Dr. Philippe J.S. De Brouwer

INNOVATION

PRACTICE

ALL RIGHTS RESERVED BY THE AUTHOR

December 1, 2023

Outline

Contents

ontents	2
Innovation Styles	2
Embedding Innovation	7
Useful Tools3.1Design Thinking3.2The Business Model Canvas3.3The Pitch3.4Innovation Leadership3.5Teamwork	8 8 10 13 15 16
Examples of Expensive Failures Conclusions	20 22
	Innovation Styles Embedding Innovation Useful Tools 3.1 Design Thinking 3.2 The Business Model Canvas 3.3 The Pitch 3.4 Innovation Leadership 3.5 Teamwork Examples of Expensive Failures

1 Innovation Styles

Inventions



Figure 1: the wheel was invented 4,500 BCE (image: the Ljubljana Marshes Wheel with axle, the oldest wooden wheel discovered – Copper Age (c. 3,130 BCE) – source: wikimedia.org

Innovations

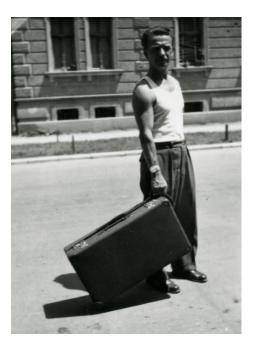


Figure 2: Alfred Krupa designed a wheeled suitcase circa 1954 – Source: Public Domain

Inventions and innovations

- 1. **discovery**: understand or identify something that has been like that for a long time
- 2. invention: create something new ... usable or not
- 3. innovation: convert knowledge into value by modest or radical changes

The Innovation Spectrum



Figure 3: Innovation can be on the spectrum from small and incremental to radical change

The 4 Innovation Dimensions

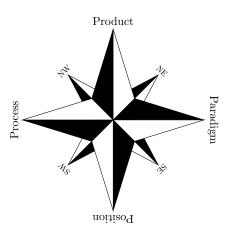


Figure 4: The 4 axis of innovation presented in a compass, but it really is a 4D space and cannot be accurately reduced to 3D – after an idea of John Bessant

The 4 Innovation Dimensions: examples for Product

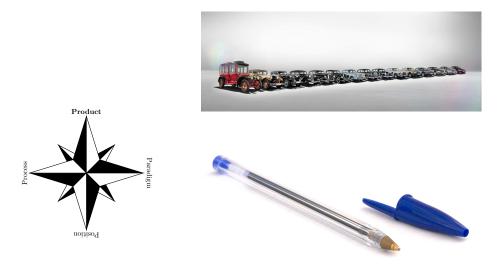


Figure 5: Examples of product innovation.

The 4 Innovation Dimensions: examples for Process



Figure 6: Examples of process innovation.

The 4 Innovation Dimensions: examples for Position



Figure 7: Examples of position innovation: who we offer the product to.

The 4 Innovation Dimensions: examples for Paradigm



Figure 8: Examples of paradigm innovation: a radical new model.

Usually it is a mix of the four dimensions



Figure 9: Innovation in one dimension often leads to changes in the other dimensions.

summary

- Innovation can be everywhere in the 4D space of the 4 P's
- Innovation can be everywhere in the spectrum from incremental to radical
- Innovation in one dimension can require or lead to innovations in other dimensions
- There is opportunity in all innovations

2 Embedding Innovation

The Innovation Trajectory

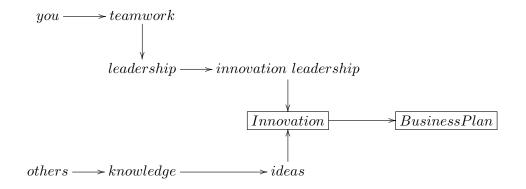
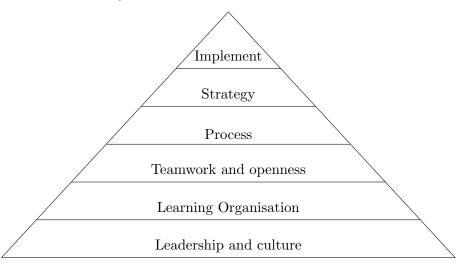


Figure 10: Our path to more efficient innovation illustrated.





