VARIETIES OF INTERNATIONAL TECHNOLOGY TRANSFER

HOMER O. BLAIR

I. INTERNATIONAL TECHNOLOGY TRANSFER VARIETIES
   - A. Export
   - B. Import
   - C. Subsidiary
   - D. Joint Venture
   - E. Licensing
   - F. Acquisition

II. Export
   - A. Advantages
     1. Control
     2. Use your own specification and quality
     3. Labor is known factor
     4. Don't worry about foreign regulations, etc., in manufacturing
   - B. Disadvantages
     1. Possible high labor costs
     2. Trade restrictions against imports
     3. Bringing money back to United States
     4. Local Nationalism
     5. Local Regulations

III. Import
   - A. Advantages
     1. No manufacturing capital investments
     2. No manufacturing risks

3. No manufacturing problems

4. Often can get product made to your specifications

B. Disadvantages

1. Smaller profits

2. Often no control of design

3. Often no control of quality

4. Doesn't permit use of plant and employees

IV. Subsidiary

A. Marketing through your subsidiary

1. Advantages

Control of marketing

2. Disadvantages

Similar to export plus local government problems

B. Foreign manufacturing subsidiary - Wholly-owned

1. Advantages

a. Control

b. Profit in proportion to interest

2. Disadvantages

a. Capital investment

b. Management time

c. Adjusting to foreign laws and customs

d. May be nationalized

e. Foreign market may be too limited

f. Foreign government will not permit

C. Foreign manufacturing subsidiary partially owned (one type of joint venture)

1. Advantages

a. Smaller investment required

b. Get cooperation of foreign partner

C. PROFIT RETURNED IN PROPORTION TO INTEREST

D. IF LOCAL PUBLIC RATHER THAN PARTNER OWNS LOCAL INTEREST YOU MAY STILL RETAIN CONTROL

2. DISADVANTAGES

A. LACK OF CONTROL IF LOCAL PARTNER OWNS MAJORITY

B. COOPERATION PROBLEMS WITH LOCAL PARTNER

C. SMALLER PART OF PROFIT

D. LOCAL REGULATIONS

E. MAY NOT WORK FOR LONG TERM BECAUSE OF MANAGEMENT CHANGES OF PARTNERS

F. DISTANCE PROBLEMS

JOINT VENTURES

V. JOINT VENTURES GENERAL

A. SOME FORM OF COOPERATION RANGING FROM

1. LETTING SOMEONE USE ONE OF YOUR PROPRIETARY ASSETS

2. JOINT OWNERSHIP OF SOME ENTITY

B. ESTABLISHING JOINT VENTURE

1. EACH PARTY MUST CONTRIBUTE SOME ASSET OR CAPABILITY

2. ASSET MAY BE

A. MONEY

B. MANUFACTURING CAPABILITY

C. MARKETING CAPABILITY

D. PROPRIETARY ASSET

1. PATENTS

2. TRADEMARKS

3. KNOW-HOW

4. COMBINATION OF ABOVE

VI. Use of Proprietary Assets in Establishing Joint Ventures

A. Proprietary assets may serve as part or all of one partner's initial contribution in establishing the joint venture

1. May be assigned or licensed to joint venture

a. Difficulty in recovering proprietary assets upon dissolution of joint venture if assigned or exclusively licensed

b. Joint venture may bear costs in obtaining, maintaining and enforcing proprietary rights

B. Proprietary assets may form basis for continuing royalty from joint venture either under license, or as part of payment for assignment

C. If license to joint venture is renewable, can be used as an element of control of joint venture

D. If is the usual demands on a company's investment funds, use of proprietary assets in return for equity in establishing joint venture and their use for continuing royalty return provides

1. Higher rate of return on invested funds

2. May permit formation of joint venture where establishment of wholly-owned enterprise is not possible because of lack of funds

E. Proprietary assets may be attractive to other partners who may have manufacturing and/or marketing capability and who has a need for the new products included in the proprietary assets

F. Licensing of certain proprietary assets, with retention of others for later inclusion in license if joint venture does well with initial assets, provides incentive for good performance on initial assets

G. Territorial limitations in license to joint venture may be used to control activities of joint venture (But consider anti-trust problems)

VII. Trademarks in Joint Ventures

A. Trademarks must include goodwill if assigned

B. If trademarks are licensed, must be provision for and actual control of quality to avoid losing trademarks

C. Trademarks last indefinitely, if properly handled, and thus can provide basis for continuation of all or part of royalty after expiration of patents, or after know-how loses its value

VIII. Know-How in Joint Ventures

A. Usually limited life

B. Disclosure may destroy value

C. Confidentiality is important

D. Problems in sending know-how overseas

1. Department of Commerce export regulations
2. State Department Munitions list
3. Know-how contained in patent application needs Patent Office license unless six months have passed since patent application was filed

IX. Patents in Joint Ventures

A. Taxes or maintenance fees

B. Working requirements

C. Patents of confirmation (Latin America) and importation (Belgium, Spain) can be used, at late date, to increase and extend value of patent asset

X. Joint Venture Form is Particularly Useful in Three Situations:

A. It enables the company with limited financial or personnel resources to expand its overseas operations at a satisfactory rate.

