Module: Change and Stability Management

Handout Seven: Digital Transformation

Dr. LEUNG, Wing Chung Joe PhD(Warwick)

March-April 2024

1

Dr. LEUNG, Wing Chung Joe PhD(Warwick)

M: (852) 9103 3586 E: drjoeleung@gmail.com

- Dr. Joe Leung has engaged in consulting and training services in ESG, Corporate Growth Strategy, and Corporate Changes in Hong Kong and China for 50 enterprises.
- Dr. Leung successfully assisted his clients in implementing "corporate governance" and won the "Director of the Year Awards" in 2019, 2020, and 2022 respectively, issued by the "Hong Kong Institute of Directors", indicating that his clients achieved "corporate governance" in high-level performance". Dr. Leung also assists companies to formulate "Environmental, Social, and Governance (ESG)" sustainable development plans. In 2022, he assisted his clients to win the “Special Environment, Social and Corporate Governance Awards” in the Institute of ESG and Benchmark. In 2023, Dr. Leung helped his client win the “Grand Award of HKIE BSD Excellent Building Award 2023” to affirm the achievement of sustainability.
- In the past 19 years, more than 9,800 entrepreneurs, executives, and managers have participated in Dr. Leung's executive/director training and UK MBA programmes to enhance their strategic thinking and insight to seize the opportunity in the highly competitive market environment.

1. What is Digital Transformation?

Digital transformation is the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers. It's also a cultural change that requires organizations to continually challenge the status quo, experiment, and get comfortable with failure.

Digital transformation can refer to anything from it modernization (for example, cloud computing), to digital optimization, to the invention of new digital business models.

The term is widely used in organizations to refer to modest initiatives such as putting service online or legacy modernization.

Legacy Modernization is the continued process of transforming Legacy Systems in order to reduce IT environment complexity and costs, increase data consistency, enable collaboration across platforms and improve process flexibility. It mostly aims at transforming existing systems into web based thin client systems and integrate multiple related systems. One of the major challenges in legacy modernization is to ensure that the modernized system has similar capabilities with compatibility with existing data formats.

Advantages of Legacy Modernization are as follows:

- Reduce processing time
- Analyse frauds quickly and prevent them from occurring in the future
- Address mobility challenges
- Implement Business Intelligence into their core systems

Challenges in Digital Transformation

As digital transformation continues to accelerate, businesses must consider the challenges that arise during implementation. Here are some of the most common challenges businesses face when implementing a digital transformation:

- **Culture and Onboarding.** Digital transformations are not as simple as adopting technologies for each aspect of your business. Businesses must provide the right tools, onboarding assistance, and general company culture for employees to encourage the transformation. A major factor in this challenge is having effective senior leaders in an organization, particularly a Chief Data Officer (CDO).

- **Budgeting.** Digital transformations are an investment. If businesses do not have a clear transformation strategy in place, budgeting becomes more challenging. Having foundational knowledge of what types of technologies you should adopt and why is a critical first step before budgeting comes into play.

- **Lack of Strategy.** As we previously mentioned, not having the right experts assisting with your digital transformation could ultimately prove detrimental. In the same vein, going into a digital transformation with a lack of strategy could lead to wasted time and money. If you’re looking to get a rundown of what a traditional strategy looks like before making any decisions, digital transformation frameworks can provide clarity and insight into proven strategies.

- **Not Prioritizing Cybersecurity.** Although this is becoming less and less of an issue as businesses take cybersecurity more seriously, businesses must put security at the forefront of their digital transformation. Prioritizing cloud migration is a practical start to ensuring your newly adopted technologies are secure.

Question and Answer

2. Digital Transformation Strategy

- **Identify your business goals.** Deciding to start a digital transformation project because everyone else is doing a digital transformation project is a surefire recipe for disaster. Before you begin, make sure everyone on your team understands why you are undertaking the effort. You need to have agreement on your current situation and a clear vision for where you want to go. Often, the most effective digital transformation goals come with key performance indicators (KPIs), metrics that allow you to track your progress toward your goal.

