10

Technology transfer

Agreements

technology transfer

- technology transfer is the process by which a technology, expertise, know-how or facilities developed by one individual, enterprise or organization is transferred to another individual, enterprise or organization.
- Effective technology transfer results in the commercialization of a new product or service or in the improvement of an existing product or process.

دلايل نياز به جذب تكنولوژي

- where the market evolves incessantly, with new products, new functions and new designs appearing on a regular basis, companies are forced to innovate by *acquiring or developing new technologies*.
- Technological innovation is therefore a crucial element of the competitive strategy of any enterprise, big or small, hightech or low-tech.

شركتهاي كوچک و متوسط

- Small and medium-sized enterprises (SMEs) have to decide whether to develop technology in-house or to obtain it from others.
- Investing in technology creation may be expensive and risky as there are many uncertainties linked to the innovation process. But it has the advantage of preventing technological dependence on other companies and enables a company to enhance its technological capability and to innovate according to its own specific needs.

مسير موازي تحول

- Many firms, including SMEs (especially high-tech SMEs) will rely on both routes,
  - in-house innovation
  - as well as on technology purchased from others, buying the required machinery from large firms
- to make technical improvements to the company's products, processes and/or services.

Negotiating agreements

- The sale and purchase of exclusive rights to a patented technology, or of permission to use a given technology or know-how, takes place through legal relationships between
  - the owner of the exclusive rights or the supplier of the know-how, called the "transferor",
  - and the person or legal entity which acquires those rights or that permission or receives that know-how, called the "transferee."

nature of the relationship

- The nature of the relationship between the two parties and the type of agreement that will result from a technology transfer negotiation will depend on a number of factors, including some of the following:
  - The complexity and the level of development of the technology that is to be acquired;
  - The actual needs of the recipient;
  - The technological capacity of the transferee and the latter's ability to use and/or adapt the technology being purchased;
  - The relevance, availability and cost effectiveness of alternative technologies;
  - The price to be paid (in cash or kind) by the recipient;
  - Other proposed terms and conditions for transfer, such as support offered during and after transfer in absorbing and adapting the new technology, or rights over improvements or adaptations made by the recipient;
  - The negotiating power of both parties (which, in turn, will depend on variables such as size, technological sector, demand for the technology, number of competitors, etc.);
  - The type of relationship envisaged between the two parties (e.g. long term,short term or one-off purchase of products/services);
  - Issues concerning product liability, indemnity, warranty, etc; and
  - Whether technical support and training for use of new technology and related equipment are required.

Players of the game

- Technology transfer agreements may involve different players, including
  - large multinationals,
  - small enterprises,
  - public sector bodies or any other entity or individual seeking
- to acquire or sell new technology or technological information. What is crucial is that both parties perceive the agreement as beneficial to their company and/or institution.

What is crucial is that both parties perceive the agreement as beneficial to their company and/or institution

- Neither must feel that the other party has obtained a better deal and/or that the agreement is unfair. The secret to the success of technology transfer agreements is that each party perceives the other as a partner in a fruitful collaborative process.
- In many circumstances, strategic alliances between companies may include a technology transfer agreement, and are generally useful for allowing a business to meet its objectives, while maintaining the flexibility to adapt quickly to technological developments, as appropriate.

Main types of agreement

- The legal relationship between transferor and transferee is essentially contractual in nature, which means that the transferor of the technology consents to transfer and the transferee consents to acquire the rights, the permission or the know-how in question.
- There are various methods and legal arrangements through which technology may be transferred or acquired.

قراردادهای انتقال تکنولوژی

- **Sale or assignment of IP rights**
- **License or licence contract**
- **Know-how contract**
- **Franchise**
- **Acquisition of capital goods**
- **Consultancy arrangements**
- **Joint venture agreements**
- **The turnkey project**

Sale or assignment of IP rights

- the sale by the owner of all his exclusive rights to, say, a patented invention, and the purchase of those rights by another person or legal entity.
- When its owner transfers all the exclusive rights to a patented invention to another person or legal entity, without any restriction in time or any other condition, it is said that an "assignment" of such rights has taken place.

License or licence contract

- A licence is, the permission by the owner of a patented invention to another person or legal entity to perform, in the country and for the duration of the patent rights, one or more of the "acts" which are covered by the exclusive rights to the patented invention in that country.
- When that permission is given, a "licence" has been granted.

License & conditions

- The license is usually granted subject to certain conditions, which will be set out in the written document under which the license is granted to the licensee.
- for example, the manufacture of a pharmaceutical product for use by humans but not for use on animals.
- another condition might be that the licensee is allowed to use the invention only in specified factories or sell the product embodying the invention only in specified geographical areas.

