DOWNLOAD PDF PRODUCT INNOVATION AND ORGANIZATION

Chapter 1 : Defining innovation - OECD

Product and process innovation A product innovation is the introduction of a good or service that is new or has significantly improved characteristics or intended uses; a process innovation refers to the implementation of a new or significantly improved production or delivery method.

Innovation management[edit] Innovation management IM is based on some of the ideas put forth by the Austrian economist Joseph Schumpeter , working during the s, who identified innovation as a significant factor in economic growth. Innovation management helps an organization grasp an opportunity and use it to create and introduce new ideas, processes, or products industriously. Innovative ideas are the result of two consecutive steps, imitation and invention. The process can be viewed as an evolutionary integration of organization, technology, and market, by iterating series of activities: A pushed process is based on existing or newly invented technology that the organization has access to. The goal is to find profitable applications for the already-existing technology. By creating multi-functional development teams, containing both engineers and marketers, both dimensions can be solved. The most direct way of business innovation is through technological innovation , disruptive innovation or social innovation. Management of innovation, however, plays a significant role in promoting technological and institutional innovation. The goal of innovation management within a company is to cultivate a suitable environment to encourage innovation. To lead or sustain with innovations, managers need to concentrate heavily on the innovation network, which requires deep understanding of the complexity of innovation. Collaboration is an important source of innovation. Innovations are increasingly brought to the market by networks of firms, selected according to their comparative advantages, and operating in a coordinated manner. When a technology goes through a major transformation phase and yields a successful innovation, it becomes a great learning experience, not only for the parent industry but other industries as well. Big innovations are generally the outcome of intra- and interdisciplinary networking among technological sectors, along with combination of implicit and explicit knowledge. Networking is required, but network integration is the key to success for complex innovation. Social economic zones, technology corridors, free trade agreements , and technology clusters are some of the ways to encourage organizational networking and cross-functional innovations. Innovation management tools[edit] Antonio Hidalgo and Jose Albor proposed the use of typologies as an innovation management tool. These typologies were found by looking at 32 characteristics [12] that classify Innovation Management Tools. Hidalgo and Albors were able to narrow the list down to 8 criteria knowledge-driven focus, strategic impact, degree of availability, level of documentation, practical usefulness, age of the IMT, required resources for implementation, measurability , that are especially relevant for IMTs in the knowledge-driven economy knowledge economy. The advantage of using typologies is the easy integration of new methods and the availability of a broader scope of tools. Innovation management tool comparison[edit] Below is a comparison of various features regarding known innovation management tools Voting: Can users vote on ideas? Can users comment on ideas? Can you categorize ideas? Can you customize your ideation process? Are single sign-ons supported? What are the use cases of this tool? Can you evaluate ideas? Can you mention people on ideas? Can you filter ideas? Which languages are supported? Can you share ideas? Can you export data? Does the tool support multiple simultaneous innovation processes? This article contains content that is written like an advertisement. Please help improve it by removing promotional content and inappropriate external links , and by adding encyclopedic content written from a neutral point of view.

Chapter 2 : Innovation - Wikipedia

Forbes CommunityVoice Why Innovation Is Crucial To Your Organization's Long-Term Success. Aside from products, innovation can also pertain to new services, business models, processes and.

