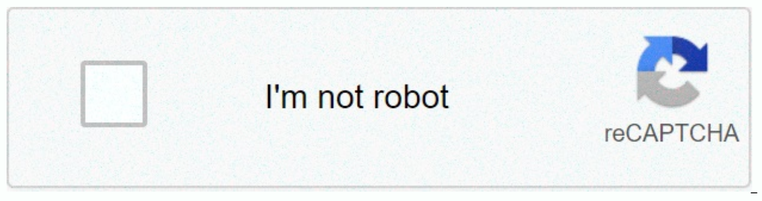

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Product process matrix characteristics

This article needs additional citations to verify. Please help improve this article by adding citations to reliable sources. Unsourced materials may be challenged and removed. Search for sources: Hayes-Willwright Matrix - News · Newspapers · Books · World · JSTOR (December 2018) (learn how and when to remove this template message) illustration of the product process matrix. The framework predicts that companies outside the Green Zone cannot be successful. The Hayes Willwright Matrix, also known as the Product Process Matrix, is a tool for analyzing the convenience between the location of the chosen product and the manufacturing process. The first dimension of the matrix, the product life cycle, is a measure of product or market maturity. They range from highly customized products with low quantities, to very uniform products of large size. The second dimension, the life cycle of the operation, is a measure of the maturity of the manufacturing process. They range from high manual processes with high unit costs (job store) to a highly automated process with low unit costs (continuous flow). Companies can hold any position in the matrix. However, according to the framework, it can only be successful if the product life cycle phase is consistent with their working life cycle stage. It was developed by Robert H. Hayes and Stephen C. Wheelwright and published in the Harvard Business Journal in 1979, in articles entitled Linking manufacturing process, product life cycles and dynamics of process product lifecycles. The use of the company's location matrix depends on the matrix on two dimensions - process structure/operation life cycle and product structure/product lifecycle. [1] The process/lifecycle structure consists of process selection (job store, batch, assembly line, continuous flow) and operation structure (gliding flow, separate line flow, connected line flow, and continuous flow). [1] The product structure/product lifecycle refers to the four stages of the product life cycle from low volume to large size and product structure from low uniformity to high specifications. [2] Hayes-Wheelright product matrix low-volume product unique low-volume product of high volume product, standard size product, very large product processing product, Jumbled project structure, flow function, cutting line flow line, continuous flow line, each process option on the diagonal of the matrix includes different sets of characteristics in mind the skill level, flexibility of workers and labor intensity. Left upper units (projects, job shop, push operations) tend to have higher skilled workers with a greater range of skills for better and more labor-intensive flexibility compared to. It's rare for the left upper units to operate at full capacity and use them. Equipment. They usually meet the needs of local and/or specialized markets. The number of people who have been subjected to violence in the past has been significantly lower than in the past. Production facilities are also interconnected and require unique specialized machines for the specific product. They often meet their needs for national markets and can be vertically integrated. The matrix highlights the difficult trade-off between efficiency and operational flexibility with left upper units that prefer flexibility with high-cost production and lower right units that prefer efficiency with the ability to distribute their large fixed costs on a wider base, reducing the cost per unit. [1] The product process matrix affects three aspects of the work. Distinctive efficiency is a feature or aspect of the company that gives it a comparative advantage over its competitors, and is usually classified by cost/price, quality, flexibility and service/time. The matrix can be used as a framework to identify and analyze the company's distinctive efficiency to improve informed decisions about processes, alternatives and marketing alternatives. [1] Flexibility allows a wide range of skilled labor and the use of general purpose equipment upper left operations to have a distinctive efficiency in flexibility in their products/service provided, specifically in unique product designs. [1] Lower right-wing operations do not have this side of flexibility because they rely on specialized machines with unskilled or semi-skilled workers. However, they have better flexibility when it comes to quantity. [1] Top-left quality processes excel in quality when it comes to unique designs based on customer specifications or if the product is considered artisans. While the top left processes meet the products for specific customers, lower right processes can benefit from the production of consistently homogeneous products to remove defects and improve designs over time to gain greater reliability for the end user. [1] Left upper/upper time processes can be called distinctive efficiency through face-to-face interaction and personal attention while the lower right processes are more efficient at the time. [1] Companies using higher-left operations are likely to be able to charge higher prices because of their ability to meet the needs of individual customers and compensate skilled workers. [1] Minimum operations are more cost-efficient because their large sizes allow them to benefit from economies of scale. [1] Management companies that operate along a diagonal matrix assume that they perform better than those very far from the diagonal because it weakens them from competition effectively. For example, the commodity produced by a place of employment is economically impractical. [1] There Players who don't exactly work on a diagonal but are near by, for example, Rolls-Royce manufactures cars using a job