

Design Thinking and Effectual Action

The importance of 'design thinking' for creating innovation in business.

Prof., Peter McGrory, School of Arts, Design and Architecture
Aalto University, Helsinki, Finland.

Design Thinking ...

Can be viewed as both a mindset as well as a methodology which incorporates and integrates an empathetic, holistic, synergistic, generative, collaborative and effectual approach to innovation and entrepreneurial (business) practice.

Mindset

a mental attitude or disposition that pre-determines how one interprets and responds to different situations and (new) contexts (ref.: simple rules).

Methodology

a system of methods used in a particular study or activity
e.g., IDEO Method Cards, CX and UX Methods.

Process

a series of actions or steps taken in order to achieve a particular end.
e.g., Design Thinking Process i.e., empathise, define (point-of-view), ideate, prototype and test insights and ideas.!

Skill-set

a set of skills, abilities or capabilities e.g., creative facilitation skills, persuasive communication or negotiation skills

Toolset

a set of tools utilised to achieve a particular end.

Empathetic

Identification with, and understanding of, another's perspective, values, feelings, motives, ...

Deep understanding of the customer (incl., stakeholder) or user i.e., identification with, and understanding of, another's perspective or point-of-view, feelings, thoughts, motives, aspirations, interests, abilities.

6 or 9

Your startup team should work to develop empathy and connect emotionally with the people you are designing for, in order to understand the problems and realities of their lives. The main purpose is to simultaneously understand the world from multiple-perspectives., incl., cognitive and cultural preferences, gender, lifestyle and life-stage differences. It's about stepping into the mind's and bodies of others.

Holistic

Emphasising the importance of the whole, and the inter-dependence of its constituent (existing and emerging) parts i.e., the big picture or innovation eco-system (as well as particular or specific nuanced elements).

1

When assessing the impact of solutions, take a holistic and systemic view. Identify all the stakeholders and the effects of your solutions. Create a map correlating the stakeholders to the effects. Then keep iterating to increase positive and decrease negative effects.

Synergistic

The whole being greater than the sum of its individual constituent parts $1+1>2$ i.e., more than 2. Ref.: Synergy 4.0

Generative

Learning that encourages pro-active experimentation, risk-taking, openness and divergent thinking. $1+1=10$ (ref.: backcasting approach)

Embrace a style of learning that encourages experimentation, risk-taking, openness, and system-wide thinking. Innovative Organisations have successfully used this style of learning to transform themselves in the face of technological,

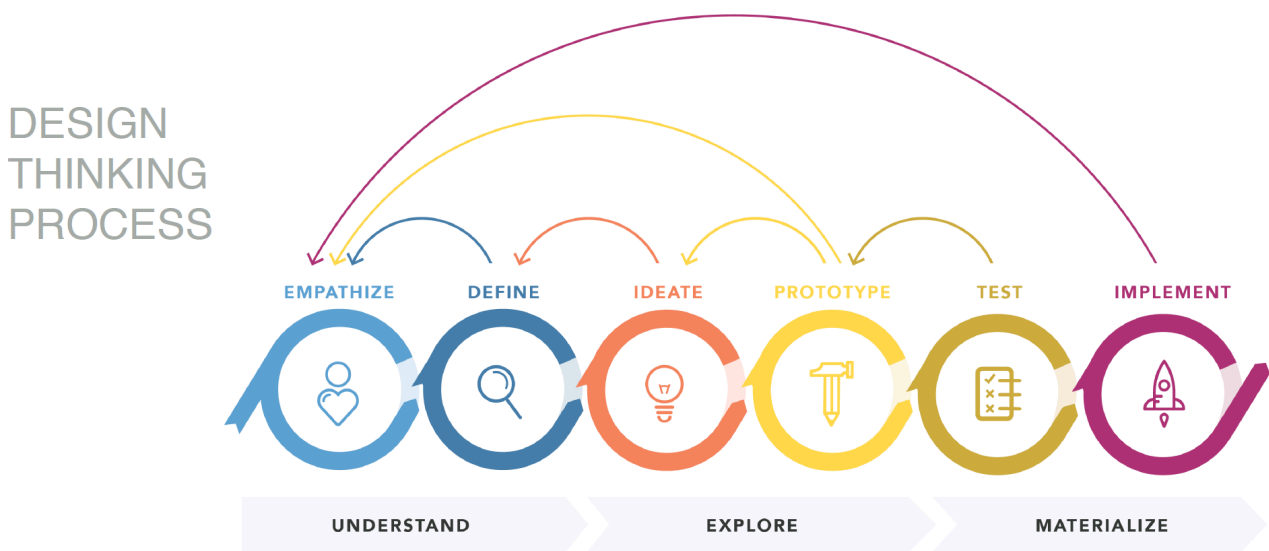
social, and market change. Adaptive learning is a contrasting approach to Generative learning.