Economist Joseph Schumpeter â€" , who contributed greatly to the study of innovation economics , argued that industries must incessantly revolutionize the economic structure from within, that is innovate with better or more effective processes and products, as well as market distribution, such as the connection from the craft shop to factory. He famously asserted that " creative destruction is the essential fact about capitalism ". In , dissatisfied employees of Shockley Semiconductor , the company of Nobel laureate and co-inventor of the transistor William Shockley , left to form an independent firm, Fairchild Semiconductor. After several years, Fairchild developed into a formidable presence in the sector. Eventually, these founders left to start their own companies based on their own, unique, latest ideas, and then leading employees started their own firms. Over the next 20 years, this snowball process launched the momentous startup-company explosion of information-technology firms. Another example involves business incubators â€" a phenomenon nurtured by governments around the world, close to knowledge clusters mostly research-based like universities or other Government Excellence Centres â€" which aim primarily to channel generated knowledge to applied innovation outcomes in order to stimulate regional or national economic growth. However, recent research findings highlight the complementary role of organizational culture in enabling organizations to translate innovative activity into tangible performance improvements. Innovation is the specific function of entrepreneurship, whether in an existing business, a public service institution, or a new venture started by a lone individual in the family kitchen. It is the means by which the entrepreneur either creates new wealth-producing resources or endows existing resources with enhanced potential for creating wealth. It is necessary to create and nurture an environment of innovation. Executives and managers need to break away from traditional ways of thinking and use change to their advantage. It is a time of risk but even greater opportunity. Companies will have to downsize and re-engineer their operations to remain competitive. This will affect employment as businesses will be forced to reduce the number of people employed while accomplishing the same amount of work if not more. Foundational innovation tends to transform business operating models as entirely new business models emerge over many years, with gradual and steady adoption of the innovation leading to waves of technological and institutional change that gain momentum more slowly. This system aids in better evaluation of policies and procedures with accountability and efficiency in terms of time and money. In addition, the growing use of mobile data terminals in vehicles, that serve as communication hubs between vehicles and a control center, automatically send data on location, passenger counts, engine performance, mileage and other information. This tool helps to deliver and manage transportation systems. It can occur as a result of a focus effort by a range of different agents, by chance, or as a result of a major system failure. According to Peter F. Drucker , the general sources of innovations are different changes in industry structure, in market structure, in local and global demographics, in human perception, mood and meaning, in the amount of already available scientific knowledge, etc. This is where an agent person or business innovates in order to sell the innovation. This is where an agent person or company develops an innovation for their own personal or in-house use because existing products do not meet their needs. MIT economist Eric von Hippel has identified end-user innovation as, by far, the most important and critical in his classic book on the subject, The Sources of Innovation. Engelberger asserts that innovations require only three things: A recognized need, Financial support. Investigation of relationship between the concepts of innovation and technology transfer revealed overlap. Information technology and changing business processes and management style can produce a work climate favorable to innovation. Both companies cite these bottom-up processes as major sources for new products and features. An important innovation factor includes customers buying products or using services. As a result, firms may incorporate users in focus groups user centred approach , work closely with so called lead users lead user approach or users might adapt their products themselves. The lead user method focuses on idea generation based on

leading users to develop breakthrough innovations. Sometimes user-innovators may become entrepreneurs , selling their product, they may choose to trade their innovation in exchange for other innovations, or they may be adopted by their suppliers. Nowadays, they may also choose to freely reveal their innovations, using methods like open source. In such networks of innovation the users or communities of users can further develop technologies and reinvent their social meaning. This technique is sometimes used in pharmaceutical drug discovery. Thousands of chemical compounds are subjected to high-throughput screening to see if they have any activity against a target molecule which has been identified as biologically significant to a disease. Promising compounds can then be studied; modified to improve efficacy, reduce side effects, and reduce cost of manufacture; and if successful turned into treatments. This is used by major sites such as amazon. One driver for innovation programs in corporations is to achieve growth objectives. As Davila et al. Innovation is the key element in providing aggressive top-line growth, and for increasing bottom-line results". Most of the goals could apply to any organisation be it a manufacturing facility, marketing firm, hospital or local government. Whether innovation goals are successfully achieved or otherwise depends greatly on the environment prevailing in the firm. The causes of failure have been widely researched and can vary considerably. Some causes will be external to the organization and outside its influence of control. Others will be internal and ultimately within the control of the organization. Internal causes of failure can be divided into causes associated with the cultural infrastructure and causes associated with the innovation process itself. Common causes of failure within the innovation process in most organizations can be distilled into five types:

Chapter 3 : Creativity and Innovation: Your Keys to a Successful Organization | HuffPost

*Product innovation and organization (Studies of the modern corporation) [Jay William Lorsch] on calendrierdelascience.com *FREE* shipping on qualifying offers.*

