

Types of Innovation

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Outline

- **Introduction**
- The Innovation Matrix
- Doblin's 10 types of Innovation
- Other positions
- Closed vs. Open Innovation

Introduction

- Innovation is regarded as the process of introducing something new (idea, method, process, device) or the subject/result of this action.
- Because it is regarding the NEW, its image, scope and classification are changing continuously.
- An important component of innovation is the one related to science and technology, with direct application in the production of goods.
- Most of the time, innovation comes with small improvements of existing products, but sometime it represents radical changes in what was known up to that time.

Innovation Process

General evolution for the innovation process.

- Identify a problem. It is usually in a domain/market you are familiar with. May need investigations, surveys, etc...
- Bring/invent a solution. It can be something totally new, an adaptation of something existent in the same domain or in other domain, etc... The solution should bring profit!
- Test the solution. The solution should work. Make prototype(s) and subject them for evaluation on the market.
- Launch the solution (product or service) to the market.
- Develop it.

Types of Innovation - Classification

- As specified, it is a fluid subject because it is large and fluid.
- Classification Matrix
- Doblin's 10 types of Innovation
- Other positions
- Closed vs. Open Innovation

- For each one, taxonomies can be defined and discussed.

Outline

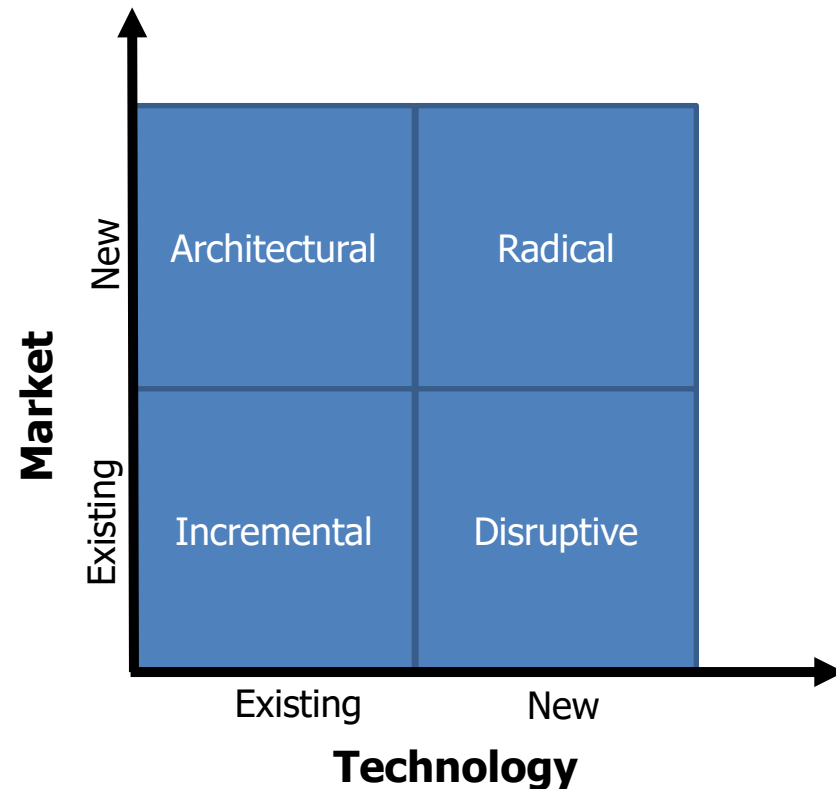
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Problems

