

# Synergy of Technology Transfer

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**Abstract :** The Institutional or Laboratory research results in Technology which is more fundamental. It must find its application in a down to earth manner to the comfort of all. The synergy to do this is provided by an urge to travel from the realm of a "Fool" to that of a "Pundit". Industrial establishments do research and develop technologies related more to the upliftment of their organisation. The technologies route are more complete and mostly ready for use. Synergy to do this comes from the urge to survive and forge ahead in globally competitive business.

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## INTRODUCTION

Technology (knowledge) generation and technology transfer (dissemination) are two sides of a valuable coin. A coin is valueless unless it has both the sides authenticated by proper accreditation. The generation side has two venues as under :

- i) Institutions or Laboratories
- ii) Industrial Establishments

The technology generated at Institute or Laboratories is more on the fundamental side of the science and needs patient work up to put into useful practice. Rudolf Diesel patented his famous Diesel Engine in 1893 AD but the first near useful model came much later. Carl Benz and Gottlieb Daimler worked very hard separately from 1880 onwards. The two combined in 1926 to give synergy to the development and helped by the banker

Emil Jellinek came up with Mercedes-Benz from the Daimler Benz group. Name Mercedes came from the daughter of Emil Jellinek.

Technology generated at Industrial Establishments is more complete for the market because industries possess infrastructure for producing parts, making assemblies and trying the proto types, pilot scale trials, and finally the commercialization in a widenway. Technologies from Industrial Houses are mostly ready to use which may not be the case with the Institutions or Laboratories.

Institutions or Laboratories have a very wide vision of scientific facts to be made useful for the society. Michael Faraday after discovering electromagnetic phenomena wanted to carry his work further for its social application. His proposal for grants to accomplish his research came from scrutiny before a board of experts appointed by the Queen of England. Faraday could not stand to the onslaught of various kinds of questions put to him. Ultimately in his dispair he remarked that 100 years from now it will be the biggest money spinner for England to which the board replied that we do not work on speculations. Such problems do not exist in Industry where grants flow if the development is useful for the business. In fact in Industry the management always remains eager to search for areas of developments to keep them in business in the face of stiff competition.

Talking of the dissemination part there are two basic ideas which synergise technology transfer. One is a reference from the great epic of Mahabharat which read as follows :

पठक : पहिकार मूर्खा येश्चाण्ये ग्र्थं चिन्तका ।

सर्वे व्यसनिनो मूर्खा यो क्रियावान स पण्डितः ॥

All those who teach, preach study and think are edicted "fools" (first adjective), but those who transfer their teaching, study and thinking into useful and meaningful activity are "Pundits" (second adjective). All the ideas and techniques until they are disseminated usefully, keep the inventor in the domain of first adjective under inverted commas. Only after transfer dissemination they can change a foot to a Pundit. This is a big driving

force (synergy) for any kind of technology transfer. The second basic idea deals with the synergy required to apply the development. A fable goes in our mythology that on one day there was acute pain in one of the two thousand eyes of "Shesh Nag" the giant godly snake having thousand hoods on which the earth is said to rest. The pain made him restless which resulted in random shaking of earth (resembling severe quake). God Vishnu who rests in Ksheer Sagar on the bed of Shesh Nag got concerned with the pain in the eye of Shesh and remembered Ashwini Kumars (Eye Physicians of Gods). They came and for immediate relief they applied "Tridhat" into the paining eye of the Shesh Nag. Surprisingly and unfortunately the pain got increased unbearably. God Vishnu immediately remembered Narad the "information god" of Gods. Narad advised Ashwini Kumars to go down to earth where he told them the address of a Vaidya who may be able to give some solution to the problem. Ashwini Kumars went to the Vaidya in the guise of Brahmin and told to him that a patient is having severe pain in his eye and even the application of Tridhat did not give any relief. The Vaidya very politely asked them that Sir ! Tridhat is patent of Ashwini Kumars and they only know about it. So tell me that you two are respectful Ashwini Kumars. The God Physicians had to reply in affirmative. The Vaidya continued that if with the application of Tridhat there was no relief then the only possible patient can be Shesh Nag whose one of two thousand eyes is in pain. To this also Ashwini Kumars had to reply in agreement with the Vaidya. Having diagnosed the identity of the visitors and the patient. Vaidya remarked that Sir ! your medicine is perfectly alright. You apply it in the eye under pain only after closing all other eyes, i.e., ask him to close all the 2000 eyes and then gently open the paining eye and slowly smear the medicine i.e., Tridhat. Ashwini Kumars went back immediately and did what was suggested by the down to earth Vaidya. Shesh Nag got immediate relief to the comfort of all. The moral of the story is that to invent and merely taking patent precisely keeps you in the category of the first adjective mentioned in the shloke of Mahabharat. The Second adjective is applicable only when one finds the useful application of the technique to the comfort of all.