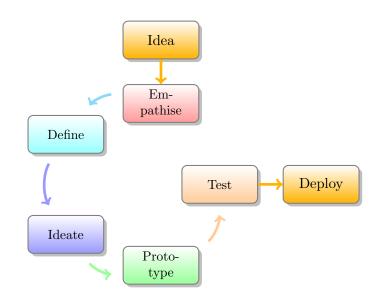


Figure 11: The steps in the Design Thinking Method

Innovation Checklist

- Are we a learning organisation?
- Do we have a process that enables innovation?
- Do we have a culture that allows for innovation and risk taking?
- Do we have a strategy to use innovations when they pop up?

3 Useful Tools

3.1 Design Thinking

Design Thinking

Design thinking is a structured process to come up with new ideas that make sense and fast come to a moment where one can decide to invest more or not.

Design Thinking is a design methodology that provides a solution-based approach to solving problems. It's most helpful in tackling complex problems that are ill-defined or unknown, by understanding the human needs of the potential customers, by re-framing the problem in human-centric ways, by creating many ideas in brainstorming sessions, and by adopting a hands-on approach in prototyping and testing.

We present the five-stage Design Thinking model proposed by the Hasso-Plattner Institute of Design at Stanford (d.school). d.school is the leading university when it comes to teaching Design Thinking. The five stages of Design Thinking, according to d.school, are as follows: Empathise, Define (the problem), Ideate (solutions), Prototype, and Test. Let's take a closer look at the five different stages of Design Thinking.

- 1. **Empathise** gain an empathic understanding of the users and their problems you are trying to solve. Talk to experts and potential customers, make sure to go deeper than that logical level, gather experiences and motivations, as well as immersing yourself in the physical environment of the customer. Empathy is crucial to a human-centred design process, and helps to set aside one's own assumptions about the world.
- 2. Define analyse, synthesise observations from step one and define the core problems and finish with human-centred problem statement. For example better than "we need to increase our market share among older people by 2%" is "Older people not always have a balanced diet and need supplements to feel optimal". The Define stage helps to gather ideas to establish features, functions of the product or service that solve real problems of the customer.
- 3. Ideate generate ideas. . Brainstorm and think "outside the box" to find new solutions to the problem statement you've created, and you look for alternative ways to view the problem.¹ Gather as many ideas or problem solutions as possible at the beginning of the Ideation phase. Then choose the best one.
- 4. **Prototype** Produce a number of inexpensive, scaled down versions of the product or specific features found within the product, so they can investigate the problem solutions generated in the previous stage. The idea is to identify the best possible solution for each of the problems identified during the first three stages. Important is to reconnect to the potential user and decide based on this feedback to accept, improve, or reject the ideas.
- 5. **Test** build the product or service and test with minimal expenses. Then decide to accept, improve or redesign the solution.

Note that the Design Thinking process needs to be very flexible and non-linear fashion. At any stage it is important to be able to go one or more steps back. For example, different groups within the design team may conduct more than one stage concurrently, or the designers may collect

¹There are hundreds of Ideation techniques such as Brainstorm, Brainwrite, Worst Possible Idea, and SCAMPER. Brainstorm and Worst Possible Idea sessions are typically used to stimulate free thinking and to expand the problem space.

information and prototype during the entire project so as to enable them to bring their ideas to life and visualise the problem solutions. Also, results from the testing phase may reveal some insights about users, which in turn may lead to another brainstorming session (Ideate) or the development of new prototypes (Prototype).

3.2 The Business Model Canvas

What is the Business Canvas Model

Business Model Canvas is a tool to create an overview of the essential elements to run a business. It can be used to start a new business or document an existing.

The Business Model Canvas was initially proposed by Alexander Osterwalder based on his earlier work on business model ontology.