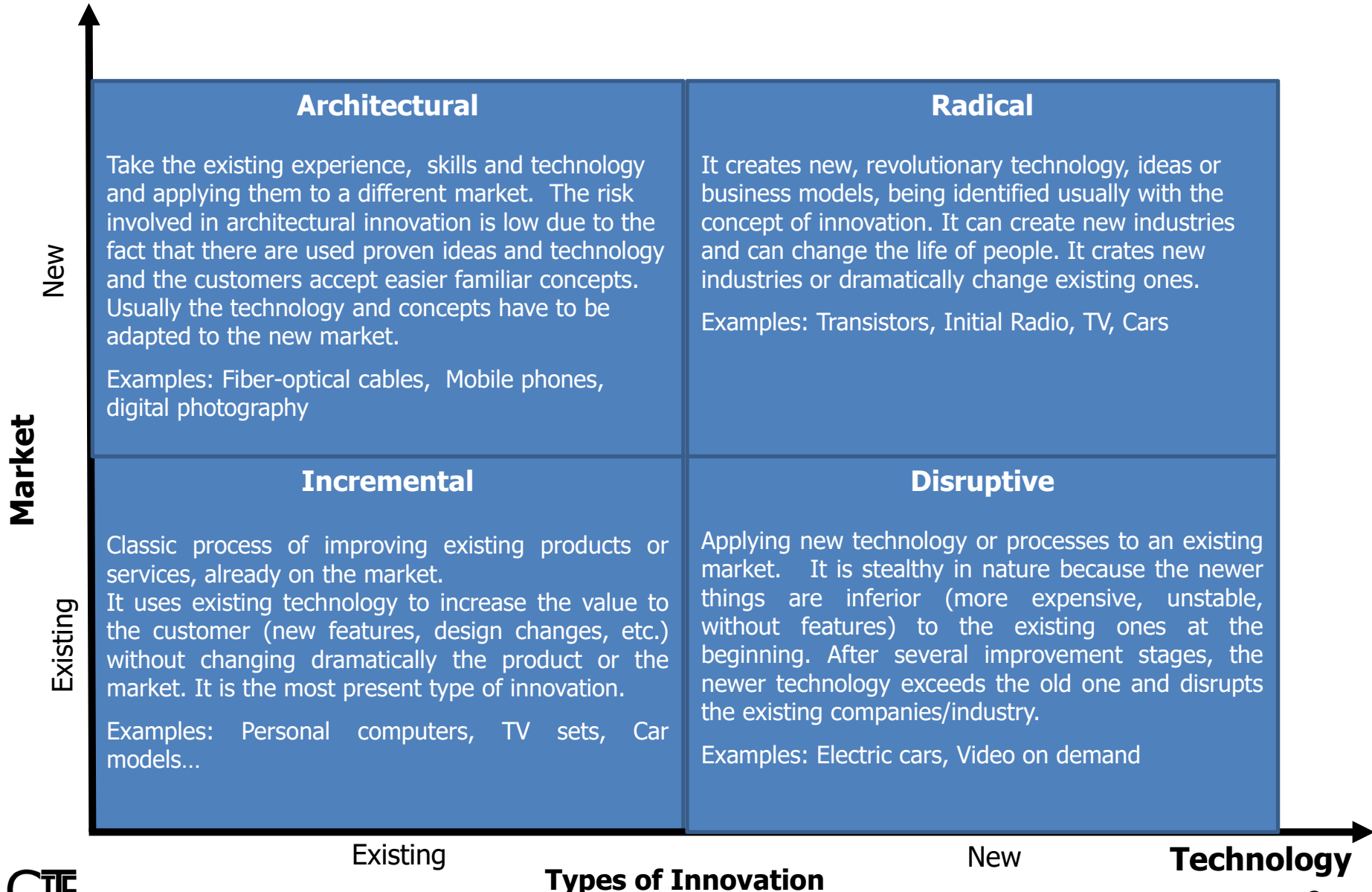
- Innovation is difficult to understand, because it can be viewed from different perspectives. Many times, usual things are labeled as innovation for marketing purposes and it may happen that the value of important things to be recognized after a long period of time.
- It is in the human nature to try to solve problems and to improve things and we are doing it every day. In order to become innovations, the ideas (in their purest form – inventions) should be applied to a specific domain (market) and should be valuable to people (customers).
- That gives an important outline for innovation, where it is considered the domain and the existing technology.

