

Technology Transfer

Vishal P. Pawar¹, Wasmate D. N², Nandkishor B. Bavage³, Shaymlila B. Bavage⁴

¹*B. Pharmacy Final Year Student, Latur College Of Pharmacy, Hasegaon, Tq. Ausa, Dist. Latur-413512, Maharashtra, India*

²*Department of Pharmaceutical Analysis, Latur College Of Pharmacy, Hasegaon, Tq. Ausa, Dist. Latur-413512, Maharashtra, India*

³*Department of Pharmaceutical Chemistry, Latur College Of Pharmacy, Hasegaon, Tq. Ausa, Dist. Latur-413512, Maharashtra, India*

⁴*Department of Pharmacology & Toxicology, Latur College Of Pharmacy, Hasegaon, Tq. Ausa, Dist. Latur-413512, Maharashtra, India*

Abstract - The generation transfer is each quintessential and important to drug discovery and improvement process for brand spanking new medicinal merchandise this system gives necessary records for era switch from r&d to pdl/t.ms&t department and development of present product to the manufacturing for commercialization. The item tries to speak about about the technology transfer system, steps worried in technology transfer, motives for using generation transfer, significance of technology switch and the issues worried within the generation switch in the pharmaceutical enterprise.

In today's enterprise putting, interest in the promatchable exploitation of a firm's technological assets, through technology transfer, has intensified. Factors that have facilitated international technology transfer include globalization of commercial enterprise, liberalisation of the economic regimes of many countries, and the impetus given to the protection of intellectual property after the formation of the world trade organization (wto). Those factors have collectively resulted in commercial transfer of technology becoming an important element of the international enterprise placing.

INTRODUCTION

What's technology transfer???

- transfer of generation is described as a “logical method that controls the switch of any Procedure collectively with its documentation and expert understanding among traits Or between manufacture sites.”
- technology transfer is each critical and essential to the drug discovery and improvement Technique for brand new medical products.

- era switch is useful to broaden dosage bureaucracy in various methods as it offers Performance in procedure, continues high-quality of product, enables to acquire standardized system Which allows cost effective production. It is the method by using which by way of an authentic Innovator of generation makes it technology available to business associate on the way to Make the most the generation.
- in pharmaceutical industry, “generation transfer “refers back to the procedures of a success Progress from drug discovery to product development, medical trials and in the long run complete Scale commercialization.
- technology transfer is critical for such researcher to materialize on a bigger scale for Commercialization specially within the case of developing product. Technology transfer Consists of no longer best patentable components of production but also includes the commercial enterprise techniques Inclusive of knowledge and abilities.

Generation transfer is the expression of couple of phrases ‘the generation’ and ‘the switch’. First of all The time period "generation" itself is tough to interpret, look at or examine, it is genuinely define as the accumulation Of strategies, abilities, strategies and procedures applied as a part of the advent of merchandise or Administrations or in the achievement of targets, for instance, logical exam, scientific studies. Technology (innovation) may be the facts of strategies, techniques, and so forth. And the “transfer”

Method to carry or to move some thing from one area to some other.

GUIDELINES /IMPORTANCE OF GENERATION SWITCH

1. to explain necessary facts to switch technology From r&d to real production by means of finding out diverse Records obtained all through r&d.
2. demonstration of vital facts to generation demonstration of vital facts to generation Manufacturing.
3. to explain important facts to switch era of present products among numerous production Places.
4. to exemplify specific tactics and factors of problem.
5. For smooth technology switch. For the easy.
6. Manufacturing of commercialized products.

Software of technology transfer in pharmaceutical enterprise

7. Formula manufacturing manner transfer
8. Analytical technique switch

- 1)Packaging technique transfer
- 2)API production technique transfer.

REASON FOR GENERATION TRANSFER

1. Forming alliances with partners with advertising and distribution functionality.
2. Exploitation in a one of a kind field of application: - Every associate may also have simplest half of the answer i.e. the developer of the technology might be able to exploiting the technology itself inside the discipline of diagnostic applications and might supply exploitation proper to Industrial companion for the exploitation of therapeutics application.
3. Due to lack of production capacity: - Developer of technology can only have production equipment worth a little work, and should work with another organization to make a larger scale production.