versus **ADAPTIVE** learning that focuses on prior successes and the use of these as the basis for leveraging existing strategies via convergent, causal and linear thinking. $2+8=?$ (ref.: forecasting approach).

Collaborative

Working collaboratively i.e., co-creating, co-generating ...

Work collaboratively in inter-disciplinary, trans-disciplinary and multi-cultural teams, and with key stakeholders. Co-design and Co-generate and test insights and ideas. Create something really new by crossing traditional cultural and disciplinary boundaries. $2 > 1$ or $1 < 2$.



DESIGN THINKING 101 NNGROUP.COM

Effectual

Capable of, or successful in producing an intended result ref., 'principles of effectual action'

The extent to which you can control the future, you do not have to predict it $1 > 1$ or $1 = 1$ Ref.: Principles of Effectuation.

Principles of Effectuation

https://www.effectuation.org/?page_id=207

Bird In Hand Principle

https://www.effectuation.org/?page_id=4055&principle=bird-in-hand

Start with your means. Don't wait for the perfect opportunity. Start taking action, based on what you have readily available: who you are, what you know, and who you know.

When expert entrepreneurs seek to build a new venture, they start with their means. These means can be grouped into three categories:

- Who I am—my traits, tastes, and abilities
- What I know—my education, training, expertise, and experience
- Who I know—my social and professional networks.

Using a combination of these means, the entrepreneur begins to imagine possibilities and take action. Most often, she starts very small with the closest means and moves almost directly into implementation without elaborate planning (fire, aim versus aim, fire). With each action, possible outcomes are reconfigured. Eventually, certain emerging effects coalesce into clearly achievable and desirable goals—landmarks begin to appear on the blank map. The end goals are the combined result of the imagination and aspirations of the entrepreneur and the people she has interacted with during the process.

Affordable Loss Principle

https://www.effectuation.org/?page_id=4055&principle=affordable-loss

Set affordable loss Evaluate opportunities based on whether the downside is acceptable, rather than on the attractiveness of the predicted upside.

In much of the business world, the manager in charge of launching a new product analyses the market and chooses segments with the highest expected value. It is a natural reflex that is the result of years of training around a single mantra: maximise returns by selecting the optimal strategy

for your target. Expert entrepreneurs turn this logic on its head—they think in terms of affordable loss rather than expected returns. They decide what they are willing to lose rather than what they expect to make. Instead of calculating upfront how much money they will need to launch their project and investing time, effort, and energy in raising that money, the effectual entrepreneur tries to estimate the downside and examines what she is willing to lose. The entrepreneur then uses the process of building the project to bring other stakeholders on board and leverage what they can afford to lose together. An estimate of affordable loss does not depend on the venture but on the person. It varies from person to person and even across his or her life stages and circumstances. For the Greenwoods (GoodKaarma article), affordable loss did not permit the use of cash, but did include the use of their old farmhouse. By allowing estimates of affordable loss to drive decisions about which venture to start, entrepreneurs stop depending on prediction. Instead, they focus on cultivating opportunities that have a low failure cost and that generate more options for the future. The combination enables cheap failure and learning that can be applied to the next iteration of the opportunity. This does not mean that entrepreneurs choose projects that won't cost a lot if they fail—or that they do not expect to make a lot of money. It simply acknowledges that uncertain new venture opportunities are difficult to value upfront, whereas the investment of time, money, and other resources is quantifiable, manageable and controllable.