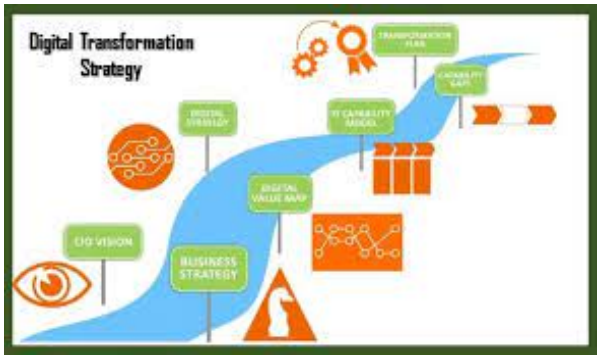
- **Hire an expert.** Chances are good that no one on your current team has ever shepherded a successful digital transformation before. If that's your situation, you might want to think about bringing in some help. This could take the form of hiring a full-time employee with digital transformation experience, or it could entail hiring an outside consulting firm. Some companies also hire other key personnel in IT, marketing, or other areas who have experience or expertise in the kind of transformation you want to make.

- **Build on your strengths.** It's tempting to throw out everything you are currently doing and start from scratch, but that is usually a mistake. Think about what you already do well. Do you have loyal customers? What does your brand stand for? As you go through your digital transformation you need to make sure you aren't doing anything to undermine the success you already have. The digital transformation projects that meet their goals often seem like a natural extension of a company's previous efforts into the digital arena.

- **Put yourself in your customers' shoes.** A common theme among digital transformation frameworks (more on that below) is an emphasis on the customer experience. Digital transformation will change the way your customers interact with your organization. You need to make sure that this new experience is positive and reinforces the brand image you want to have.

- **Establish new procedures and policies.** New technology is completely unhelpful if no one uses it. Before you roll out a new tool or application, think carefully about how you want your employees to use it. If you don't clearly define procedures and institute some enforcement mechanisms to make sure that people follow them, your staff will likely revert back to the old way of doing things. In some cases, digital transformation will require a complete cultural transformation, which is a lengthy, difficult process.
- **Iterate.** You can't transform your organization in an instant. Instead, make a small change, evaluate and repeat. Digital transformation projects that evolve through a series of steps are more likely to succeed than a wholesale change that you attempt to implement all at once. If you keep your strategy somewhat agile, you can make slight modifications along the way and react to changing conditions in a timely manner.
- **Consider following a digital transformation framework.** Several analyst and consulting firms have laid out digital transformation frameworks that can help give form to your strategy. Remember that your actual strategy should be unique to your organization, but following a proven strategy can help you avoid missing key steps or repeating mistakes that other organizations have made before. A framework isn't necessary, but it might be helpful, particularly if your management team doesn't have prior experience with digital transformation.

Question and Answer



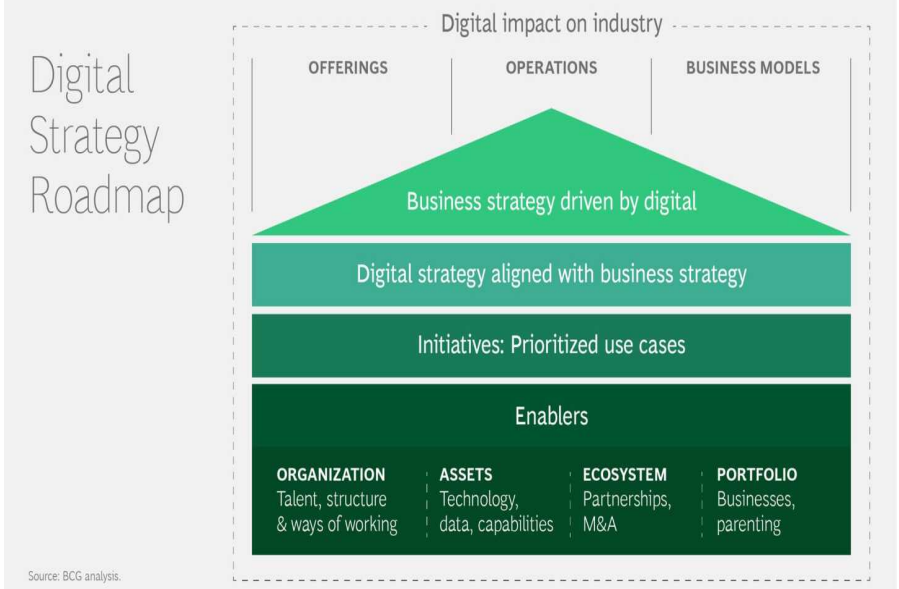
3. Digital Transformation Framework: BCG Digital Strategy