STEPS IN TECHNOLOGY TRANSFER PROCESS

The transfer of technology is not a one-way process. The development of new construction goes through

many stages. During construction development, it is important that understand the operating process use sensitive and unimaginable limits of individual performance, production environment, equipment and availability of goods, viz should be considered in the first paragraphs of construction improvement, so that the effective scale can done. Proper care during technology transfer is essential to improve the quality of the drug as it was developed by R&D in the end formulation and quality assurance of pre-determined time. The processes are divided into three categories:

1. Research phase,
2. Development Phase
3. Production Phase.
4. Research phase (R&D technology development)

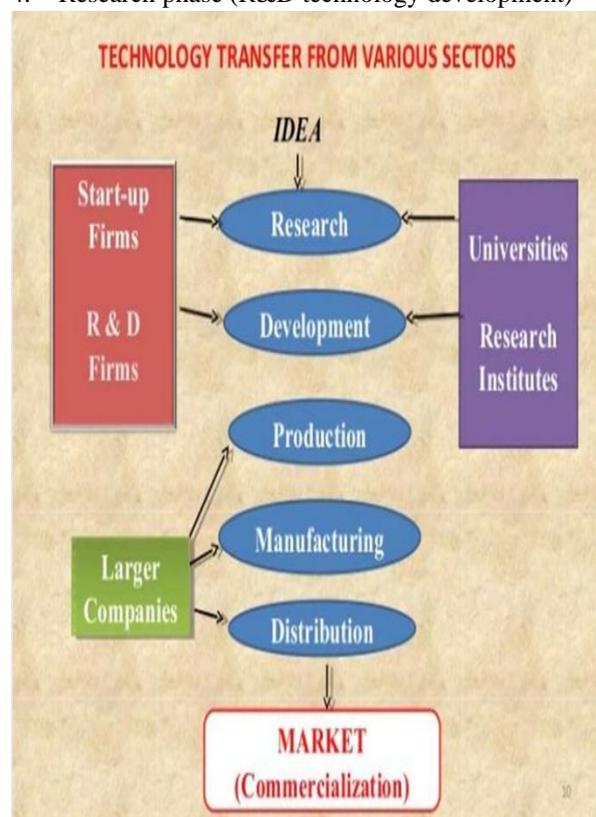


Fig: TECHNOLOGY TRANSFER FROM VARIOUS SECTORS

Factors Contributing to Technology Transfer:

Good business and production practices.

1. Opportunity pricing opportunity.
2. Strategic planning.
3. Strong economy and environment.
4. Clear and effective regulation.
5. Opportunities for emergency services.