They tend to distance themselves from the competition rather than compete with them. If they see another company copying what they do, they create something new and better. In other words, they are able to leverage their creativity and their innovative capabilities to attain long-term success. Would you like to be one of those organizations? In fact, all companies can be more creative and innovative no matter what their expertise, product, or service. When you apply creativity and innovation to everything aspect of your business, you are able to stay ahead of a changing marketplace and the competition. Creativity is a function of knowledge, curiosity, imagination, and evaluation. The greater your knowledge base and level of curiosity, the more ideas, patterns, and combinations you can achieve, which then correlates to creating new and innovative products and services. But merely having the knowledge does not guarantee the formation of new patterns. The bits and pieces must be shaken up and iterated in new ways. Then the embryonic ideas must be evaluated and developed into usable ideas. In other words, there really is a process. To help you master that process, you first must understand three important levels of creativity, which are discovery, invention, and creation. The lower level of creativity is discovery. For example, there is art called "discovered art. If you have ever purchased a piece of natural stone or wood art, that art was discovered art. Many inventions start with a discovery. A higher level of creativity is invention. For example, Alexander Graham Bell invented the telephone. But you have to ask yourself, "Would the telephone have been invented without Bell? Eventually the telephone would have been invented because the science was there. It might have taken longer, but it would have happened. Creation is the highest level of creativity. For example, the stage play Othello is genuinely a creation. Elizabethan drama would have gone on without Shakespeare, but no one else would have written Othello. Similarly, there are things that only your organization can create! The key is tapping in to what those things are. You purchase the tool for your staff, and that discovery helps everyone work better. After some time, that discovery may also spur an innovative idea of how to apply the discovery. You may then use that innovative idea as an inspiration that yields something never seen before, something created by your company that helps you and your customers. Realize that creativity and innovation are different. Creativity refers to generating new and novel ideas. Innovation refers to the application of an idea and, in many cases, is a collaborative enterprise. So in other words, innovation is applied creativity. Or if I put my creative speaker hat on, I might say, "Creativity is a bioelectrical thunderstorm that precipitates an inescapable notion. Truly creative people have developed their ability to observe and to use all of their senses, which can get dull over time. Take time to "sharpen the blade" and take everything in. Innovation is based on knowledge. Therefore, you need to continually expand your knowledge base. Your perceptions may limit your reasoning. In other words, defer judgment. Practice guided imagery so you can "see" a concept come to life. Let your ideas "incubate" by taking a break from them. It shifts my brain into another place and helps me be more innovative and creative. Experience as much as you can. Exposure puts more ideas into your subconscious. Actively seek out new experiences to broaden your experience portfolio. Treat patterns as part of the problem. Recognizing a new pattern is very useful, but be careful not to become part of it. Redefine the problem completely. When you define the real problem, you can solve it and move on. Come up with ideas at the beginning of the innovation process Many times we come up with several ideas and start innovating, and then we come up with more ideas and never get a single idea done. At some point you have to turn off the idea generation part of the process and really work on the innovation and execution part in order to bring a project to life.

Chapter 4 : Innovation Metrics: Measuring Innovation for Business Growth

Innovation practice contributes to economic development by fostering the development of new markets and the improvement of existing markets. This study aimed to identify the innovations in the flat knitting industry that occurred between and

Metrics can be important levers of innovation â€" for driving behavior, as well as evaluating the results of specific initiatives. Defining the right metrics for your business can be tricky. Across the Fortune that do possess innovation metrics, for example, the most prevalent metrics include: And in an environment in which disruptive innovation and cannibalization must be wholeheartedly embraced as a core strategy, fundamentally new types of behaviors are required, and subsequently new structures and related metrics to drive these behaviors. What gets measured drives behavior. Too many metrics leads to excessive activities that provide little value and often drive conflicting behaviors. The Metrics Imperative Because innovation is now a widely recognized critical requirement for virtually all companies across all industries, the metrics imperative is here. Leaders must establish a new breed of metrics that move beyond conventional measures and that: Create an organizational culture that supports and drives strategic innovation Establish critical capabilities tuned to the evolving competitive business landscape Evaluate innovation efforts to ensure both return on investment and support feedback loops of learning and improvement Drive profitable growth A Framework for Innovation Metrics The best solutions create simplicity from complexity. Assuming that successful innovation results from the synergies between complementary success factors, it is important to address these by: The following are the three categories to consider for any metrics portfolio: ROI metrics give innovation management fiscal discipline and help justify and recognize the value of strategic initiatives, programs and the overall investment in innovation. Organizational Capability Metrics Organizational capability metrics focus on the infrastructure and process of innovation. Capability measures provide focus for initiatives geared toward building repeatable and sustainable approaches to invention and re-invention. Leadership Metrics Leadership metrics address the behaviors that senior managers and leaders must exhibit to support a culture of innovation within the organization, including the support of specific growth initiatives. Input metrics are the investments, resources and behaviors that are necessary to drive results. Output metrics represent the desired results for the metric category. Learn more at www. These illustrations are not meant to be exhaustive but rather provide an initial list of options for those looking to instill metrics within their own organizations. Creating innovation metrics requires a strategic and disciplined approach that starts with the enterprise growth strategy and cascades throughout each business unit, division and group structure. Using metrics to drive and assess growth is not a one time exercise. As an ongoing tool for innovation management, the approach involves: The specific process for establishing innovation metrics can include the following steps: Learning loops that capture insights gleaned from successes and failures must be integrated into the approach and valued as an ongoing process. For more on innovation metrics, check out our video that makes the case for building a culture of innovation. Use it to kick off your strategy sessions and leadership development programs: Soren Kaplan is a leading expert in strategic innovation, new business models, and innovation culture.