The Business Model Canvas

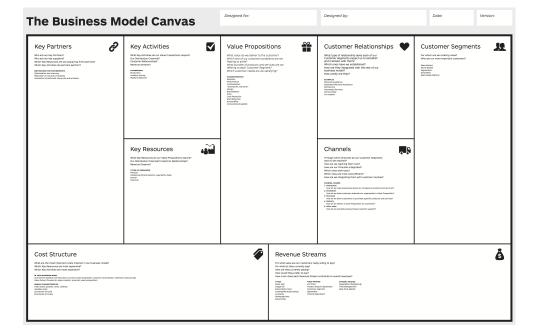


Figure 12: The Business Model Canvas – more and source: https://en. wikipedia.org/wiki/Business_Model_Canvas

Details of the Business Canvas Model

• Infrastructure

- Key Activities: The most important activities in executing a company's value proposition. An example for Bic, the pen manufacturer, would be creating an efficient supply chain to drive down costs.
- Key Resources: The resources that are necessary to create value for the customer. They are considered assets to a company that are needed to sustain and support the business. These resources could be human, financial, physical and intellectual.
- Partner Network: In order to optimize operations and reduce risks of a business model, organizations usually cultivate buyersupplier relationships so they can focus on their core activity. Complementary business alliances also can be considered through joint ventures or strategic alliances between competitors or noncompetitors.

• Offering

Value Propositions: The collection of products and services a business offers to meet the needs of its customers. According to Osterwalder (2004), a company's value proposition is what distinguishes it from its competitors. The value proposition provides value through various elements such as newness, performance, customization, "getting the job done", design, brand/status, price, cost reduction, risk reduction, accessibility, and convenience/usability. The value propositions may be: Quantitative – price and efficiency; Qualitative – overall customer experience and outcome

• Customers

- Customer Segments: To build an effective business model, a company must identify which customers it tries to serve. Various sets of customers can be segmented based on their different needs and attributes to ensure appropriate implementation of corporate strategy to meet the characteristics of selected groups of clients. The different types of customer segments include:
 - * Mass Market: There is no specific segmentation for a company that follows the Mass Market element as the organization displays a wide view of potential clients. e.g. Car
 - * Niche Market: Customer segmentation based on specialized needs and characteristics of its clients. e.g. Rolex
 - * Segmented: A company applies additional segmentation within existing customer segment. In the segmented situation, the business may further distinguish its clients based on gender, age, and/or income.

- * Diversify: A business serves multiple customer segments with different needs and characteristics.
- * Multi-Sided Platform / Market: For a smooth day-to-day business operation, some companies will serve mutually dependent customer segments. A credit card company will provide services to credit card holders while simultaneously assisting merchants who accept those credit cards.
- Channels: A company can deliver its value proposition to its targeted customers through different channels. Effective channels will distribute a company's value proposition in ways that are fast, efficient and cost-effective. An organization can reach its clients through its own channels (store front), partner channels (major distributors), or a combination of both.
- Customer Relationships: To ensure the survival and success of any businesses, companies must identify the type of relationship they want to create with their customer segments. Various forms of customer relationships include:
 - * Personal Assistance: Assistance in a form of employee-customer interaction. Such assistance is performed during sales and/or after sales. Dedicated Personal Assistance: The most intimate and hands-on personal assistance in which a sales representative is assigned to handle all the needs and questions of a special set of clients.
 - * Self Service: The type of relationship that translates from the indirect interaction between the company and the clients. Here, an organization provides the tools needed for the customers to serve themselves easily and effectively.
 - * Automated Services: A system similar to self-service but more personalized as it has the ability to identify individual customers and their preferences. An example of this would be Amazon.com making book suggestions based on the characteristics of previous book purchases.
 - * Communities: Creating a community allows for direct interactions among different clients and the company. The community platform produces a scenario where knowledge can be shared and problems are solved between different clients.
 - * Co-creation: A personal relationship is created through the customer's direct input to the final outcome of the company's products/services.

• Finances

 Cost Structure: This describes the most important monetary consequences while operating under different business models. A company's DOC.

