

Economic Sustainability as an Element of Fit Manufacturing in Realizing Economic Competitiveness and the Mediating Roles of Sustainability: A Review

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Abstract

The fit manufacturing structure has included in the direction of significant support production companies toward modification interested in leanness, agility with economically sustainable, moreover, use effectively in a global competitive business enterprise. In order to realize firm excellence and progress in all activities, you have to build on Economic sustainability to support improvement firms, also this success will support realizing Economic competitiveness. Hence this paper seeks in order to study the association between fit manufacturing and Economic sustainability, on the other hand; it will study associate mid fit manufacturing moreover, sustainability similarly the element of requirement fit manufacturing. The article utilizes the depository library approach toward gathering information in addition to thereby subject this information in the direction of investigation next to choosing related deductive with inductive methods. It was current determined that fit manufacturing is present at a technique, whatever be capable be obtained by adoption via Economic competitiveness.

Keywords: fit manufacturing, sustainability, economic sustainability, economic competitiveness

1. Introduction

For different social, economic, mechanical with political causes production comprises changes into globalize, accompanied by supply chains that usually progress further than national boundaries. The marketplace has got witnessed larger internationalization thus in contemporary information with communication technologies. The needs of worldwide consumers include increased extra various as well as unexpected compressing the life cycle of products with inventing main planning problems. Additionally, universe resources subsist decreasing. Moreover, environmental difficulties are presently increasing. In order to obtain competitiveness in this structure unstable condition brand new manufacturing strategies like lean with agile manufacturing have been arranged the previous advocating capabilities via the elimination of waste plus the ensuing enhances the manufacturing system's capability in order to deal with modification with unpredictability next to construction in measures that raise resiliency with responsiveness (Pham et al., 2008).

2. Development Conceptual Framework with Hypotheses

This study will make the investigation a number of hypotheses utilizing this conceptual framework furthermore; the proposed conceptual framework comprises of four variables like fit manufacturing, sustainability, Economic sustainability and Economic competitiveness. Table 1 indicates briefly variables that recommend using for, in conclusion, this study. Hence we set the following hypothesis designed for the conclusion.

Table 1. Model of the framework

Variables of the study
Fit manufacturing
Sustainability
Economic sustainability
Economic competitiveness

3. Fit Manufacturing

According to Pham et al. (2010) fit manufacturing comprises linking manufacturing, marketing, moreover, products innovation strategies in order to obtain long-term economic sustainability. Vinodh et al. (2014) pointed out that fit manufacturing is present in a competitive manufacturing model whatever comprises both lean with agile systems linked through the sustainable benefits. Furthermore, a number of researchers like Williams (2013) named fit manufacturing with fit production exemplary integrates the determinations of lean and agile manufacturing, through the long-term sustainability, in addition to the economic viability of the business. The prototype was capable nearly brand-new, in the direction of the review the carrying out of the manufacturing operation, toward appraise contribution suggestions, same as supplementing contemporary novel goods part; otherwise expanding the comprehensive capability of the assembly line, as well as to develop the business of the tomorrow. In addition, Ebrahim (2011) clarified that conception of fit manufacturing systems has got advanced via integration mid the lean manufacturing, agile manufacturing, with sustainability conceptions. Additionally, Pham et al. (2008) submitted a new production paradigm named fit manufacture. The purpose of the fit is present in order to supply a complete manufacturing solution in order to the problems encountered in the present extremely unpredictable in the progressively complex manufacturing environment. Including the lean and agile manufacturing conceptions, it follows fit integrates essential business areas like as design, manufacture, sales, marketing, and finance. In order to supply a holistic systems approach toward production, different from another significant approach, "Fit" not only improves a firm capability in the direction of gathering customer demands and breaks interested in contemporary marketplaces. It pro-actively looks for modern marketplaces whereas ensuring a firm around technique in addition to important foundation is present adapted in order to meet the novel marketplace sector essentials. Besides fit determine to empower a firm in the direction of recognizing correctly a consumer need speedily with efficiently, hence ensuring new consumer associations are currently advanced quickly as well as sustainability is contemporary accomplished. Besides, Thomas and Pham (2004) pointed out that fit manufacturing strategy has been current, frequently extra than exactly the compound of Lean and Agile manufacturing approaches, furthermore, beginning a technological view. It subsists plenty more than suitable a CIM system through managerial combined whereas leanness with Agile it is present at the basic essentials of the Fit strategy. It exists the holistic nature taken by adoption subordinate to Fit manufacture that develops the administration theory of the responsive system in order to formulate this manufacturing strategy. Fit manufacturing increases during a firm manufacturing system in addition to relating to every characteristic of a consumer's order deployment in the direction of the firm around production manufacturing strategy. Technology presents the essential for the fit strategy focusing on the technical connects between the customer and the manufacturer. This technology subsists; it follows dovetailed interested in an effective strategy. Moreover, an operational management system that leading to the invention of a producer with responsive manufacturing environment.