Chapter 5 : Innovation and Product Development Services Overview - Video - Accenture

Organizational Innovation. This article shares insights about what organizational innovation is, a process for approaching it, and examples for how to learn and develop your skill to innovate within organizations.

We increasingly come to see that much of this economy based on fabricated needs is unsustainable from a financial and ecological perspective. The concept of innovation expands beyond benefit to the organization and is not approached through the traditional lenses of profit and competition. For more on innovation and product development in earlier stage organizations: Red organizations Red organizations are opportunistic and adaptive in response to their circumstances, but without organizing specifically for innovation. Amber organizations Amber organizations value predictable processes. Their sustained existence is tied to the maintenance of proven tools and roles. Innovations are adopted, cautiously, after top-down endorsement. Orange organizations With Orange , innovation becomes a core practice. It is necessary to stay competitive. Research centers might be established. At the operating level, units are encouraged to be creative in how they achieve their targets. All these activities are subject to review in the regular operating and strategic planning cycles. Green organizations Green organizations are values-based. This colors their approach to innovation. And it encourages service level initiativeâ€”as at Southwestern Airlines. Their multi-stakeholder view encourages them to find novel approaches to labor relations, employee empowerment, customer service, shareholder interests, and the communities of which they are a part. This means ideas must be discussed with knowledgeable colleagues. In this environment, anyone, and everyone, can be an innovator. It attempts to answer these questions: They can also be supported by structured design practices that are intended to catalyze empathetic thinking. An example is the concept of "design ideation" [2]. This is a process where frontline workers spend long periods out in the field, observing how their customers are using their products and services. Innovation at the frontlines Any frontline person can act on insights gained from working closely with the customer and therefore having a deep understanding of his or her needs. With Teal self-management, there is nothing to hold back a good idea from being pursued if it has use for customers and if its pursuit adheres to the advice process. Practice sharing New insights and practices are systematically shared through Teal Organizations, often through an intranet or wiki. Through sense and respond and various practices supporting evolutionary purpose, these successful innovations can potentially be adopted quickly throughout the organization. Innovation impacts whole organization Emergent innovation does not just follow organizational purpose but may impact the evolutionary purpose of a Teal organization, shifting its impulse into a new direction and potential. Frequently asked questions How would a strong visionary and innovative personality fit into a Teal organization, such as for example Steve Jobs? In Teal organizations decision-making is bounded by the advice process. Anybody with strong skills in a particular area can contribute, irrespective of position, and this is certainly true with respect to innovation. However, the Teal paradigm also confers on all decision-makers the obligation to respect the advice process and consult with appropriate individuals within the organization. This does not mean that everyone consulted has to agree with a proposed innovation, only that his or her advice is considered. However, at the same time, the collective innovative intelligence of the entire organization is unleashed under Teal, making it not nearly so dependent on the contributions of a single individual. How do these practices link with the three Teal breakthroughs? All three Teal breakthroughs are supported by the practices and principles for Teal innovation and product development. Self-management Self management allows anybody to innovate and develop improvements in products and services with minimal delay. The empathetic understanding that frontline staff have for their customers can be used to act on observed needs. Wholeness Wholeness is integrated into the design and product development process through a "whole brain" approach. Teal innovation designs for aspects such as beauty and through intuition as well as more traditional market or customer analysis. Furthermore, innovation plays a key role in the evolution of that purpose. Concrete examples for inspiration Here are some practical examples from organizations that have adopted Teal innovation and product development practices. What if FAVI could somehow do the impossible - shape industrial products made of percent pure copper? Would there