Know-how contract

- It is possible to include provisions concerning know-how in a document that is separate from a licence contract. It is also possible to include such provisions in a licence contract.
- The know-how may be communicated in a tangible form. Documents, photographs, blueprints, computer cards and microfilm, among others, are illustrations of tangible forms.

Examples of know how

- Examples
  - Architectural plans of factory buildings,
  - diagrams of the layout of the equipment in a factory,
  - drawings or blueprints of machines,
  - lists of spare parts, manuals or instructions
  - for the operation of machines or
  - the assembly of components, lists and
  - specifications of new materials, labour and machine time calculations,
  - Process Flow charts, packaging and storing instructions,
  - reports on stability and environmental aspects,
  - and job descriptions for technical and professional personnel.
  - Such know-how in tangible Form is sometimes referred to as "technical information or data."

Franchise

- A franchise or distributorship is a business arrangement whereby the reputation, technical information and expertise of one party are combined with the investment of another party for the purpose of selling goods or rendering services directly to the consumer.
- The outlet for the marketing of such goods and services is usually based on a trademark or service mark or a trade name and a special décor (the "look") or design of the premises.

Acquisition of capital goods

- The commercial transfer and acquisition of technology can take place with the sale purchase of equipment and other capital goods. Examples of capital equipment are machinery and tools needed for the manufacture of products or the application of a process.
- Sales and purchases of capital goods and their import into the country can be considered, in a sense, technology transfer transactions.

Consultancy arrangements

- The help of an individual consultant or a firm of consultants that will give advice and render other services concerning the planning for, and the actual acquisition of, a given technology can be useful, if not indispensable, for such enterprises, entities and governments that wish to acquire technology from enterprises in other countries.

Joint venture agreements

- . A joint venture is a form of alliance between two separate companies.
- There are two fundamental forms of joint venture,
  - the equity joint venture
    - The equity joint venture is an arrangement whereby a separate legal entity is created in accordance with the agreement of two or more parties.
  - and the contractual venture.
    - The contractual joint venture might be used where the establishment of a separate legal entity is not needed or where it is not possible to create such an entity.

The turnkey project

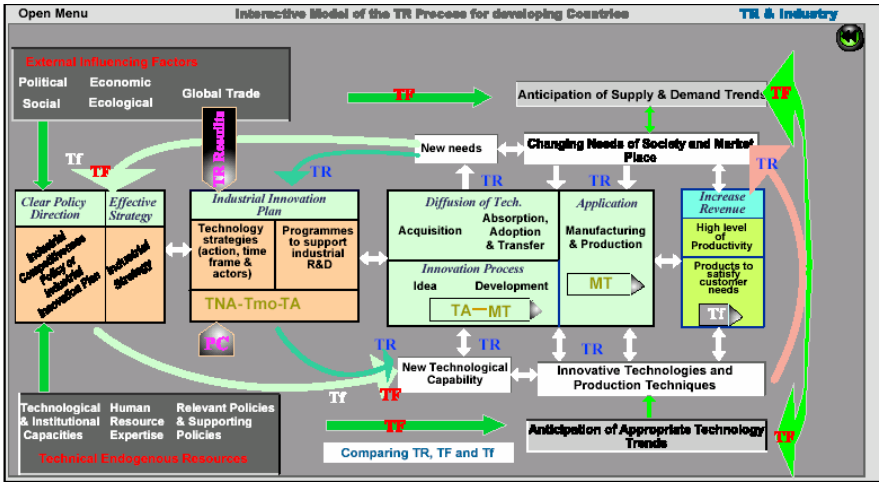
- In certain instances, two or more of the business arrangements, and hence the legal methods that they reflect, can be combined in such a way as to entrust the planning, construction and operation of a factory to a single technology supplier, or to a very limited number of technology suppliers.
- Thus, the "turnkey project" may involve a comprehensive arrangement of certain of the legal methods, whereby one party undertakes to hand over to his client - the technology recipient - an entire industrial plant that is capable of operating in accordance with agreed performance standards