store. The Administration must consider the disadvantages and implications of that. [1] Management can also consider the strategic implications of their position on the matrix compared to their competitors. The company's position on the matrix can change over time; the consequences of any products or practical changes can be predicted in the future. [1] The nature of the product can be determined by using the matrix. Hayes Willwright illustrates this by using a specialized manufacturer of printed circuit boards that produces custom products in low folders using a threaded assembly line process, and putting the business in the unwanted lower left corner of the matrix. Knowing this, the company concluded its products lie in the ability to design rather than the circuit boards themselves, which put them closer along the diagonal. [1] Another organization is a diagnostic use of the matrix to organize individuala units of action according to the appropriate process test while maintaining the overall coordination of the manufactured procedure. Most companies use more than one process for the product. For example, processing batches may be more suitable for individual components because of their nature or volume required is insufficient for the line process, but the product itself was created on an assembly line. Companies may need separate facilities for spare parts or products. [1] Companies can also produce similar products using different practical options. The Musical Instrument Club produces large electric guitars using the line process while also producing custom guitars using a shop shop (custom handrail shop). [1] The four stages of the Hayes-Willwright matrix are a four-stage model; Each phase is characterized by a management strategy implemented to exploit manufacturing potential. In phase 1, the production process is flexible and costly, and becomes increasingly standardized, mechanized and automated, leading to an inflexible and cost-effective process. The company can navigate between stages. Chase and Hayes (1991) expanded the model to include service companies. Cruz and Rodríguez (2008) also used the theoretical framework to assess the effectiveness of the operations strategy. [3] Phase 1 the company's manufacturing approach is reactive,[3] dealing with daily problems such as machine failures, quality and delivery difficulties. They can't use manufacturing potential and they're suffering from incorporation issues. The Department will emphasize the increase in equipment and technological investments rather than improving infrastructure such as planning and measurement systems and manpower policies. [4] Phase 2 companies will have long-term objectives to achieve industry standards. [3] The focus on enhancing productivity and economies of scale will be a standard meeting Companies will prefer capital investmentas as a means of obtaining competitive advantages. Its main objective is competitive parity in the manufacturing process. [4] Phase 3 business strategy would generate a manufacturing strategy. Charter and letter data are used to improve the company's competitive position by guiding manufacturing and decision-making activities. The development of manufacturing techniques such as computer-aided design (CAD), computer-aided manufacturing (CAM) and flexible manufacturing system (FMS), as well as practices such as timely and lean manufacturing will be taken into account to enhance the product. [3] Phase 4 companies will develop a strategy to use manufacturing to enhance their corporate efficiency. [4] Their internal processes and product improvements will advance previous industry standards, ultimately leading the industry. This will lead to a sustainable competitive advantage. The manufacturing strategy will significantly stimulate the competitive strategy and will affect the company's key decisions. [3] Project process options are a process option added by subsequent authors. It refers to unique and wide-ranging products. They are unique to customers and are often very great for transportation, so the project is a selection process. [1] Job store shops are semi-custom manufacturing processes of small to medium size. Products are either unique to the system or have inconsistent demand with long gaps between orders. Because each output is different, efficiency is difficult. Each request requires a different structure, materials, shape and possibly processing according to the client's design and specifications, resulting in a mixed flow with no recurring pattern. This usually requires the planning of a process in which the machines are assembled in different areas of the shop according to the purpose or function. This manufacturing process also requires highly skilled and experienced labour. Besides manufacturing processes such as tools, machine and die manufacturers, it can also apply to service processes such as law firms, medical practices, car repair and tailor shops. [1] Payments produce similar items on a recurring basis, often in larger volumes than work shops. Product management may accumulate so that they can be processed together. Larger size and repeating requirements allows management to take a more efficient manufacturing path as it improves capacity and significantly reduces costs. There is a cut line flow or intermittent flow since the action move sit in the process around assembling a different machine in the shop in a mixed way. It is smoother than processing a work shop because the higher size and similarity in the items allows the manufacturer to take advantage of the repetition. And machine rye and printing shops that have contracts for larger quantities of products are examples of the batch process in Examples of service operations can include some offices, some hospital operations, university and school