be a market for such products? What really got them excited was not the market they might discover. They were excited by the beauty of the seemingly impossible: After two years of tinkering, they succeeded. And as they had imagined, a market came knocking at their door. Pure copper rotors have interesting properties in electrical motors. This is now an important business for FAVI. Metallurgists have long known that copper has antiseptic properties. A team started tinkering with antimicrobial copper equipment for hospitals. A prototype soon gave promising results, but Zobrist CEO was bothered by its color. The reddish color of copper evokes the faded world of old 19th-century sanatoriums, he found. Zobrist CEO asked the project team if they could make a prototype with a silver-colored alloy, to give it the shine of stainless steel we associate with modern equipment. This simply made no sense. The added material for the alloy would make the copper lose its antiseptic properties. Zobrist CEO knew he had no ground to stand on. But he was possessed by a deep aesthetic and intuitive sense that it was worth pursuing. He managed to persuade the team into giving it a try. A new market opened for FAVI. The product development process that FAVI used to achieve this breakthrough was developed in collaboration with a Japanese professor, Shoji Shiba. It is a design process that explicitly factors in emotions, beauty and intuition [4]. Buurtzorg Health care - Netherlands - 9, employees - Nonprofit Buurtzorg develops a new boarding house to support overwhelmed relatives of their patients. One team in the countryside had an idea: It is not unusual for the husband or wife, often elderly as well, to be exhausted by the constant care of the patient, sometimes 24 hours a day. If the strain becomes too much, the caregiver can fall sick too. One of the nurses had inherited a small farmhouse in the countryside. Together, the team transformed it into a Buurtzorg boarding house. The idea of boarding houses will run its own course. If it is meant to be, if it has enough life force, it will attract nurses from other teams to make it happen and carry Buurtzorg into a new dimension of care. Otherwise, it will remain a small scale experiment [5]. Two nurses on a Buurtzorg team found themselves pondering the fact that elderly people, when they fall, often break their hips. Could Buurtzorg play a role in preventing its older patients from falling down? The two nurses experimented and created a partnership with a physiotherapist and an occupational therapist from their neighborhood. They advised patients on small changes they could bring to their home interiors, and changes of habits that would minimize risks of falling down. The two nurses sensed a need, and with the power of self-management acted upon it. Self-management helped the idea to spread.

Chapter 6 : Innovation: Key to Successful Business

The Innovative Organization is a fresh take on corporate innovation that prepares managers and leaders to embrace the challenges and opportunities of creating a truly ambidextrous enterprise -- one that is capable of both entrepreneurial opportunity development and excellent execution (both essential but potentially conflicting activities).

Entrepreneurs Answer the Question: Light bulb idea image via Shutterstock One of the keys to any successful business is being able to come up with new ideas to keep operations, products and services fresh. The process of bringing those ideas to reality is called innovation. While thinking up new ideas is one step of the process, businesses have a much greater task in trying to turn that into an actual product or service that will benefit customers. In an article he wrote for BusinessNewsDaily , Fusion92 vice president of innovation Jacob Beckley said while innovation might have slightly different meanings depending on the industry, its core is universal. The Accenture study found a decline in the satisfaction with innovation performance over the past three years, while a different by study by Deloitte Touche Tohmatsu Limited discovered that just one quarter of millennial employees think business leaders are doing enough to encourage practices that foster the development of new ideas. In order to successfully innovate, businesses need to install the strategies that best fit their needs and goals. Types of innovation When trying to be innovative, businesses can choose from a variety of different strategies. Each offers advantages and disadvantages. Among the different types of innovation processes business can employ: Open innovation is when companies use internal and external ideas to help advance their operations. Researching a New Paradigm" Oxford University press Coined by professor, author and entrepreneur Clay Christensen. Disruptive innovation is when new products or services start out at the bottom of the marketplace but end up eventually moving up and displacing their competitors. According to the Clayton Christensen Institute for Disruptive Innovation, the "theoryexplains the phenomenon by which an innovation transforms an existing market or sector by introducing simplicity, convenience, accessibility, and affordability where complication and high cost are the status quo. Initially, a disruptive innovation is formed in a niche market that may appear unattractive or inconsequential to industry incumbents, but eventually the new product or idea completely redefines the industry. Both products were not highly welcomed when they first hit the market, but over time, as they improved on the original designs, the products eventually took hold with consumers. Reverse innovation is when products or services are developed first for use in developing nations. In an article for the Harvard Business Review, Vijay Govindarajan, author of "Reverse Innovation" HBR Press, wrote, "at its core, reverse innovation describes solutions adopted first in poorer, emerging nations that subsequently â€” and disruptively â€” find a market in richer, developed nations. Incremental innovation is when companies make small changes to products and services to ensure they keep their spot in the marketplace. Rather than changing the products or services completely, incremental innovation simply builds upon what already exists. Often developed by research and development teams, breakthrough innovations often use new technology as a way to quickly climb to the top of new markets. Examples of the breakthrough innovations include the Internet and transistors. A graduate of Indiana University, he spent nearly a decade as a staff reporter for the Daily Herald in suburban Chicago, covering a wide array of topics including, local and state government, crime, the legal system and education. Following his years at the newspaper Chad worked in public relations, helping promote small businesses throughout the U. Follow him on Twitter.

Chapter 7 : Innovation and Product Development - Home

The differences between product, process and organizational innovation processes are surprisingly few and appear to be strongly related to the type of innovation developed or adopted.

Chapter 8 : Innovation management - Wikipedia

These organizations don't copy what others do; instead, they may use innovative ideas from others as a spring board to

come up with a unique application, product, or service for themselves.