BCG's digital strategy model is designed to bring necessary rigor to the blueprinting phase. Each digital strategy roadmap engagement is customized to your situation and yields five essential deliverables that answer key questions:

- **Digital vision**.
  How is digital changing your industry? What new offerings, operating models, and business models can it enable? What new rivals can it empower?
- **Competitive advantage assessment.**
  How is digital affecting competitive advantage? Where are we well positioned? Where are we disadvantaged?
- **Prioritized list of digital bets**.
  Which digital opportunities are consistent with your business strategy based on value potential—and with your ambition and capabilities? In what order should you pursue them?

- **Gap analysis.**
  Based on your bets, what gaps in capabilities, organization, and systems need to be filled to win?

- **Transformation roadmap.**
  What are the timelines, targets, and accountabilities for each of your programs? What moves are needed to fund the journey?



Question and Answer

4. Digital Transformation Framework: PwC Digital Transformation

An integrated approach is designed to meet the expectations of today's customer and help your business deliver value in the evolving digital economy.

Evolve your business

- Digital consulting services focused on helping your business transform into a digital and social enterprise.
- Digital strategy
- Multichannel integration
- Customer experience design
- Enabling the social and mobile enterprise
- Streamlining operations

Create new value

- Generate innovative ideas and MVPs for your business and test these in a market without incurring brand or operational risk.
- Innovation
- Ideation
- Incubation
- Commercialisation

Protect for the future

- With the increased reliance on digital assets, we help protect and reduce the risks associated with online security and cyber crime.
- Compliance
- Security assessment
- Mitigation services
- Response services

Know your customers

- Understand your customers' expectations and consumption by demystising and managing digital data.
- Diagnosis
- Delivering growth and profitability
- Smarter measurement
- Data innovation and revenue
- Improved digital strategy

Accelerate through technology

- Agile delivery and integration of enterprise level social, mobile and web solutions.
- Technology strategy and architecture
- User experience design and implementation
- Mobile, social and web solutions
- Cloud infrastructure planning and integration

Question and Answer

5. Digital Transformation Framework: Gartner's Digitalization Strategy for Business Transformation

What is the need for digitalization?

- All organizations across industries are being challenged by disruptions. Many are finding ways to align or reinvent their activities to respond — at the requisite speed. As organizations begin to shift from the recovery phase of COVID-19 (Reset Your Business Strategy in COVID-19 Recovery) to the renewal, many are focused on what comes next and capitalizing on the changes made to the business during COVID-19. The Gartner CIO Agenda 2021 highlighted that 69% of boards report accelerating digital business initiatives in response to COVID-19

Organizations no longer have the option to continue on as they have — they have to adopt and accelerate digitalization. It has to be done to preserve the business and the future of the business.