Lemonade Principle

https://www.effectuation.org/?page_id=4055&principle=lemonade

Leverage contingencies Embrace surprises that arise from uncertain situations, remaining flexible rather than tethered to existing goals.

If you come across lemons, make lemonade! The third principle of effectual reasoning is at the heart of entrepreneurial expertise—the ability to turn the unexpected into the profitable. Expert entrepreneurs learn not only to work with surprises but also to take advantage of them. In most contingency plans, surprises are bad—the worst-case scenarios. But because entrepreneurs do not tie their idea to any theorised or preconceived “market,” anything and everything is potentially a surprise that can lead to a valuable opportunity.

Crazy Quilt Principle

https://www.effectuation.org/?page_id=4055&principle=crazy-quilts

Form partnerships Form partnerships with people and organisations willing to make a real commitment to jointly creating the future—product, firm, market—with you. Don't worry so much about competitive analyses and strategic planning.

The crazy quilt principle of effectual reasoning is the focus on building partnerships rather than beating competitors. Since entrepreneurs tend to start the process without assuming the existence of a predetermined market for their idea, they don't know who their competitors will be, so detailed competitive analyses have little value. Instead, entrepreneurs generally take the product to the nearest potential customer. Some of the people they interact with make a commitment to the venture, committing time and/or money and/or resources and, thus, self-select into the new-venture creation process. The partnership principle dovetails well with the affordable loss principle to bring the entrepreneur's idea to market with very little cash expenditure. Obtaining pre-commitments from key stakeholders, suppliers or customers helps reduce uncertainty in the early stages of creating an enterprise. Finally, since the entrepreneur is not wedded to any particular market for his or her idea, the expanding network of strategic partnerships determines, to a great extent, which market or markets the company will eventually end up entering or creating.

Pilot in the Plane Principle

https://www.effectuation.org/?page_id=4055&principle=pilot-in-the-plane

Control the controllable. The four specific principles above represent different ways entrepreneurs interact with the environment to shape the environment. Of course not everything can be shaped or controlled, but effectuation encourages you, as the pilot of your venture, to focus on those aspects of the environment which are, at least to a certain degree, within your control.

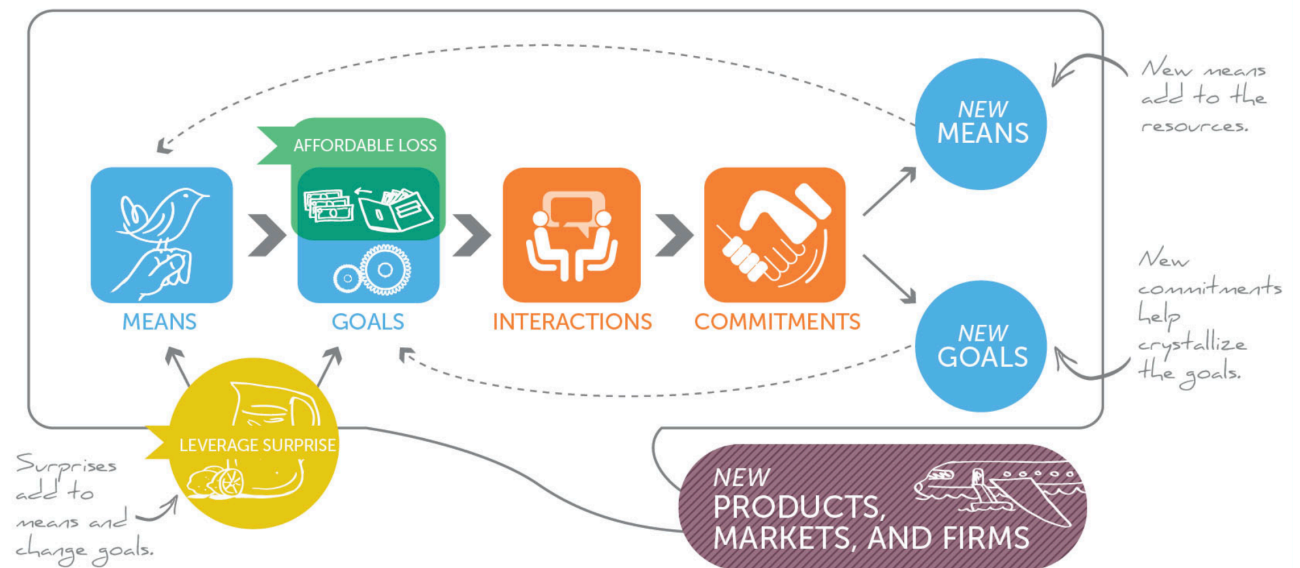
The struggle for personal control is as old as humankind itself—primitive and innate. There is abundant evidence that most people desire control of the events in their lives, indeed over their lives, and that such strivings for control span history and cultures. The venues, mechanisms and instruments for control-striving today are different than they used to be, but the issue remains. In fact, psychological research suggests that an enormous range of

