

Once the underlying assumptions that create the core conflict are surfaced, a breakthrough solution(s) can be devised, known as 'injection'. The Future Reality Tree (FRT) uses a logic of sufficiency to connect the injections with statements of reality ensuring the achievement of the goal while satisfying the two fundamental needs identified in the conflict cloud. Any negative implications identified during the building of the FRT are verbalized and addressed using the Negative Branch Reservation (NBR).

In order to implement the injections/solutions, all obstacles are identified and reverbalized in terms of Intermediate Objectives to be achieved. These Intermediate Objectives are mapped using the Prerequisite Tree. Each intermediate Objective is further broken down into actions using the Transition Tree which reveals the logic, need and resulting change in reality of each action to be taken. Once the actions have been specified, they can be scheduled into a project using the Critical Chain algorithm based on finite capacity.