Technology transfer

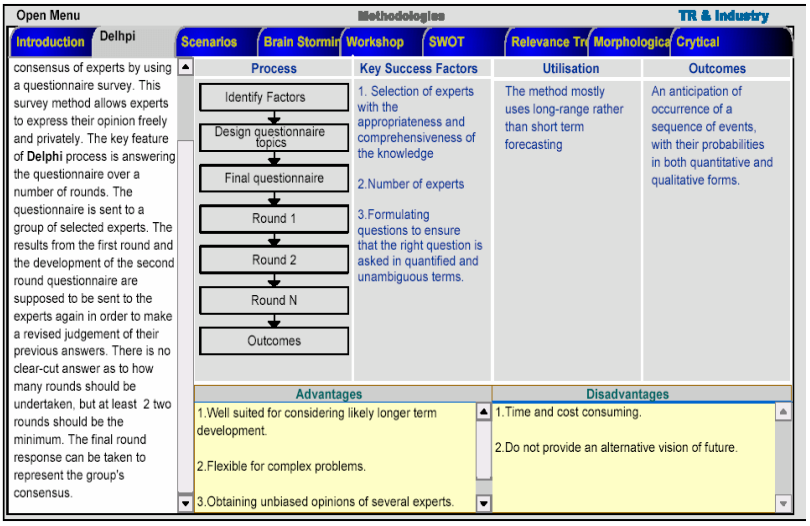
United nation recommended

Procedure for developing countries

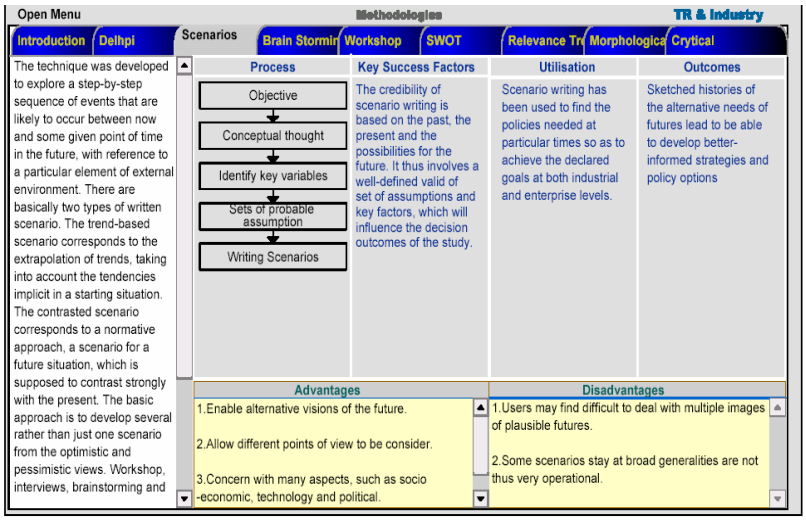
General model



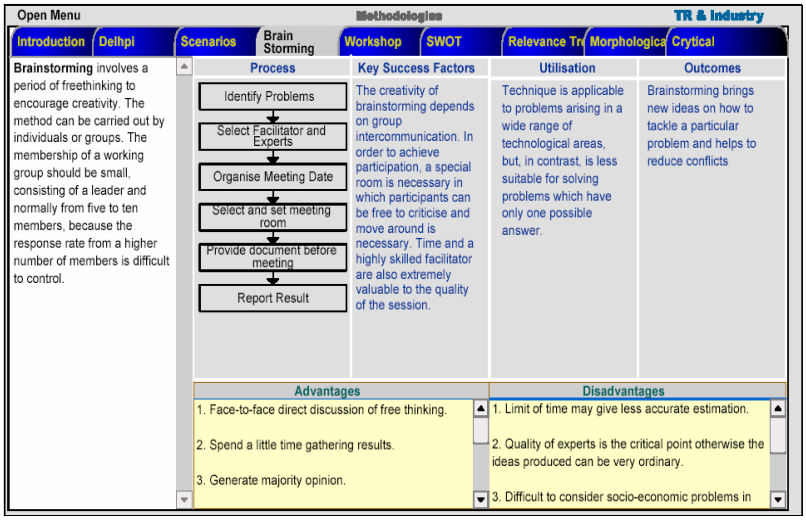
Delphi method