B. It enables a company to enter those markets that are not open to wholly foreign-owned ventures.

C. It may enable a firm to take advantage of the strong market position, technology, or management skill or a local partner.

LICENSING

XI. Licensor's Viewpoint

A. License solution should maximize profits

B. Advantages

1. Provides entry into other markets without large capital outlay

2. a. Substantial initial payment

   b. Continuing royalty income

3. Use of proprietary assets to obtain equity in licensee

4. Makes technology available to others and reap a return where competitors might develop their own technology and avoid or break your patents if license was not available

5. Penetrates domestic or foreign markets which are not readily available for reasons such as:
   a. Transportation costs
   b. Duties
   c. Government regulations
   d. Customer preferences for local or long-term supplier

6. PROVIDES RAPID ENTRY INTO MARKETS
7. MAY BE ONLY AVAILABLE AVENUE IF DIRECT EXPORTS ARE NOT FEASIBLE AND SUBSIDIARY OR JOINT VENTURE OPERATION IS NOT FEASIBLE
8. AVOIDS NECESSITY FOR ESTABLISHING PERMANENT STAFF OF ADMINISTRATIVE AND/OR TECHNICAL PERSONNEL IN A LOCATION WHICH IS NOT FEASIBLE
9. AVOIDS NECESSITY FOR ESTABLISHING YOUR OWN MARKETING CAPABILITY IN LOCATION INVOLVED
10. PROVIDE ACCESS TO TECHNOLOGY OF LICENSE ON A CROSS-LICENSE OR LICENSE GRANTBACK BASIS
11. TO TEST A PRODUCT OR PROCESS IN ANOTHER LOCATION WHERE IT CANNOT BE DONE IN YOUR LOCATION (FOR EXAMPLE, PLASTIC PIPE IN CANADA)
12. TO HELP SELL RAW MATERIALS OR ASSOCIATED PRODUCTS, SERVICES OR EQUIPMENT
13. LICENSE MAY BE TECHNIQUE OF EVALUATING LICENSEE FOR ADDITIONAL LICENSES, OR POSSIBLE PARTIAL OR TOTAL ACQUISITION
14. PROVIDE BENEFITS FROM TECHNOLOGY THAT WILL NOT BE USED BY LICENSOR OR WHICH WILL NO LONGER BE USED BY LICENSOR
15. PROVIDES A WAY TO SATISFY MARKET WITHOUT CREATION OR EXPANSION OF LICENSOR FACILITIES
16. TRADEMARK LICENSE - TRADEMARK DEVELOPED BY LICENSEE
17. GAIN ADVANTAGES OF LOCAL MANUFACTURE WITHOUT COMMITTING CAPITAL ABROAD
18. AUGMENT LIMITED DOMESTIC CAPACITY AND MANAGEMENT RESOURCES
19. PROVIDE SERVICES AND SUPPLIES FOR LOCAL CUSTOMERS
20. METHOD OF ACCOMMODATING MILITARY NEEDS OF FOREIGN GOVERNMENTS

C. Disadvantages

1. Usually can make more money by making and selling yourself
2. In doing it himself licensor can utilize or expand his own facilities, personnel, etc.
3. Royalties for a limited period may be inadequate return for licensor
4. License may not build up market for additional or future products
5. Insufficient opportunity for growth and investment
6. Licensor will not be able to control licensee operation and because of this, licensee may not make adequate use of licensor's experience and thus may not be successful
7. Licensing may create a competitor
8. Providing adequate assistance to licensee may be too burdensome, especially if licensee is inexperienced, distant, etc.
9. Trademark license - difficult to control quality
10. Licensee may do bad job and damage licensors reputation, especially if trademark involved

XII. Licensee's Viewpoint

A. Advantages

1. May permit rapid entry into market using completely developed tested technology of others
2. May be cheaper than developing own technology
3. May eliminate need for extensive research
4. May provide relationship providing access to additional technology
5. May acquire technical services and backup technology as well as problem solving
6. Management assistance

7. Marketing assistance
8. License may be start of closer relationship, such as partial or total acquisition
9. License gives licensee opportunity to evaluate technology which it may want to purchase itself and license others
10. Potential prestige factor

B. Disadvantages

1. Down payment may not be recoverable because technology is not adequate or is not suitable for licensee's market
2. By accepting license from one licensor may remove access to other licensors - licensee may choose wrong technology or wrong licensor
3. Licensor may not be able or willing to render adequate assistance
4. Licensee may be harmed by unlicensed competition if licensor's patent protection is weak
5. License may be too expensive and thus profit on licensee's operation under license may be inadequate
6. Licensed technology may not be suitable for licensee's market (Obsolete, too high or too low quality, too expensive, etc.)

XIII. Acquisition

A. Advantages

1. Fast acquisition of plants, markets, technology, people, etc.
2. May be able to use stock, rather than money

B. Disadvantages

1. Cost
2. Often acquire problems
3. May not have adequate in-house management