human behaviours relate to control striving in some way and are intrinsically linked to healthy human functioning. For example, personal control is linked to the development of self-esteem and the reduction of stress, whereas loss of control increases the likelihood of feelings of helplessness and depression. In other words, having a desire for control over your life doesn't make you a "control freak" (despite what your friends may say!). Instead, it is normal and healthy. Many entrepreneurs instinctively recognise the of personal control: fundamentally, many chose entrepreneurship because they want to be their own boss and choose their own course. Control enables entrepreneurs to work on things they think are important, set their own schedules and work with whom they want. Many entrepreneurs attest that they feel differently about running a business they own as compared with working for a wage, and that they value being in control. For them, the experience of personal control is closely associated with freedom, self-direction and autonomy. The strength of a person's desire for control can be thought of as an element of his or her means: "Who you are." While everyone has some desire for control, the intensity of that desire varies among individuals and over the course of a lifetime. For example, a high desire for control may motivate someone to become an entrepreneur, but the experience of working for himself may strengthen the desire even further—he may not be able to imagine working for anyone else again.

Effectual Cycle

https://www.effectuation.org/?page_id=4055&principle=effectual-cycle

Effectuation isn't a static, one-time exercise. It is a logic and process that can be used as the firm develops in the "0-60mph" (early startup) phase of growth. Expert entrepreneurs follow the process to gain early customers and committed partners who then create new means and new goals as resources and viewpoints are added to the mix. Thus, instead of having a stated goal and finding means to reach it, expert entrepreneurs use the new means and new goals to drive the creation of the venture in ways they hadn't expected, leveraging surprises as they present themselves. Effectuators use the process to lower the risk of the venture (by getting customers and income early, setting affordable loss, and spreading risk to others) and finding truly new and useful market opportunities by leveraging constraints and new information.



The entrepreneur's means provide the starting point. The action begins in earnest when the entrepreneur begins interacting with people. Sometimes the starting point of that interaction is an idea, a provisional goal the entrepreneur uses to initiate the interaction. Sometimes the interaction is specifically initiated in the terms of "what can we do?" as the entrepreneur determines possibilities together with the person she interacts with. Regardless, each interaction can terminate without a commitment. In that case, the opportunity, as the entrepreneur and that specific person she interacts with envisioned, is on hold. Alternatively, that interaction might result in a commitment. As we described upfront, those commitments have two effects. One effect of adding a stakeholder to the venture is the addition of that stakeholder's means—the possibilities those means suggest. At the same time, new goals also accompany the commitment, adding to the constraints accumulated by the venture and converging it toward a specific direction. At any time in this cycle, unexpected events, information and meetings can change the environment the venture is developing. Those contingencies have similar effects to commitments. On one hand, they present new resources—new means the entrepreneur can use to expand the possibilities of the venture. On the other hand, they present new constraints also, perhaps sending the venture in a more specific direction.