4. Sustainability

Kuhlman and Farrington pointed out (2010) that sustainability like a policy conception comprises an origin in the Brundtland Report of 1987. That document was present involved, accompanied by the tension between the purposes of humankind closer to a better life; furthermore, the idea associated sustainability comprises referring to as including three dimensions, particularly social, economical with environmental. Moreover, sustainability refers to be capable in order to reach long-term growth in addition to prosperity in what is present now and continuously more unpredictable with complex market. In order to achieve this, firm essentials are effective in the direction of utilizing productively in larger than one marketplace sector via perceptive a total of high-value production markets.

To manage in such different marketplace sectors, the firms around need to comprise next to give the technology platform with innovation culture in order to change interested in these areas, moreover, have got the dependence in order to utilize in like environments. Furthermore, a firm requirement ensured that whereas its manufacturing processes be present organized under the direction of fitting the demand chain necessities it is in addition to besides vital that its supply chain is advanced in order to the same scope, hence ensuring a finished relationship mid demand chain with the supply chain (Pham et al., 2010). In addition, Sustainability refers that equally

determine whole of environmental aspects, social with economic aspects. Moreover, Sustainability is present at a large concern in our contemporary worldwide (Charron, 2014).

In addition, Chichilnisky (2011) revealed that sustainability means referring the requirements of the current lacking undermining the requirements of the future. As well, Sustainability technique is present in various types of science that subsists basically utilize like are agricultural with health sciences, accompanied by important essential. Moreover, implemented knowledge elements in addition to involvement in order to move such knowledge interested in social activity (Kates, 2011).

5. Economic Sustainability

According to Found and Rich (2006), economic sustainability points up mentioned in the three-way conclusions combined sustainability; whereas its effect existed underrated provided. The firm continues not economically sustainable. After whatever all the ecological with society manage in corporate social responsibility, comprised not of all purpose, at the same time as they need to withdraw, by the advocate of the marketplace market allocation, investors in the community, as well as well as everything else is insignificant except you organize a profit through including value. Economic sustainability exists, difficult, additionally many-sided although selecting a methods' entrance. This is presently resolved by the firms' fittings, with fitting in the direction of empowering; It's in order to productively, in addition to impressively transform inputs, interested in the belongings with services, that the consumer benefits to the marketplace. Moreover, according to Curtis (2003) illustrate that economic sustainability is present excellent obtained next to the invention of local otherwise regional self-reliant, community economies. Furthermore, Doane and MacGillivray (2001) review the significance of economic sustainability, expressing that:

In fact economic sustainability is the paradoxical golden child of sustainability: if organizations or countries understood perfectly well what it meant to be economically sustainable, there would be full employment, less poverty and no bankruptcies. Unfortunately, that is not the case: economic sustainability is a complex picture, the nature of which cannot be fully understood without looking at both the internal and external environment in which organizations are operating. (p. 18)

As Anand and Sen (2000) determined clearly that economic sustainability illustrates the quality of a subject of intergenerational equity with regardless of the possibility whatever the essentials of what exists to become sustained subsists not constantly clear. The supplement reviews the correlation mid distributional fairness, the sustainable increase outgrowth, in addition to simple period selection.

6. Competitiveness

According to Santos et al. (2009), the competitiveness, in the relations of macro and micro levels of a business is present generally determined next to its capability in order to pioneer, capacity in the direction of answers to the requirements of the marketplace as well as flexibility toward challenges from competing. Furthermore, Competitiveness is present as a marketplace characteristic in order to provide the correct toward managing with determining the societal resources, mainly in order to those who usage then the majority effectively. In varied economic or management encyclopedias as well as vocabularies, competition subsists related like a continuation of manufacturers and suppliers to better farming and excellent achievement conditions with used for the fix in the marketplace. Considering that competition stimulates culture improvement of managing of good science with management and leads in effectively working manufacturers in the direction of financial ruin (Rutkauskas, 2008)

7. Economic Competitiveness

Sahlberg pointed out (2006) that Economic competitiveness is currently usually observed like a logical indicator used for evaluating a country's level of economic success. It is overall supposed that in order to raise economic competitiveness, residents need to get knowledge, qualifications as well as viewpoints essentially used for community success moreover, the knowledge-based economy. Additionally, Cesca (2006) mentioned that economic competitiveness can be explained like the capacity in order to maintain as well as grow a business surrounded by the worldwide textile with apparel environment, via optimization of products, processes, moreover, strategies in the direction with the increase a competitive advantage. Furthermore, According to Jesionowski (1996), economic competitiveness like a country's capability in order to formulate greater goods and services than other competitor surrounded by the world marketplace. This is presently one of lots of methods of clarifying the economic competitiveness.

