Managing The Dynamics Of New Technology: Issues In Manufacturing Management

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Technology management needs to be separated from research and development (R&D) management. R&D management refers to the process by which a company runs its research laboratories and other operations for the creation of new technologies. Technology management focuses on the intersection of technology and business, encompassing not only technology creation but also its application, dissemination, and impact. Michael Bigwood suggests that New Technology Exploitation (NTE) lies somewhere between R&D and New Product Development, with characteristics of the cyclical learning process of Guoqing Zhang (Managing Guest Editor) Supply Chain Management and Logistics Optimization Research Center University of Windsor Canada Email: gzhang@uwindsor.ca. Prof. Xiang Li The School of Business Beijing University of Chemical Technology China Email: lixiang@mail.buct.edu.cn. Prof. Ali Diabat Civil and Urban Engineering New York University Abu Dhabi United Arab Emirates Email: diabat@nyu.edu. Call for paper: Special Issue in International Journal of Production Economics on “Exploring supply chain structural dynamics: new disruptive technologies and disruption risks”. Guest Editors: Alexandre Dolgui, Dmitry Ivanov. Small and Medium Manufacturing Enterprises and Asia’s Sustainable Economic Development. Call for Papers.
A new technology that can substitute for an existing technology at a lower cost and provide higher quality can change the very basis for competition in an industry. Impact of Stakeholders on Innovation: A company should look to its stakeholders, especially its customers, suppliers, and distributors, for sources product and service improvements. These groups of people have the most to gain from innovative new products or services. Resource Allocation Issues: The Company must make available the resources necessary for effective research and development. Research indicates that a company’s R&D intensity (its spending on R&D as a percentage of sales revenue) is a principal means of gaining market share in global competition. Advanced manufacturing technologies are a comparatively new priority of state innovation policy, even for developed countries. In Russia, where this field has been studied for some time both theoretically and statistically [HSE, 2014b, p. 398], it has taken on new meaning and has expanded considerably in the last two years. They have assessed the dynamics and specific nature of the innovation process in manufacturing companies using constantly updated empirical material [Gonchar, 2009; Golikova et al., 2012; Yakovlev, 2014]. Proportion of patents issued in the Russian Federation with a Russian focus in the Orbit global database. (%) 2.83. Information technologies for production cycle management. 0.58. 80.00.