The innovation matrix

- One way to categorize innovation is to classify it based on two dimensions: the technology it uses and the market it operates in.
- We can use the innovation matrix to visualize the most common types of innovation: incremental, disruptive, architectural and radical.

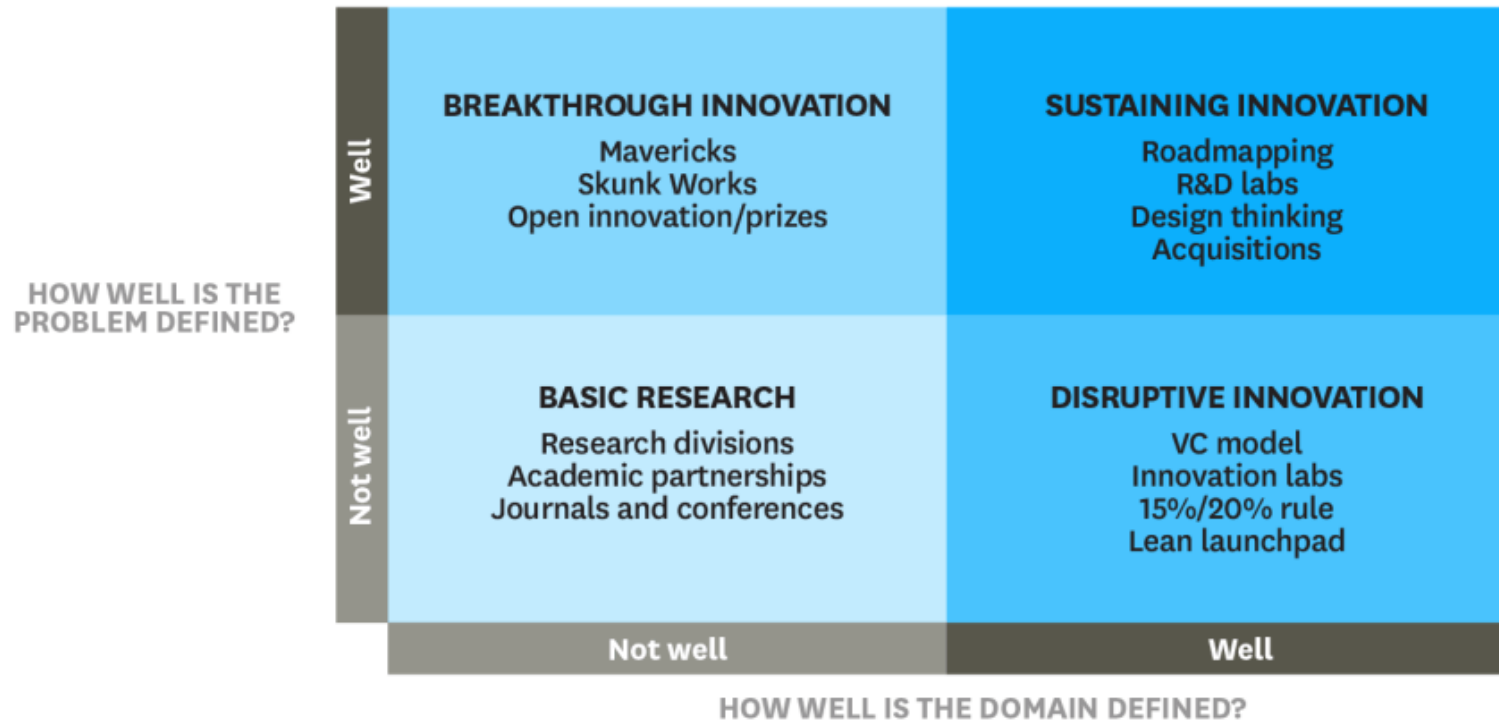


The innovation matrix



The innovation matrix (2)

Problem/domain type based



SOURCE GREG SATELL

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<https://www.ideas4allinnovation.com/innovators/types-innovation/>