8. Fit manufacturing and Economic sustainability

According to Pham and Thomas (2011), the improvement of a Fit paradigm sought next to dealing with presenting the concerns of economic sustainability is currently suggested with is considered via the authors like

one of a type. The fit will supply a structure used for the realization of sustainable manufacturing processes surrounded by organizations. As Found and Rich (2006) pointed out, economic sustainability is present scheme with multifaceted however accompanying a systems approach, it subsists fixed next to the firm's fitness with fitting in order to empower it in the direction of effectively furthermore productively change inputs into goods and services that the consumer values with the marketplace needs.

Nevertheless, this work purpose in order to review the improvement of a holistic manufacturing paradigm, named fit manufacturing, at the same time as the fundamental of establishing sustainable economic significance with realizing organizational long-term fitness. Furthermore, fit manufacturing is present forward like a manufacturing strategy used for reaching continuous organizational survival with economic sustainability manufacturing role new system of calculations for manufacturing companies to be administered and continue through a focus on economic sustainability slightly than the investigation of unqualified year-in year-out short-term development strategy. This model change designed for a number of administrators of manufacturing firms means sustaining the present systems, structure with methods of life. Therefore, fit manufacturing is observed like the company-wide strategy that empowers organizations in order to administer the involvement of the marketplace, customer predictions in terms of products with prices, waste elimination in operations, alteration of production capabilities in the direction of fitting brand new products designed obstacles, Marketplace variations in addition to supply-chain management. Fit manufacturing can be collaboration organizations in order to stay agile and sustainable via a strategic approach that role importance on qualified with prompted employees, usage of advance computer technologies with the flexible organizational framework (Williams, 2013).

Hypothesis 1: Fit manufacturing has a positive effect on economic sustainability.

9. Fit Manufacturing and Sustainability

According to Nickols (2009), they are fitted with fitness. In this way, sustainability, obviously suggests, is present at the ability in order to support toward maintenance ongoing. The fit and fitness of a firm are current with the essential basics of capability in the direction of sustaining. Furthermore, it illustrates a slightly high level view of a firm as an open, flexible system. Another time, the operational framework advances, interest in theatrical work. It comprises the essential direct responsibility used for the alignment, adaptation moreover, innovation operations. It depends on internal and external intelligence like the fundamental designed for dynamic the modifications required in order to safeguard alignment, adaptation and innovation. In this method, the operational framework is present, including dependable used for the sustainability of the firm.

Hypothesis 2: Fit manufacturing has a positive effect on sustainability.

10. Sustainability and Economic Sustainability

Economic sustainability is considered as an element vital for sustainability: that supplied organizations otherwise, countries implied excellently well what it's designed to be economically sustainable (Doane & MacGillivray, 2001).

Hypothesis 3: Sustainability has a positive effect on Economic sustainability.

11. Sustainability and Economic Competitiveness

Regardless of all the reviews on competitiveness, still negative clarify definition otherwise model of competitiveness comprises even though advanced. On another side, globalization, economic dynamism with social progress, sustainability with competitiveness go together. Competitiveness has to be supporting next to a broad vision for the economy and society. There is a requirement of study enterprises in order to improve the modern concept of Sustainable competitiveness in the framework of globalization, with a lot of the analysis focus on how sustainable development in addition to competitiveness interactive. Such extra investigation determined brand new hypothetical models illustrating the associations' mid international globalization, economic growth, sustainable development, well-being and competitiveness (Balkyte & Tvaronaviciene, 2010). Furthermore, Popescu et al. (2015) refer that aim competitiveness with sustainability in the framework of a contemporary economic approach in order to industrialize policy, showing a case study in Romania. The article clarifies the challenges of the globalized economy on its developed sector, by focusing on the first process, the second-level re-industrialization; moreover, in the end, the third stage the return to manufacturing next to pointing up new approaches in the direction of industrial policy. In the context of Romania's national improvement strategy in line accompanied by Europe 2020 Strategy Government leads its consideration to adapting economic development through active with responsible measures used in the society.