- * Classes of Business Structures:
 - Cost-Driven This business model focuses on minimizing all costs and having no frills. e.g. Low-cost airlines
 - Value-Driven Less concerned with cost, this business model focuses on creating value for products and services.
 e.g. Louis Vuitton, Rolex
 - · Characteristics of Cost Structures:
 - Fixed Costs Costs are unchanged across different applications. e.g. salary, rent Variable Costs Costs vary depending on the amount of production of goods or services. e.g. music festivals
 - Economies of Scale Costs go down as the amount of goods are ordered or produced.
 - Economies of Scope Costs go down due to incorporating other businesses which have a direct relation to the original product.
- *Revenue Streams*: The way a company makes income from each customer segment. Several ways to generate a revenue stream:
 - Asset Sale (the most common type) Selling ownership rights to a physical good. e.g. retail corporations
 - Usage Fee Money generated from the use of a particular service.
 e.g. UPS
 - Subscription Fees Revenue generated by selling access to a continuous service. e.g. Netflix
 - Lending/Leasing/Renting Giving exclusive right to an asset for a particular period of time. e.g. Leasing a Car
 - Licensing Revenue generated from charging for the use of a protected intellectual property.
 - Brokerage Fees Revenue generated from an intermediate service between 2 parties. e.g. Broker selling a house for commission
 - Advertising Revenue generated from charging fees for product advertising.

3.3 The Pitch

Pitch Definition

In selling technique, a sales presentation or sales pitch is a line of talk that attempts to persuade someone or something, with a planned sales presentation strategy of a product or service designed to initiate and close a sale of the product or service. A sales pitch is essentially designed to be either an introduction of a product or service to an audience who knows nothing about it, or a descriptive expansion of a product or service that an audience has already expressed interest in.

Hints for an Impactful Pitch

- 1. Make it interesting and get to the point fast Attention is not a given, it has to be earned. Attention spans decrease.² Maybe use a "soundbite" (catchy phrase).
- 2. Practice and time the practice plan for 20% less time; remember that reading is faster than speaking
- 3. Know who is in the room tailor message but not the essence (e.g. customers are more interested in value propositions, investors more in revenue potential)
- 4. Have a clear goal what do you ask: money, partnership, a loan, an order, ...
- 5. Be ready for questions questions about the idea, what-if questions or even statements disguised as questions (be prepared to brush these off)
- 6. Do we clearly communicate who is customer, what is the offer and how the revenue works – Make the Business Canvas Model and have it with you. Make sure you know why *you* will succeed.
- 7. Look competent no need to wear a suit and tie if you're not used to it though.
- 8. Have a prototype or at least pictures of it a picture is more worth than thousand words.
- 9. Know who the competition it is not necessarily bad if your idea already exists, but you *need* to know that.
- 10. Use minimalistic slides with predominantly images Guy Kawasaki has the 10-20-30 rule: 10 slides, 20 minutes, 30 point font.
- 11. Have a great opener and a great closer The opening and the closing words are the most powerful.
- 12. Be prepared for technology failures no comment ;-)

²You can check out "How to Pitch Anything in 15 Seconds" from Forbes.

3.4 Innovation Leadership

Innovation Leadership

- Is a leadership style that encourages innovation: Innovation has the following steps:
 - 1. Idea Generation
 - 2. Evaluation
 - 3. Implementation

Remember the innovation spectrum:

- 1. incremental innovation improve existing service or product / minimal risk requires transactional leadership (e.g. Lean, Six Sigma)
- 2. radical innovation new ideas and strategies / risky needs innovative culture

Leadership Roles

Direct Influences

- 1. Providing creative input and idea suggestion to employees
- 2. Providing employees with clear and concrete goals
- 3. Allocating organizational resources (i.e. research and development spending; manpower) for implementing ideas

Leadership Roles

Indirect Influences

- 1. Establishing a supportive climate for creativity within the organization
- 2. Acting as a role model for innovative thinking
- 3. Providing employees with rewards and recognition for innovative thinking
- 4. Hiring and team composition (i.e. putting together teams with specific skill sets needed for innovative thinking, or hiring employees with creative personalities without planning what they work on).