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10 Types of Innovation

- Jay Doblin set 10 important dimensions/types for innovation around 1997.
- Jay Doblin and Larry Keeley founded in 1981 the Doblin global innovation agency, now part of Deloitte.
- According to [Doblin](#), they offer a combination of design, strategy, social science, and technology.
- Important book, authored by Keely and some disciples: Ten Types of Innovation: The Discipline of Building Breakthroughs, Wiley (2013).
- This theory is the result of studies performed on over 2000 successful companies, such as Amazon, IBM, Ford.
- They are not just types, but models of Innovation

The 10 Types of Innovation [1]



THE TEN TYPES OF INNOVATION

C O N F I G U R A T I O N

O F F E R I N G

E X P E R I E N C E

C O N F I G U R A T I O N				O F F E R I N G		E X P E R I E N C E			
Profit Model	Network	Structure	Process	Product Performance	Product System	Service	Channel	Brand	Customer Engagement
<p>The way in which you make money</p> <p><i>Skype uses the "freemium" model to make money</i></p>	<p>Connections with others to create value</p> <p><i>Target works with renowned external designers to differentiate itself</i></p>	<p>Alignment of your talent and assets</p> <p><i>Whole Foods has built a robust feedback system for internal teams</i></p>	<p>Signature or superior methods for doing your work</p> <p><i>Zara's "fast fashion" strategy moves its clothing from sketch to shelf in record time</i></p>	<p>Distinguishing features and functionality</p> <p><i>OXO Good Grips products cost a premium but the company's "universal design" has a loyal following</i></p>	<p>Complementary products and services</p> <p><i>Scion thinks beyond the car to cater to drivers' lifestyle needs</i></p>	<p>Support and enhancements that surround your offerings</p> <p><i>"Deliver WOW through service" is Zappos' #1 internal core value</i></p>	<p>How your offerings are delivered to customers and users</p> <p><i>Nespresso locks in customers with its useful members' only club</i></p>	<p>Representation of your offerings and business</p> <p><i>Virgin extends its brand into sectors ranging from soft drinks to space travel</i></p>	<p>Distinctive interactions you foster</p> <p><i>Wii's experience draws more from the interactions in the room than on the screen</i></p>

Profit Model

- It shows how the organization changes its value, offering, resources into profit.
- “Innovative profit models often challenge an industry’s tired old assumptions about what to offer, what to charge, or how to collect revenues” [x]
- Examples:
 - Premium pricing
 - Cheap Ink-Jet printers
 - Subscription for media
 - Computer Games: Arcade (pay to play)->Boxed (Retail)->Digital (Internet)-> Microtransactions (In-game purchases, DLCs, season passes, loot boxes, etc..)>Subscription.
Noteworthy - Games with Player-to-Player Marketplaces

Network (1)

- The value that is created by working with others. One major representative is Open Innovation, where companies create partnerships or develop collaborations in order to create new goods or services.
- By duration:
 - Short-term - Project teams and virtual corporations
 - Long-term - Strategic alliances, joint ventures, and business association
- By position of the actors:
 - Vertical – connecting actors along a supply chain;
 - Horizontal – connecting actors from similar functional areas
 - Diagonal – connecting actors from complementary functional areas

Network (2)

- Geo-scope:
 - Local
 - Regional or national
 - International or global
- Examples:
 - ID2020 Alliance
 - The Enterprise Ethereum Alliance
 - Different franchises

Structure

- It shows how are organized the assets in a company. Structure innovations are optimizing the organization of the company (hard, human, or intangible assets) in some exclusive ways, in order to create value.
- It can be given by the presence, functioning and value of departments like Human Resources, R&D and IT.
- It will adapt the structures to the functionalities
- Competency centered structures
- Decentralized management
- Knowledge management
- Examples: Google Research, Microsoft Research, Manufacturing facilities abroad