Hypothesis 4: Sustainability has a positive effect on Economic competitiveness.

12. Fit Manufacturing and Economic Competitiveness

The foundation Production Fitness (fit manufacturing) is noticed from the elements that have supplied in the direction of manufacturing capabilities, specifically in accomplishing competitiveness in rapid modifications demand (Ebrahim, 2011).

Hypothesis 5: Fit manufacturing has a positive effect on Economic competitiveness.

13. Economic Sustainability and Economic Competitiveness

The majority governments need a strong local economy. The thought of strength, though comprises a variety of values in addition to meeting accompanied by values like resilience. Competitiveness subsists a characteristic of a strong economy, plus mainly standard economic models mention that competitiveness is present regarding productivity related to other cities, whether regionally, nationally, otherwise globally. Even though, the idea of competitiveness is many-sided, moreover, be capable mean various things in an economic sustainability structure that including comprises community sustainability. Competitiveness will able be suitable for the social as well as environmental dimensions of sustainability (Hackler, 2012).

Hypothesis 6: Economic sustainability has a positive effect on Economic competitiveness.

14. Research Hypotheses

This study sought to analyse the role of fit manufacturing, between sustainability, Economic sustainability with Economic competitiveness. The literature review mentioned that fit manufacturing effect on economic sustainability directly, additionally, directly impact on sustainability. Furthermore, directly impact on realizing Economic competitiveness. Besides this, the study focused the role of sustainability as mediating variable between fit manufacturing, Economic sustainability with realized economic competitiveness (see Figure 1). Hence the following hypotheses suggested via this study used for conclusion and future research in order to examine that were present identified from the literature review.

H1: Fit manufacturing has a positive effect on Economic sustainability.

H2: Fit manufacturing has a positive effect on sustainability.

H3: Sustainability has a positive effect on Economic sustainability.

H4: Sustainability has a positive effect on realizing Economic competitiveness.

H5: Fit manufacturing has a positive effect on realizing Economic competitiveness.

H6: Economic sustainability has a positive effect on realizing Economic competitiveness.

15. Conceptual Framework

From the previous figure, it can be concluded that the conceptual framework proposes that fit manufacturing has the main role in sustainability, what considers as elements fit manufacturing. Thus, comprise one mediating variable, name sustainability, in addition to besides, the framework shows that there is effect fit manufacturing in sustainability, economic sustainability, in realizing economic competitiveness.

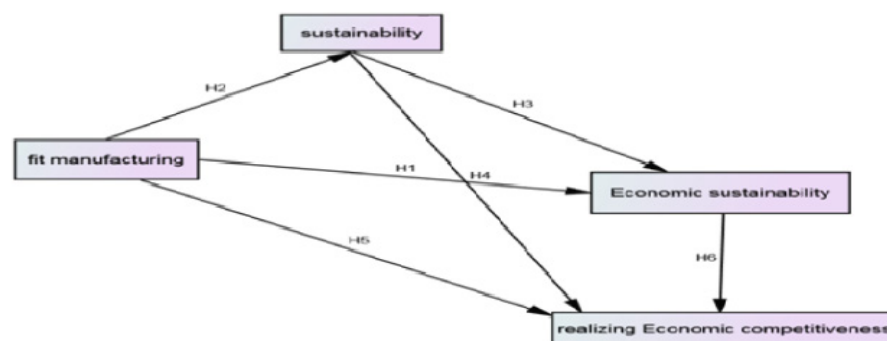


Figure 1. Conceptual framework

16. Conclusions and Future Research

From the previous, it can be concluded that fit manufacturing that some researcher name (fitness production) requirements for realized excellent firms in all operations and activities. Nothing that paradigm fit manufacturing

comprised the role essential in sustainability, what consider as an element, mainly in the elements, in addition, relationships between fit manufacturing and sustainability. Furthermore, there is a link between fit manufacturing with economic competitiveness as well as between economic competitiveness and sustainability. Based upon the assessment of the past studies concluded in this review, we can approve that fit manufacturing has got positively significant relationship accompanied by the sustainability, economic sustainability and realized economic competitiveness. This recommends whole during the past studied to suppose that fit manufacturing is positively associated with the other variables referred to be earlier. Nevertheless, the significance result of our review is present that the effect of fit manufacturing on sustainability, economic sustainability, and economic competitiveness is introduced as a result means firms that will depend on policy work. It will obtain extra advantages to possibilities to be able to increase productivity.

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