Innovative Organizational Culture/Climate

- **Organizational Encouragement** involves encouragement of risktaking and idea generation from all levels of management, fair and supportive evaluation of new ideas, recognition and reward of creativity, and collaborative idea flow across an organization.
- **Supervisory Encouragement** highlights the roles of supervisors and project managers in goal clarity, open interaction between supervisors and subordinates, and supervisory support of a team's work and ideas.
- Work Group Encouragement means that diversity in team members' backgrounds and openness to ideas affects creativity because individuals are exposed to a variety of novel and unusual ideas and such exposure had been demonstrated to have a positive effect on creative thinking.
- Autonomy is believed to foster creativity since studies have revealed that individuals produce more creative work and experience increased intrinsic motivation when they have a sense of control and ownership over their work and ideas and they perceive themselves as having a choice in how their goals are accomplished, whether those goals are given to them by their supervisor or chosen by themselves.
- **Resources** are related to creativity in organizations. Individuals' perceptions of the availability of resources may lead to increased beliefs of the likelihood that the ideas they generate have a possibility of reaching the implementation stage.
- **Pressure** is sometimes attributed somewhat paradoxical influences. Some degree of pressure could have a positive effect if the pressure originates from the challenging and intellectual nature of the task itself, increasing intrinsic motivation. However, if the pressure experienced is perceived extreme it could counteract creativity.
- Organizational Impediments to Creativity include internal strife, conservatism, and rigid, formal management structures within organizations. This dimension is seen as working against autonomy and tends to have an inverse effect as individuals may perceive a more controlling environment.

3.5 Teamwork

The following pages are cited from: https://www.tablegroup.com/topics-and-resources/teamwork-5-dysfunctions/





ABSENCE OF TRUST

The fear of being vulnerable with team members prevents the building of trust within the team.



FEAR OF CONFLICT

The desire to preserve artificial harmony stifles the occurrence of productive, ideological conflict.



LACK OF COMMITMENT

The lack of clarity or buy-in prevents team members from making decisions they will stick to.



AVOIDANCE OF ACCOUNTABILITY

The need to avoid interpersonal discomfort prevents team members from holding one another accountable for their behaviors and performance.



INATTENTION TO RESULTS

The pursuit of individual goals and personal status erodes the focus on collective success.

table group

The Organizational Health People \mid www.tablegroup.com © The Table Group, Inc. All rights reserved.

1

Conquer Team Dysfunction

By Patrick Lencioni

Introduction

Like it or not, all teams are potentially dysfunctional. This is inevitable because they are made up of fallible, imperfect human beings. From the basketball court to the executive suite, politics and confusion are more the rule than the exception. However, facing dysfunction and focusing on teamwork is particularly critical at the top of an organization because the executive team sets the tone for how all employees work with one another.

A former client, the founder of a billion dollar company, best expressed the power of teamwork when he once told me, "If you could get all the people in the organization rowing in the same direction, you could dominate any industry, in any market, against any competition, at any time."

Whenever I repeat this adage to a group of leaders, they immediately nod their heads, but in a desperate sort of way. They seem to grasp the truth of it while simultaneously surrendering to the impossibility of actually making it happen.

Fortunately, there is hope. Counter to conventional wisdom, the causes of dysfunction are both identifiable and curable. However, they don't die easily. Making a team functional and cohesive requires levels of courage and discipline that many groups cannot seem to muster.

Addressing the Dysfunctions

To begin improving your team and to better understand the level of dysfunction you are facing, ask yourself these simple questions:

Do team members openly and readily disclose their opinions? Are team meetings compelling and productive? Does the team come to decisions quickly and avoid getting bogged down by consensus?

Do team members confront one another about their shortcomings?

Do team members sacrifice their own interests for the good of the team?

Although no team is perfect and even the best teams sometimes struggle with one or more of these issues, the finest organizations constantly work to ensure that their answers are "yes." If you answered "no" to many of these questions, your team may need some work.

The first step toward reducing politics and confusion within your team is to understand that there are five dysfunctions to contend with, and address each that applies, one by one.

table group

The FIVE of a TEAM

Conquer Team Dysfunction

(Continued from the previous page.)