Process

- Process innovations refer to the production activities of the company- its core operations. Changes applied here will make the company distinctive, with unique capabilities, efficient functioning, fast adaptation and resilience
- Examples:
 - IKEA furniture
 - Zara - integrated and efficient production system of design, production, logistics, and distribution

Product Performance

- Product performance innovations deal with the value, quality, features, capability of a company products.
- This is often considered the total sum of innovation, and revolves around the R&D department. It's certainly important, but only one of the ten types.
- Examples:
 - Corning® Gorilla® Glass

Product System

- How you create additional value by adding other firms' products and services to yours, or how you combine multiple products to create significantly more value. The web browser Mozilla is built on open-source software, and allows developers to create add-ons to enrich the product. Oscar Mayer offers "lunchables," combinations of food snacks for school lunches, making it easy for parents, and fun for kids.

Service

- How you make your product easier to use, more enjoyable, or get better value from. Zappos is famous for its customer service, with employees empowered to take the initiative to solve the customer's issue - whether it means spending hours on the phone with them, or sending them flowers. Men's Wearhouse offer lifetime pressing on their suits and coats.

Channel

- How you connect with your customer. It differs from Network, in that it's not about whom you work with to make those connections, but more about the ways in which you connect. Nike's NikeTown flagship stores offer a rich and unique experience for shoppers, with product launches, and athletic staff, including ex-basketball professionals.

Brand

- Your brand can be a powerful innovation in itself, it can represent the values you stand for, or a simple but big idea that resonates with customers. Virgin is a classic example of brand, led by Sir Richard Branson, and companies such as Virgin Atlantic Airways, Virgin Records, Virgin Trains, and Virgin Galactic; Virgin stands for being different and fun, spicing up the industries in which it ventures. Intel is another powerful brand, making a computer component so valuable that having the “Intel Inside” on the box elevates the value of the overall product.

Customer Engagement

- How you understand and then leverage the **customers needs and desires**. They can be hard to spot, often sitting among one of the other nine types. The question is how to interact with your customers and delight them? Blizzard Entertainment, who makes World of Warcraft, is an expert at customer engagement - understanding what makes users play for hundreds of hours, and what drives them to collaborate and connect with other users. Apple of course is another company that thrives on the engagement of its devotees.

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- Closed vs. Open Innovation
- view

Other positions

- There are many researchers and practitioners which are seeing the innovation space from other perspectives and come with different types of innovations/ classifications.
- There are intersections and they are not so honed as Doblin's.
- It is important to know about them and to understand the concepts, as reference points for personal attempts in innovation.

12 Types of Innovation you should know in 2021

[3] Jessica Day, 12 Types of Innovation You Should Know in 2021

Closed Innovation

Open Innovation

- In closed innovation, the innovation process takes places exclusively inside the company, whereas in the open innovation, it can include external partners.
- These concepts are extremely important and are studied for a long time
- They are presented separately after the other ones.

Social Innovation

- Social innovation is a new concept, regarding the products and services designed to meet the social needs of society including working conditions, education, health, pollution, community development, cultural needs, leisure, etc...
- Learning is extremely important, with services of dedicated tuition, online learning, life-long learning, simulators of real life, etc..
- It may have a social scope, like volunteering, hackathons, treasure finding, mystery rooms, etc...

Process Innovation

- Process innovation is the development and application of technology, production method, or method of delivery that's newly introduced or improved to a notable degree. This includes changes in technique, equipment, or software that help an organization remain competitive in the marketplace.

Product Innovation

- Product innovation refers to the creation of a new or significantly improved good or service. It includes both the development of new products and changes in the design of established products. It can also refer to the use of new materials or components in the manufacture of current products, or the improvement of an existing product's overall performance using new technology or materials.

Radical Innovation

- Radical innovation refers to research and development aimed at creating new products, technology, or techniques that leap ahead or completely change the marketplace.
- The goal is to completely change how an industry or market functions, putting the innovator at the center.