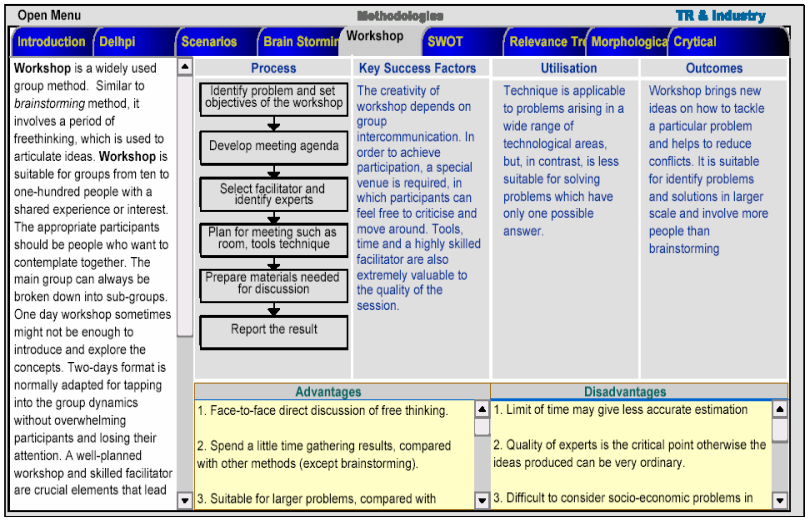
تهیه سناریو



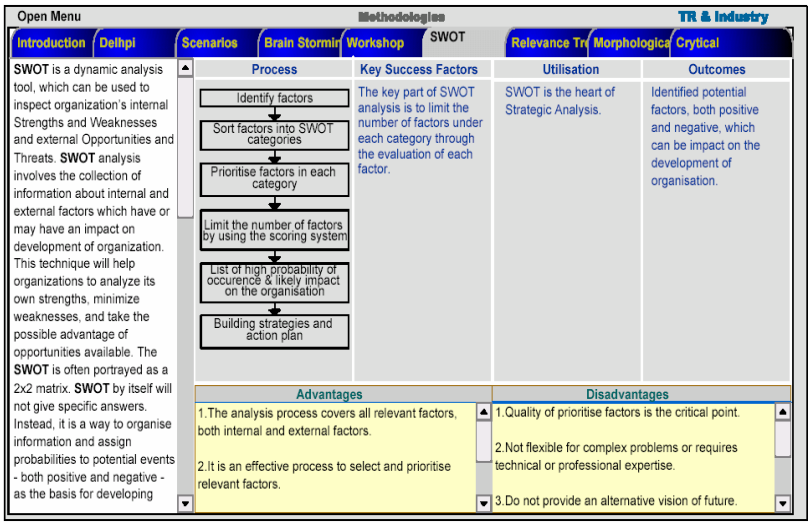
توفان ذهني



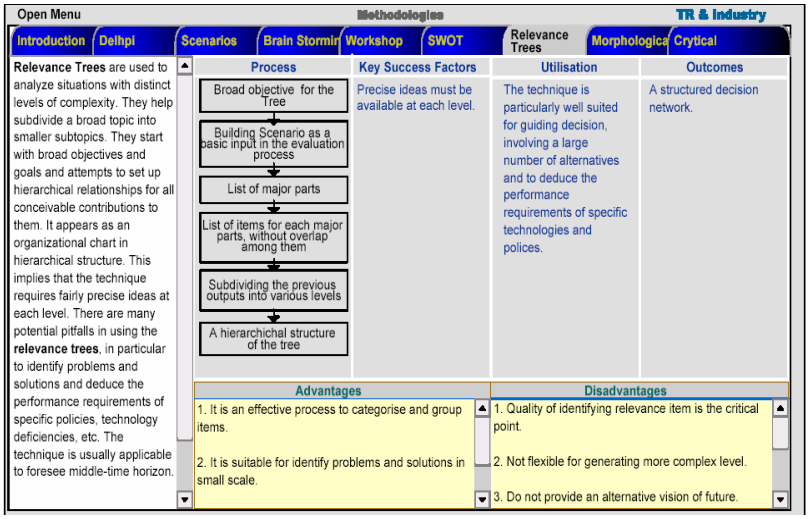
کارگاه



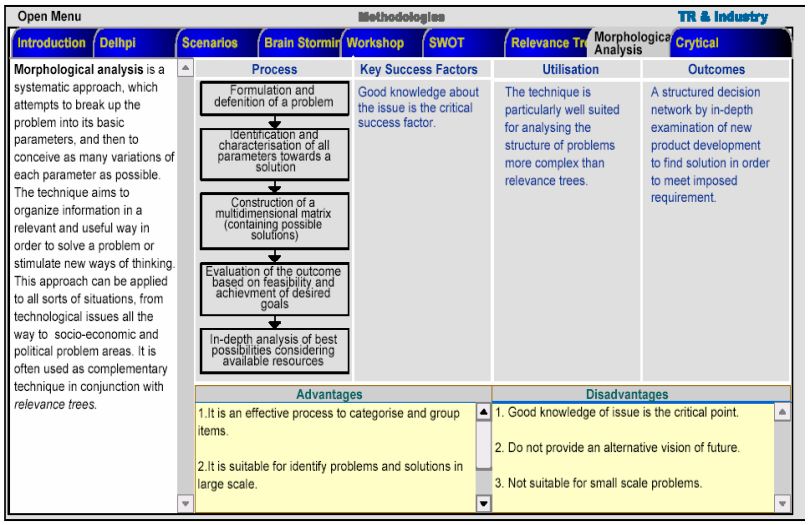
نقاط قوت و ضعف



درخت تصميم گيري



تحليل چند وجهي



تکنولوژیهاي کلیدي