

What and why?

What Are Constraints?

Constraints are entities, processes, events, relations, or conditions that raise or lower barriers to energy flow without directly transferring kinetic energy.¹

Have you ever wondered why a perfectly planned and resourced endeavor failed to materialize as intended? It is possible that when it happened that context and constraints were involved. Some philosophers of science speak about the fact that it happens “because without cause”². We may have come to a moment in the development of science and technology in which we can no longer afford to ignore the constraints/context to continue our quest for improvements.

A large volume of material explaining and classifying the constraints and their impact exists and is ready for general consumption. All we need is to pay attention, learn and determine what may be realistic and practical in our issue(s). This realization of the role constraints play is a foundation of the method “Constraint Mapping” facilitating adaptive experimentation.



Maze of Options

Photo by Amber Janssens from [Pexels](#)

¹ Definition from the book by Alicia Juarrero - “Context Changes Everything” 2023, p.40

² [Marc Lange](#) “Because without cause” 2016

Attentive readers of ancient and modern maps realise that these useful navigational tools, provide us with glimpses of the world understanding at given point in time. Even a casual look at Olaus Magnus’s 1539 *Carta Marina*, has to catch our attention. In 1570 [Sebastian Münster](#) created a catalog of these monsters. It is richly illustrated with several types of sea monsters which, today would be associated with illustrated fantastic children stories.



However, these fantastic 16th century sea monsters are an artifact, a chart of human understanding of the world at the time. These were a legitimate metaphores of the unknown awaiting explorers who would dare to travel where “there are monsters”.

Our attempts of coping with issues we encounter in our increasingly complex world, resemble that of the navigators in the early Age of Exploration. We need to dare to travel where “there are monsters”. We have to start charting the monsters, visualizing routes, currents, tides, and perils which in XXI century devour and destroy the courageous-uninformed.

The awaiting, yet to be discovered, territories lure us with infinite potential to improve, create and eliminate scarcity. Constraint Mapping is an invitation to safe experimentation and our own implementation of the method recently proposed by [Dave Snowden](#) based on the work others.

Constraint/Monsters Mapping A XXI Century Invitation To A Voyage

Most of the management methods in use today focus on visionary solutions and disciplined execution of proposed model/implementations. Little attention is devoted to comprehending what complexity is and what methods are effective in it. *Complex situations can be controlled we just need to ...* remains an often repeat falsehood instrumental in new managerial fads. Often what we perceive as clear and certain turns out to be faulty, limited and impeding or, using the proposed here nomenclature, constraining self-organization. Complex issues, sometimes also called wicked problems, seem to resist, and derail algorithmic solutions.

Addressing of complex issues requires a thoughtful and skillful approach which benefits from recognition of *emerging patterns* of being and working.

Among methods dedicated to complexity management, *constraint mapping* is one of the most promising and useful. It is based on practical observations and captured in the form of *perceived* constraints. If properly understood and discussed, *perceived* may turn out to be real or illusory. Articulated constraints illustrated by stories people tell when asked about what scares and discourages them in life and/or work, can be evaluated and remedied.

This workshop will demonstrate how to approach Constraint Mapping from the practical point of view. We will look at examples and the entire flow of activities in a mapping campaign structure. Time will be devoted to deeper understanding of underlying principles, constraints, context, counterfactuals etc.

Reason #1

Identity as emergent property of a complex system

Why interest in identity?

Identity of individuals, groups, and organizations plays a critical role in everyday practice. We cherish entities which are reliable, creative, inventive etc. However, we do not realize to what extent identities and their character are a result of, not only aggregation of components, but also a product of relations, interactions which form the system. We overly stress components but not enough care for interrelation dependences of an ecosystem.

Reason #2

Constraints form context and identity of components

Why interest in context?

Not all events are independent of context. However, there is an increasing awareness of the fact that many are. Recent pandemic provided a good illustration how context dependent response made a big difference on the disease impact. History and culture are just a few examples of the impact context has on business and life in general. Context dependent constraints are increasingly rising in importance in medicine, science, and technology. The advent of artificial intelligence will only accelerate this process.

Reason #3

Affordances a product of enabling constraints

What are affordances?

Among different forms of constraints affordances occupy a prominent position because of its cognitive impact. Affordance theory views psychological capabilities as relational properties that intertwine capabilities and propensities with the ecosystem. They are constraints that impact cognitive and behavioral possibilities. Sometimes even preventing us from reaching for what is very close but erroneously considered as out-of-bounds of reality.