

emerontl 7

Technology Transfer (T.T)

I-eKa l bNgénemerontl

kgemerontl6eyg)ansksaGBKnHsxan²kgkarRKbRKgbeckvTüa kgemerontlBabenHeygng
e lkykkareprbeckvTüamkBPakSa.

-e tGCakareprbeckvTüa?

-bENgEckkgkareprbeckvTüa

-e tmanmeFüa)aybnankgkareprbeckvTüa?

-e t l hrénkareprbeckvTüaRbRbteTamanbnan?

-bTBesaFnénkareprbeckvTüarbsRbeTSca Tiger of Asia

II-esckepm

dc)aneroabrkkgemerontl1 beckvTüaCakarbelgnvKnt ceNHdg ngFnFanepSg²eTACa
p l t p l ngesvakm. dcentHmansnrsrfaetbeckvTüaekiteLgenAkgGgPaBmyedayyrebobNa?
smcgcafabeckvTüaGacekitmaneLgBmeFüa)ayF²BrK Tl1tamry³kareprbeckvTüa (Technology
Transfer) ngkarRsavRCavngGPvDf. kgemerontlHeygngskSaeTae lGCakareprbeckvTüa.

II-nymny

kareprbeckvTüaCa teNlrkarEd l eFeGaybeckvTüaman l hrBRbPBeTAGkTT l (Technology

Transfer (TT) is a process that permits the flow of technology from a source to a receiver.) .

Ed l RbPBCama senceNHdg ngGkTT l CaGkEd l TT l RbeyacnBceNHdg. RbPBngGkTT l

GacCabK l Rkmhn bRbeTsmY.

II-bENgEckkgkareprbeckvTüa TT Classifications

BakükareprbeckvTüa)anEbgEckCaeRcneTAtamTh ngcgayénGkeprngGkTT l .

xagerkamCakarEbgEckmycnn³

-International TT

beckvTüaRtv)aneprBRbeTsmyeTARbeTsmyeTot.]TahrNBRbeTSEd lman
]sahkmTenbeTARbeTSEd lman]sahkmexSaybmFümdcCaBRbeTSGaemrc eTARbeTscn.

-Regional TT

beckvTüaRtv)aneprBtbnmyénRbeTsmyeTAtbnmyeTotkgRbeTsdckA.]TahrNB
 hgkgénRbeTscneTA esogéhénRbeTscn.

-Cross-industry or cross-sector TT

beckvTüaRtv)aneprBv symyeTAv symyeTot.]TahrNbeckvTüaEd l eKerBR)askg
 v syey aFaeTABaNCkmdcCabeckvTüaInternet BedmeLgeKerBR)asvakgvsyey aFaeRkaysRga
 mrtCakRtv)anbBabek)anbEgvaeTAerBR)askgvsyBaNCkm ngvsyepSg²eToteTAv j .

-Interfirm TT

beckvTüaRtv)aneprBRkmhnm yeTARkmhnm yeTotEd l CaRkmhnxSKatamry³

Benchmarking, Reverse engineering, Licensing or Franchising....

]TahrNbeckvTüaEd l eKerBR)askgRkmhnp ltkm A eTARkmhnesvkm B Caedlm.

-Intrafirm TT

beckvTüaRtv)aneprBkEngmyénRkmhneTAKEngmyeTotEd l CaRkmhneTmytamry³

Training and Development, Follower Operation.

]TahrNbeckvTüaEd l eKerBR)asenAsakkNa lénRkmhn ARtv)aneprTAsaxadéT
 eToténRkmhnA.

IV-crnén lhrbeckvTüa Channels of Technology Flow

beckvTüaGaceprbhrBkEngmyeTAKEngmyeTottamry³crnCaerChndcCa³

-General channels

kareprbeckvTüabceNHdgRtv)aneFeLgedayKankareRKagTkEd l RbRBteAedayGkeprngG
 kTT l KanTnakTngngKaeT. kareprRtveFeLgCsaFarN³KanRBEdnng r)agceBaH GkTT l enaH
 eT]TahrNkareprkgvsyGbr bNHbNa l CsaFarN³tamTrTSsn vTüa kaEst TSsnabdl
 skasa l aCaedlm.

-Reverse-engineering channels

kareprbeckvTüabceNHdgRtv)anekteLgedayKankarc l rmBGkeprsTsaf GkTT l
 ceNHdgeTCaGkxtxrkrkbEsgy l BbeckvTüamaSbeckvTüaEtÉkEgkgnyRbktRbECgbed j e

CgKa.

mannyfaGkTT lBüa yamEsgy lBbeckvTüaEd lmanenAkgp ltp l rbsGkRbktRbECg
bRkmhndéTeTotedm, begltp ltp l enaHedrEtmanrbragmtepSg.

meFüa)ayenHeRcnektmaneLgenARbeTSEd lmanc, abkmsTbBaaexSa yehyGkTT lman
lTPaBRKbRKankgkareFRtabtamdcCaRkmhn A GacT j p ltp l BRkmhn B enAkgtipSarehy
eFl reverse-engineers e l p ltp l enaH bnabmkp ltp l ngdak lkp ltp l enaHeTARbktRbECg
Camyp ltp l rbsRkmhn BV j.