Incremental Innovation

- Incremental innovation is research and development to design and implement a series of smaller changes over time, by improving performance, upgrading materials, or lowering manufacturing costs.
- This helps a company stay competitive or increase its position in the market. It's the most common form of innovation.

Business Innovation

- Business innovation refers to the development and refinement of an organization's process for generating new ideas, workflow procedures, methodologies, services, and products.
- The goal is to create practices that accomplish core business initiatives.

Technical Innovation

- Technical innovation uses technology in new ways to enhance business workflows and methodologies as well as improve efficiency in an organization.
- Some examples include automating business processes, developing new technologies for the marketplace, or implementing new technology to increase worker efficiency and decrease costs.

Corporate Innovation

- Corporate innovation, sometimes known as organizational innovation, refers to how the employees of a company, the public or another defined group, organize research and development together.
- Innovation most often occurs from the collaboration and combined efforts of a group, not an individual working alone.

Marketing Innovation

- Marketing innovation refers to research, development, and implementation of new practices and technology that increases the effectiveness and efficiency of a company's marketing strategy.
- This type of potentially breakthrough innovation can provide a competitive advantage in the marketplace by increasing brand awareness and market share.

Value Innovation

- Value innovation refers to the process by which a company develops and introduces new technologies or product improvements that are designed to lower costs as well as differentiate the product in the marketplace.
- Improvements made through value innovation to create both an improved product or service and, at the same time, result in cost savings through the elimination of unnecessary steps in the production cycle.

Open and Closed Innovation

- Closed innovation is based on a model of internal and centralized research and development, with all ideas being produced, developed, created, commercialized, and implemented in-house.
- Open innovation is Open innovation allows for the integration of customers, partners, and other stakeholders in the innovation process. This is helped by a mindset change specifically related to research and development. With closed innovation it was believed that, in order to protect business concerns, all research and development needed to happen internally. Now, there is more acceptance of the reality that external research and development can have its place.

Open Innovation

- Open innovation is the concept that, in a world of mass-distributed knowledge, firms can and should partner with others to advance their goals. It is innovation by sharing both the risks and rewards of new research. The paradigm is that companies cannot afford to rely strictly on their own internal methods of innovation, but can buy or license processes or inventions from other companies. This helps to further their goals while also providing the opportunity to license or use joint ventures to share their under-utilized technology or processes.

Open Innovation Advantages

- More speed in the innovation process, as it involves resources coming from various areas, internal and external;
- More variety of ideas, as there is a great diversity of people working on a particular topic;
- Greater learning ability, given the number of different minds involved in the work;
- More trust and impact because of the membership in an organization, especially for small players.
- Easier funding, as the project involves other stakeholders in the projects.

Closed Innovation

- Before being “open” as in open innovation, research is conducted internally within a company to privately create and manage inventions and new advancements before sharing them with the world. Successful closed innovation requires protection, control, and ownership of intellectual property while still under development, through the use of special product development teams within a company.

Closed Innovation Advantages

- Full control over the innovation process;
- Better performance and stability because of the better control;
- Lack of reliance on external knowledge/elements, which can be a limiting factor during innovation;
- Exclusivity in the innovation process, where products/services can bring an immense competitive advantage;
- Reduction of project leakage to the market.

References

- [1] <https://hbr.org/2017/06/the-4-types-of-innovation-and-the-problems-they-solve>
- [2] Larry Keeley; Helen Walters; Ryan Pikkell; Brian Quinn, Ten Types of Innovation: The Discipline of Building Breakthroughs, Wiley, 2013
- [3] <https://www.viima.com/blog/types-of-innovation>
- [4] <https://blog.hypeinnovation.com/using-the-ten-types-of-innovation-framework>
- [5] Jessica Day, 12 Types of Innovation You Should Know in 2021, <https://ideascale.com/12-types-of-innovation-you-should-know/>

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- Ten Types of Innovation: The Discipline of Building Breakthroughs, Larry Keeley, Helen Walters, Ryan Pikkell, Brian Quinn, Wiley, (2013)