classrooms, and food preparations. [1] The line where the product has continuous demand and is large enough, the company can use a process referred to as mass production such as assembly line and continuous manufacturing. [1] In the assembly line process, processes do not change with standard and uninterrupted flow with homogeneous outputs. This process is largely automated with special purpose equipment. Unlike the previous process, there is no difference in production. Managers will have a greater period of control and less skilled workers are needed because product consolidation means individual units do not have to me as closely monitored and controlled, and ease guidance, scheduling and control. The assembly line process also means the machines are organized according to the sequence and are usually connected by an automated conveyor system, thus as a continuous line flow. This is called a product layout. The input and output set is often fixed and consistent with the constant flow of work. An example of the manufacture of the assembly line is the manufacture of automobiles. Car wash, class registration at universities and many fast food operations are services that employ assembly lines. [1] Continuous continuous production involves raw materials undergoing successive processes such as refining and processing to a narrow range of highly standardized products described as commodities in very large quantities. Continuous manufacturing requires significant capital investment, so the demand for the product must be exceptionally high. The cost of starting or stopping the process can be harmful to business. Thus, operations often work non-stop with minimal downtime. High production levels also reduce the average fixed cost per unit. It is a self-monitoring process with a fixed and automated path, which limits the work requirements for monitoring and maintenance of machines. Industries using this process include gas, chemicals, ores, rubber, oil, cement, paper, wood, and certain foods such as milk, water, wheat, flour, sugar and spirits. [1] The advantages of the matrix make it easier to think more broadly about organizational efficiency and competitive advantage by including product lifecycle stages and their choice of production process for different products in the strategic planning process. It allows manufacturing managers to be more involved in the planning process so that their decisions can be more effectively synchronized with those of marketing and the company itself. All of this leads to more informed expectations about changes in the industry with appropriate strategic responses. [1] In addition, the matrix can be used to identify business opportunities due to the company's manufacturing capabilities. It Help make key decisions about changes in the production process and guide investment decisions to stay in line with product and process plans. It helps to choose the best process and structure of the product when entering a new market and appropriate manufacturing facilities. It also helps to identify and monitor progress in achieving important manufacturing objectives at the corporate level. [1] Defects do not take the matrix into account the product lifecycle combinations and the life cycle of the process that do not follow the above characteristics. About 60 per cent of the companies surveyed did not fall on the country [according to who?]. [1] Advanced management methods and technology reduce some of the inherent trade-offs in the matrix, leading to reduced predictive health. [5] However, Ahmed and Schroeder propose the development of the matrix to include three axes rather than two axes. Besides the X axis (product life cycle stages) and y axis (phases of the process life cycle), they propose adding a z axis to represent the company's inclusion of innovative initiatives. [1] The variety produced in the matrix is also limited. Koth and Orne (1989) propose product complexity and regulatory characteristics such as vertical integration range, size and scope of geographical processes should affect the design of the appropriate process. Das and Narasimhan (2001) refer to advanced manufacturing technology for modular product structures that can affect the emergency impact of diverse products, increase production and improve the capabilities of shops and batches in areas that have traditionally been associated with assembly lines and flow lines. [5] The matrix is fixed and its dimensions are very simple. The matrix is based on current products but does not take into account the dynamic nature of corporate operating environments. Processes should be designed with the development of product offerings and expected future product offerings in mind. [5] References ^ a b.b.g. and a z.g.c.t.s. s.s. s.s. inman, R. Anthony. Product processing matrix. Business references. Accessed September 4, 2018. ^ Spencer, M.C.; Cox, J.W. (1995). Analysis of product process matrix and frequent manufacturing. International Journal of Production Research. 33 (5): 1275–1294. doi:10.1080/00207549508930209. ^ A Bhurchand, Jane; Gajindra, K. Adel; Osha, Ananthakumar (2013). A tool for measuring strategic manufacturing efficiency factors based on Hayes And Willwright media. Journal of Manufacturing Technology Management. 24 (6): 812–829. Doi: 10.1108/JMTM-11-2011-0102. ^ A BHURCHAND, Jane; Gajindra, K. Adel; Osha, Ananthakumar (2016). Investigation of alternative models of industrial efficiency: a pilot study. Journal of Manufacturing Technology Management. 27 (6): 814–818. ^ AP C Pica, Helkiö; You, Tynhall (2013). A theoretical contingency perspective for the product process matrix. International Journal of Operations and Production Management. 33 (2): 216–244. doi:10.1108/01443571311295644. Retrieved from

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