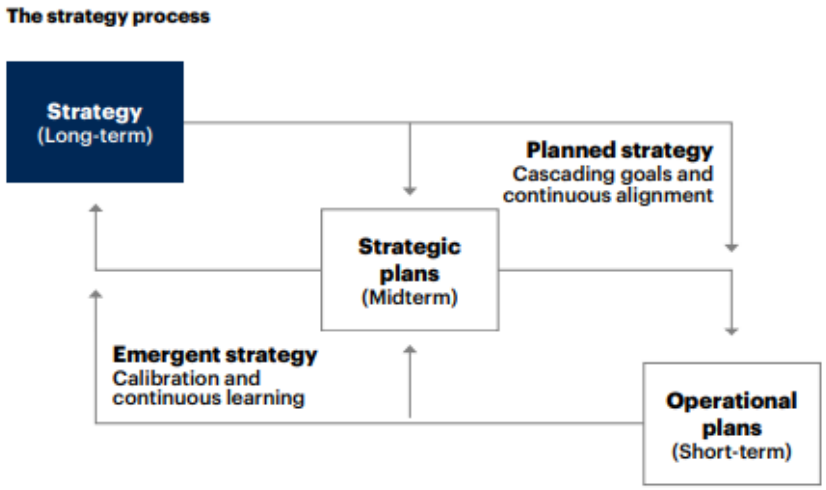
Digital business acceleration is more important than ever now for three reasons:

- **COVID-19:** The pandemic demonstrated the value of digital initiatives in e-commerce, deliveries, supply chain virtualization, process automation and other activities, especially where physical activities were no longer possible.
- **Costs and operations:** The recession has driven the need to overhaul costs and streamline operations.
- **Results:** The rapid responses to the pandemic make accelerating digital business seem feasible and critical for a company's survival.

Develop a digital transformation strategy

- Digital transformation is a top priority for CEOs and boards of directors in an effort to create a connected platform and new industry revenue streams. Executive leaders need to approach strategy in a manner that recognizes the differences between transformation and business optimization.
- Digital transformation tends to span a mid- to long-term planning horizon and needs calibration and continuous learning. The three planning horizons of Gartner's Strategic Planning Framework defines the three steps to complete transformation.

Gartner's Strategic Planning Framework



- Define **Strategy**: The first step is to consider the larger goals and initiatives that drive your business — and effectively use technology and information design patterns to improve them.
- Create **Strategic Plans**: Once you have an understanding of how you can leverage information and technology to achieve your enterprise's long-term goals, start building a strategic plan that provides guidance to realize the long-term goals.
- Execute with **Operational Plans**: Deal with the execution of specific projects and changes, as well as any operational tasks not contained in the strategic plan, such as regular software upgrades or hardware maintenance. Initiate, update or refresh the strategic plans, based on new business context or direction.

How can executive leaders make faster and more effective digital business progress?

CEOs and boards want to accelerate digital business. Gartner recommends that leaders adopt three default behaviors to become more agile:

- **Speed up decision process:** The key to accelerated product delivery, governance and other processes come from enabling faster decision making within the organization.
- **Simplify work:** Processes can overtake the ability to make decisions because they're unnecessarily complex. Remain vigilant, and find the fastest way to get work done.
- **Eliminate unnecessary tasks:** To make your organization more agile, shift the focus to what the business outcome actually is, rather than how the task to achieve it is performed.