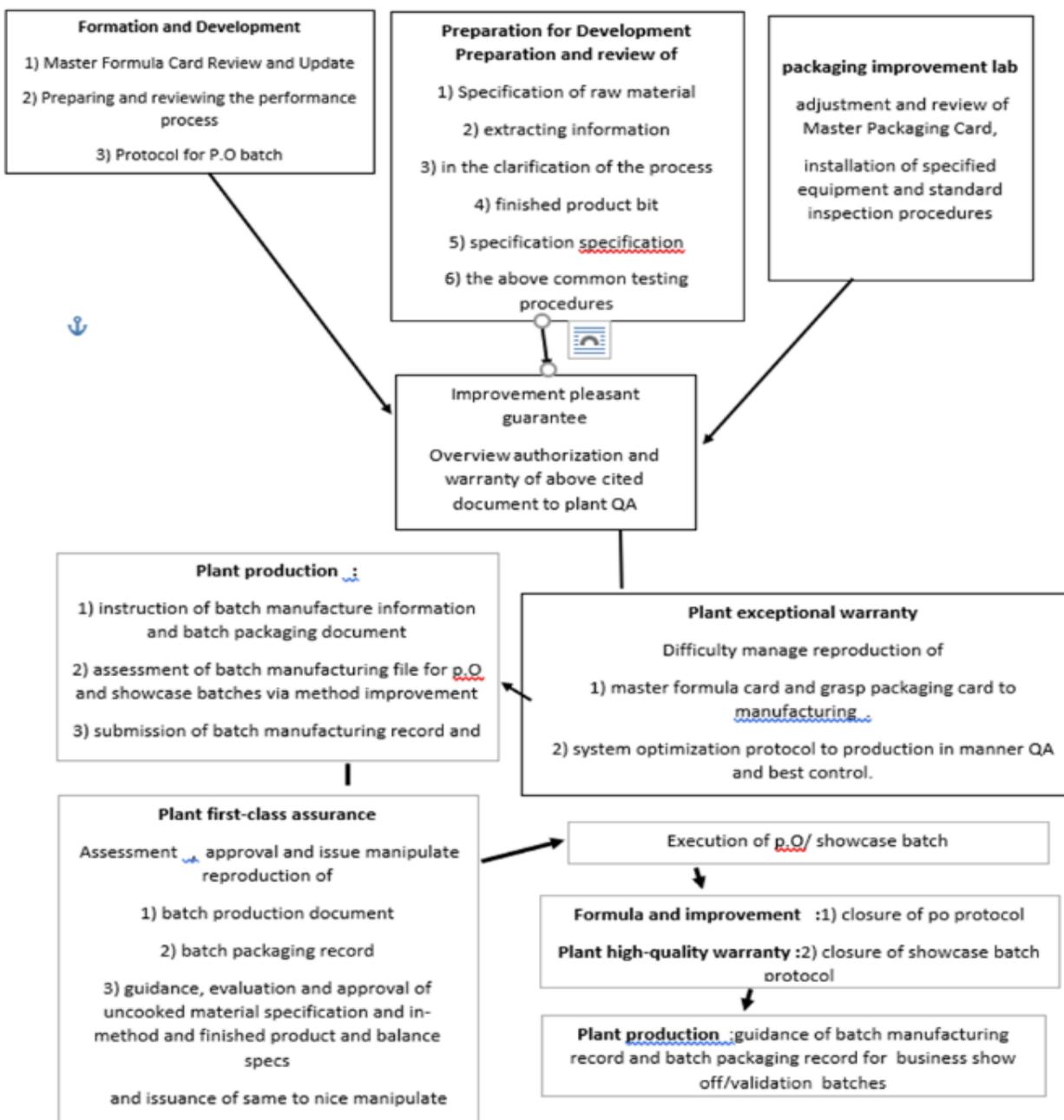


Fig : Flowchart For Technology Transfer For Process Optimization And Exhibit Batches

CONCLUSION

- 1) the transfer entails price and expenditure this is Negotiated and agreed upon via the transferee and Transferor. The transfer may be stated to be successful If the transferee can effectively utilise the Generation for business gains and in the end Assimilate it.
- 2) commercialization can be performed Through higher conversation and documentation by

- using Generation transfer team. A cooperative attempt by Team outcomes in greater a success preliminary and consistency Runs leading to an earlier license, earlier release and a Extra market proportion.
- 3) use of enriched processes like generation transfer To the development and begin- up of new production Systems will permit pharmaceutical businesses to Fully benefit from the latest improvements within The brand new drug discovery

and to complete extra successfully in a Hastily Changing market

4) A dedicated generation switch Company is installation to facilitate and execute the method. Era Switch may be taken into consideration A success if a Receiving unit can automatically reproduce the transferred product, Technique Or technique in opposition to A predefined set of Specs Is agreed with a sending unit and/or a development unit.

5) Licensing is an vital Spectacle of technology switch that has received Enterprise By means of which pharmaceutical corporations Can Make a contribution To analyze And improvement. Generation Switch Is a complicated problem and must be deal with the usage of holistic technique

[13] Singh A and Aggarwal G. Technology Transfer in Pharmaceutical Industry: A Discussion. IJPBS, 2009; 1-3.

[14] Mahboudi Mand Ananthan BR. Effective factors in technology transfer in the Pharmaceutical Industries of Iran: A Case study. The IUP Journal of Knowledge Management, 2010; 1-2.

[15] Biswajit D and Rao N. Transfer of Technology for Successful Integration into the Global Economy: A Case Study of the Pharmaceutical Industry in India. UNCTAD, 2002.

REFERENCE

- [1] Domb E. Using TRIZ to Accelerate Technology Transfer in the Pharmaceutical Industry; PGTJ, 2004; 3-5.
- [2] <http://www.research.cornell.edu/cotab>
- [3] Reamer A. Icerman L and Youtie J. Technology Transfer and Commercialization: Their Role in Economic Development, EDA Public documents, 2003
- [4] Patel DS. An overview for pharmaceutical industry. IBAP, 2010; 1-10.
- [5] <http://aspx?ContentID=193>
- [6] www.gsk.com/policies
- [7] http://www.4sme.net/images/pdf%20floder/ttps_
http://www.chapter_3.pdf
- [8] ISPE Good practice guide. Technology transfer. Tampa, F.L. International Society for Pharmaceutical Engineering, 2003.
- [9] Janodia MS, Sreedhar D, Ligade VS, Pise A and Udupa N. Facts of Technology transfer: A perspective of Pharmaceutical industry, J. Intellectual property rights, 2008; 28-34.
- [10] Ruegger CE, Royce AE and Mollan MJ, Wagner RF, Valazza SJ and Mecadon MR. Scale up of Solid Dosage Forms, 2006.
- [11] Mendes PC. Licensing and Technology Transfer in the pharmaceuticals Industry Cited, 2010.
- [12] Reamer A. Icerman L and Youtie J. Technology Transfer and Commercialization: Their Role in Economic Development, 2003.