The Dysfunctions

ABSENCE OF TRUST

This occurs when team members are reluctant to be vulnerable with one another and are unwilling to admit their mistakes, weaknesses or needs for help. Without a certain comfort level among team members, a foundation of trust is impossible.

FEAR OF CONFLICT

Teams that are lacking on trust are incapable of engaging in unfiltered, passionate debate about key issues, causing situations where team conflict can easily turn into veiled discussions and back channel comments. In a work setting where team members do not openly air their opinions, inferior decisions are the result.

LACK OF COMMITMENT

Without conflict, it is difficult for team members to commit to decisions, creating an environment where ambiguity prevails. Lack of direction and commitment can make employees, particularly star employees, disgruntled.

AVOIDANCE OF ACCOUNTABILITY

When teams don't commit to a clear plan of action, even the most focused and driven individuals hesitate to call their peers on actions and behaviors that may seem counterproductive to the overall good of the team.

INATTENTION TO RESULTS

Team members naturally tend to put their own needs (ego, career development, recognition, etc.) ahead of the collective goals of the team when individuals aren't held accountable. If a team has lost sight of the need for achievement, the business ultimately suffers.

The Rewards

Striving to create a functional, cohesive team is one of the few remaining competitive advantages available to any organization looking for a powerful point of differentiation. Functional teams avoid wasting time talking about the wrong issues and revisiting the same topics over and over again because of lack of buy-in. Functional teams also make higher quality decisions and accomplish more in less time and with less distraction and frustration. Additionally, "A" players rarely leave organizations where they are part of a cohesive team.

Successful teamwork is not about mastering subtle, sophisticated theories, but rather about embracing common sense with uncommon levels of discipline and persistence. Ironically, teams succeed because they are exceedingly human. By acknowledging the imperfections of their humanity, members of functional teams overcome the natural tendencies that make teamwork so elusive.

About Patrick Lencioni

Patrick Lencioni is founder and president of the Table Group, a firm dedicated to making work more fulfilling by making organizations healthier. Pat has written numerous best-selling books which have sold over six million copies and has worked with thousands of senior executives and their teams in organizations ranging from Fortune 500 companies to nonprofits. Through his work as a best-selling author, consultant and keynote speaker, Pat has pioneered the organizational health movement





Buy Now

🕀 table group

The Organizational Health People | www.tablegroup.com © The Table Group, Inc. All rights reserved

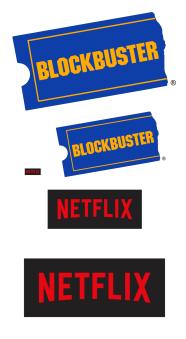
4 Examples of Expensive Failures

Corporate Examples Yahoo



- 2006: Yahoo failed to increase bid on Facebook from \$1.0 Bln to \$1.1 Bln
- 2010: Yahoo does not buy 4% of Facebook for \$2 Bln.
- 2016: Yahoo is worth \$ 4.83 Bln. to Verizon
- today: Facebook is worth \$ 518 Bln.

Corporate Examples Blockbuster



- 2000: Blockbuster refuses to buy Netflix for \$ 50 Mln. (late fees vs. monthly subscription)
- 2007: Netflix moves from delivery of DVDs to online distribution
- today:
 - Netflix is worth $\$ 151 Bln.
 - Blockbuster is worth 0.

Corporate Examples Kodak



- 1975: Kodak's engineer Steve Stasson invents the first digital camera with 0.01Mpx.
- 1995: Kodak pioneers with the DC40, but did not want to cannibalize its film business ...
- 2005: Kodak brings the first WiFi enabled camera
- today: Kodak is worth \$ 0.3 Bln., down from 30 Bln in 1997

5 Conclusions

Conclusions

- Innovation matters (organisations that are around for a while adapt: eg. IBM, HSBC)
- Innovation is not the bright idea, but the value creating from the idea
- Innovation can be incremental or radical
- Innovation can happen along the whole value chain in one or more dimensions like product, process, position, and paradigm
- Active innovation leadership is a key enabler
- Success can depend on the most minor detail or decision ... "all hands on board" (all perspectives are needed)