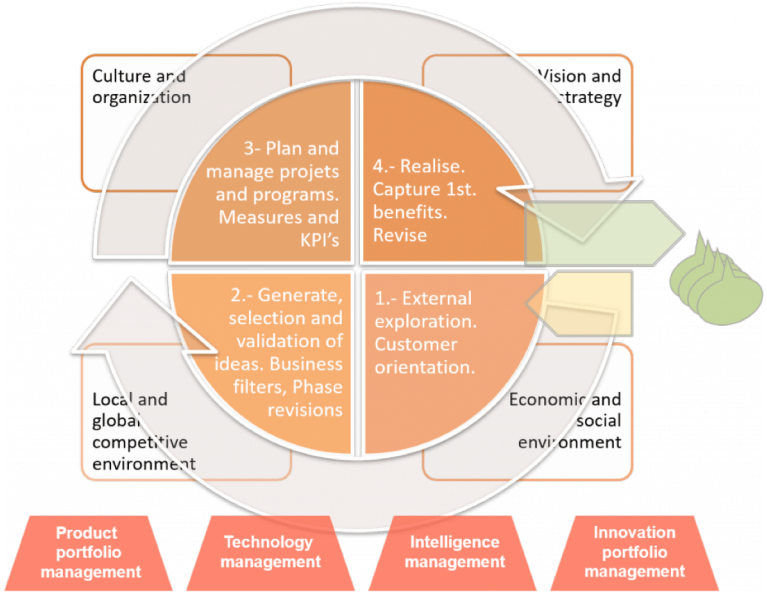
Question and Answer

Gartner®

6. Innovative and Agile Organization

Innovate

- To innovate is to bring good ideas into reality, successfully and continuously. It means converting knowledge and ideas into products or services, new or improved processes to obtain competitive advantages.
- Any innovation can mean a radical leap, something that the market has never seen, or it can be incremental, taking an existing concept and improving, turning it into something new.
- In both cases, innovation is the result of the process of managing a continuous flow of projects and programs that channels the necessary resources to bring them into a successful end.

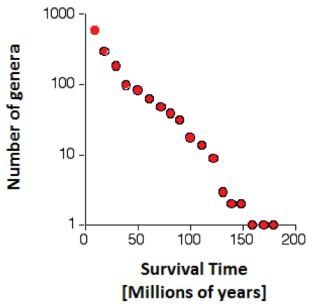


- Management and open process that can be designed, implemented and improved in all companies and organizations. If it is managed well, it favours the creation of "***innovative culture***".
- The management of the innovation process helps companies and people to share knowledge, making contributions and decisions about risk taking, benefits and associated strategic value.
- The innovation process includes challenges that should be addressed in an efficient and particularized manner for each company or organization. Some of these challenges are:
  - Difficulty in selecting the right ideas and recognizing opportunities.
  - Difficulty in capturing and understanding the 'voice of customer', their needs, explicit and implicit.
  - Difficulty investing these ideas in the right markets and with adequate resources.

- Understand the market and its globality. The influencing factors and finding the right segment
- Establish correctly the cost and potential value of projects, inputs and outputs, to guarantee financial resources.
- Identify and understand the correct mental model or appropriate paradigm.
- Find and work with the right people to take advantage of the contributions of everyone, teams, clients, etc.
- Enhance agility, transparency, measures and indicators and a good collaboration of everyone in the process.
- Create prototypes to generate observations and test ideas through the closest reality.
- Manage the cash flow needed in each project and for the total flow of projects and programs.
- Optimize the measures of innovation management and its process.
- Capacity to eliminate or redesign projects, when changes make it necessary.

Red Queen Effect/Hypothesis

- The Red Queen Hypothesis states that species continually need to change to keep up with the competition. If a species would stop changing, it would lose the competition with the other species that do continue to change. If you take for example the relationship between a parasite and its host. Both the parasite and the host are involved in an arms race with each other. There is pressure on the host to evolve to become resistant to the parasite and there is pressure on the parasite to evolve ways to cope with the resistance of the host. Both species need to change genetically to keep up with the changes in the other species (van Valen Lee 1973).



- Red Queen Hypothesis is relevant not just in biology but in the corporate world too. Any company or organization need to regularly adopt and adapt to market conditions else it will face extinction or loos the edge in the market (Barnett and Hansen, 1996).

Source: Van Valen Lee (1973), **A New Evolutionary Law**, Evolutionary Theory, 1:1–30.
Barnett, W. P., & Hansen, M. T. (1996), **The Red Queen in Organizational Evolution**, Strategic Management Journal, 17(7), 139-157.

Why Agile Innovation?

- Agile innovation is based on the active fusion of these two concepts:

  Innovation + Agility = Agile innovation

- Agility is introducing the concept of value and flow in all processes, freeing resources and integrating them especially to the innovation process

- Companies need to respond quickly to changes of all kinds and develop new products, services or business models. In addition, they also need to innovate internal processes to be more competitive or position themselves correctly in the right segment.

- Many times, the technologies and methods to do this are available, but 85 to 90 percent of new projects fail due to rigid structures. It is necessary to have agile methods of innovation, to integrate the design with the development, the trials with the use and the introduction. Therefore, make innovation processes faster.

- ***Agile innovation results from applying the "Lean" methodology in accelerating the innovation process and all the related ones.***
- The term "Lean" suggests something fat-free, lightweight, and therefore freed of unnecessary weight. The term "Agile" is similar, but also has some connotation of movement, velocity or ability to acquire velocity, that is, light and with a good capacity for acceleration.
- Since Toyota implanted its 'TPS' (Toyota Production System) back in 1975, with its results and success, the term "Lean" quickly expanded all over the world. Today it applies not only to production or in industrial fields but also in the processes of companies and organizations of all kinds. We apply it to innovation.
- In this way, the agile company is one that has managed its priorities, first gaining velocity in all processes and secondly applying new resources to innovation.

- It would be necessary to make a distinction between companies that already have a history and therefore a culture developed over time and very young or newly created companies such as 'Startup.' A "Lean startup" seeks to "create" a new model of business, instead of "running" an existing model.

Lean + startup = velocity

- Velocity, in this case, is the simultaneous activity of chained processes; Cycles of development and learning cycles; Build, measure and learn; Iterate the cycles; Persevere or pivot; create a business model based on the minimum viable product (MVP); use the "Canvas" model as a tool.

- In summary: The innovation process is made agile through "Lean" methodologies

Is it difficult to innovate nimbly?

- In our environment, the results show that there are few innovative companies and still managing innovation is a pending challenge. The % of successes obtained with new products or services, companies or projects, is still very low. And yet, what differentiates companies that consistently generate profits, is their capacity for innovation and agility.
- If we look for features that define an agile organization, they could be the following:
  - **Lightness**. It comes from the absence of "charges". In the sense of a light structure, not complicated, not authoritarian or bureaucratic. In any case, making application of the "Lean" techniques to all processes, including especially the innovation.
  - **Velocity**. It does not mean that everything must be done faster. It means a high percentage of tasks and times that add value over the total process times. Velocity measures have been implemented and the cycle times have been reduced.

- **Speed**. Indicates that waiting times and duplications have also been eliminated. Actions are always taken in time and with adequate responses. Decisions and responses result not from haste, improvisation or urgency, but because of training and creation of structured habits.
- **Elasticity**. It can also be associated with flexibility. The flexibility to adapt faster to changing needs and the elasticity of knowing how to return to the required position in each case.
- **Dynamicity**. The dynamic aspect is contrary to something static or immobile. A dynamic organization is the one that moves in continuous evolution to improve and adapt to changing needs. It also contains the concept of anticipation, without which it would be very reactive.

In summary: being agile is much more than being “flexible” and more than having “reactivity” or “responsiveness

- We can imagine the agile company in terms of innovation and change, as one that constantly evolves in its competitive environment and that proves it showing:
- Being the first to detect and understand changes and trends in their environment.
- Understand and anticipate the needs of their segment or customers.
- Have a permanent capacity for rapid reconfiguration in the face of changes and needs of new paradigms
- With ability not only to detect them, but with the ability to anticipate existing ones.
- Showing creative capacity for new business models
- To tend to this type of behaviour, the company use “agility”, in contrast to the “rigidity” that characterizes many cases.

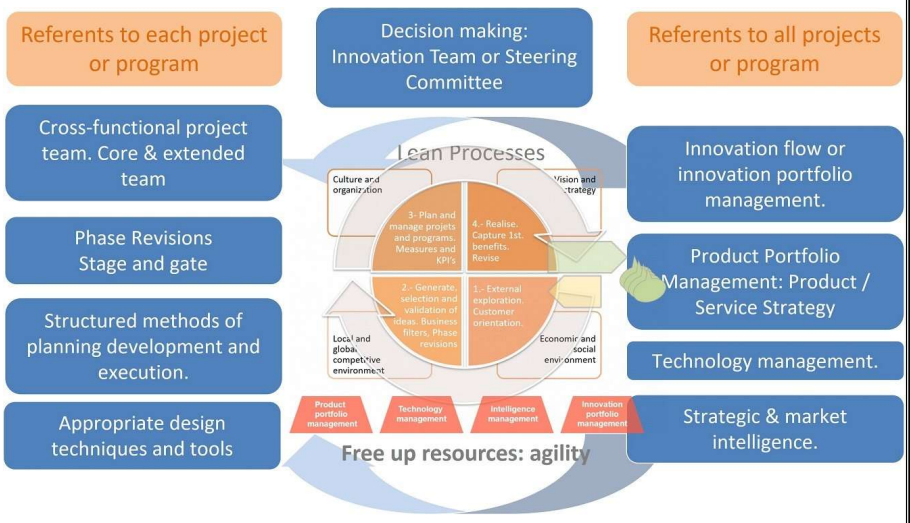
Cultural and organizational change

- To develop a correct implementation of agility, we should consider that there is no standard agile methodology of universal application. Better to have clear concepts and apply them according to the particularities of each company or organization; their culture, location, environment, organizational maturity, teamwork, etc.
- Agility in many cases implies a cultural change in the organization. As in all cases of cultural changes, how people perceive is fundamental. Any change causes tensions and possibly resistance. To overcome this, clear priorities, roles and responsibilities will be communicated. And also, continuously reporting the results.
- May be interesting to start pilot projects and use the results to learn and facilitate understanding. The experience of those who have worked on these projects usually acts as a facilitator of the agile innovation methodology.
- The work teams themselves are best placed to distinguish the necessary changes and bring solutions for the process acceleration.
- It is necessary that the members of management team act as facilitators or motivators.
- Education is key, and it is very important that is part of each project activity, ensuring that it is directly related and applied in the work environment.

7. A Model for Agile Innovation Organization

- The model we present is based on the experience and practice gathered in the companies. A single management process facilitates decision making at the right time.
- Innovation management is harmonized with this process and ensure long-term sustainability and development.
- The experience with this model has served, at the same time, to develop a tool for evaluating innovation management and the capacity of companies and organizations to innovate.

Innovative and Agile Organization Model



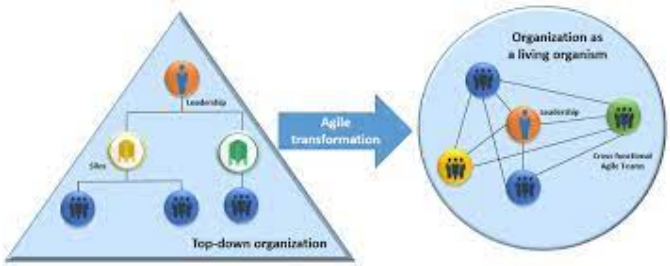
Innovation management identifiers

Elements of the Innovative and Agile Organization

- Direction and decision taking
- Organization by projects and programs
- Revisions by phases. Stages and doors
- Structured development of each project and activity
- Appropriate techniques and tools.

Support processes or elements:

- Strategic Product Management
- Technology Management
- The intelligence of the company
- Management of the flow of innovation

- The benefits of this approach can be measured and in general are spectacular:
- Time to market". Increase in sales revenue. A reduction of 'time to market' has an impulse to add new products or services that increase sales, but above all, it allows taking decisions about the product's life time and its impact on margins. In general, margins increase.
- Increase in the possibilities of reducing the life cycle of products, allowing to be faster and the first to launch new developments.
- The optimization of resources invested in the entire innovation process. This is due to timely decision making, concentration on projects with better prospects and elimination of projects with doubtful end, etc.
- Less errors in launch. Precisely because of the better filtering throughout the process, the launches have a greater short-term impact on sales and a greater percentage of them is consolidated.
- Greater opportunity to obtain and retain talent, and greater possibility of establishing external networks that are positive in new developments.

Question and Answer