-Planned channels

kareprbeckvTüaFeLgeda ymankareRKagTk mannyfaGkTT l ngGkeprmanEpknar ng
teNrkareprc, as l as. eKeXj manmeFüa)ayCaerClnRtv)aneRbR)askg Planned channels
dcCa³

Licensing: CakarT j nvSTkgkareRbR)asKntbbeckvTüaBmasKntbbeckvTüakgkrt
my (the receiver purchases the right to utilize someone else's technology.)

Franchise: vaCaTrgm yrbS LicensingEd lGkTT lT j nvSTkgkareRbR)asKntb
beckvTüaBmasKntbbeckvTüaEtxagGkp lmanp l bEnmnvkarKaRTd lGkTT l dcCa
karptpgvtFatedlm KaRte lIkareFTipSar ngbNHbNa l bK l kCaedlm.]TahrN

McDonald's, Burger King, and Pizza Hut. (a form of licensing; the source usually provides some type of continual support to the receiver, e.g. by supplying materials, marketing support, or training, such as McDonald's, Burger King, and Pizza Hut.)

Joint venture: CakarcgsmnrvagRkmhn2 beRchnedlm, bgt»kasGaCvkmmyeTot
Ed lPaKlnmy²GacEckrE lknvceNHdgngFnFanepSg²rmKaedlm, GPvD:beckvTüasrab
p ltp l rbsBkeK.]TahrNRkmhn Sony ng Errison cgsmnngKaedlm, p l t)an
TrsB SonyErrison. (Two or more entities combine their interests in a business

enterprise in which they can share knowledge and resources to develop a technology for their products. International joint ventures are common because the recipients acquire technology while the sources gain access to local markets and distribution channel.)

Turnkey project: CakarTykKeragmyTagRsgrbsRbeTsmyeTAGnvtenARbeTsm y
eTotEtmg e.g. large computer system. (a country buys a complete project from an

outside source and the project is designed, implemented, and delivered ready to operate, e.g. large computer systems)

Foreign direct investment (FDI): CakarvneyaKpa l rbsRkmhnnGnrCa teTARbeTs déTeTot. RkmhnnGnrCa tenaHp l tp l tp l ngvneyaKFnFanrbsBkeKenAeRKARbeTs Ed l xnKtfamanskanB l edaynaykeTAnvceNHdg beckvTüa FnFanmnSS hrBavtCaedm ehly)anmkv j nvTipSarp l tp l .

(a multinational company always produce its products or invest some of its resources overseas. The investor gains access to a labor force, natural resources, technology, or markets, e.g. Philips, Motorola. The recipient country receives technological know-how, employment opportunities for its people, training for workforce, investment capital for infrastructure development and tax advantages.)

Technical consortium and joint R&D project: karbBa l rvagRkmkargarBrberChnBl RbeTsepSgKaedm, Gnv tKeragF² Ed l Rkmkargarnmy²mnGaceFeTA)anedayÉkÉgeday kgHbeckvTüabFnFanepSg²Caedm]TahrN, consortium was formed between France and England to develop a supersonic plane (the Concorde). Ggkar NASA was joint by many countries.

v-bTBesaFnénkareprbeckvTüakgRkmxNNGnrCati

-International Technology Transfer

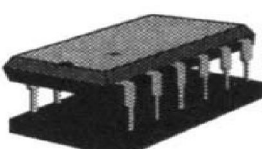
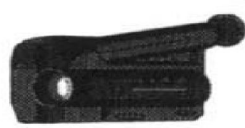
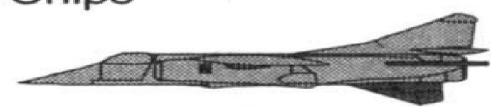
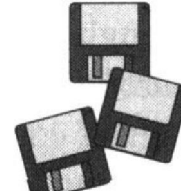
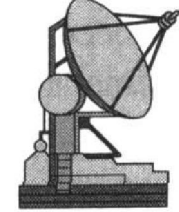
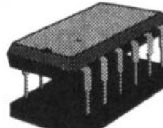
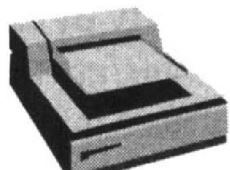
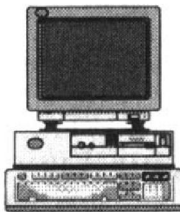
kgbnanTSv tScgeRkayenHe ygsegteXj RbeTsed l man]sahkm l t l asCaeRch(Germany , USA, France, Japan...))aneprbeckvTüarbsxneTARbeTsepSg²Ed l Bsvmankar GPvDEntamry³ FDI, Joint Venture, Licensing, Export Caedm. sBé fmanRbeTs]shkmf²CaeRch)anrk l t l as eLlg (China, Sigapore, Taiwan, Korea...) Camyngm l danbeckvTüaEd l GaceFobeTAngRbeTs]shkmcas²mycnn)an. ehlyRbeTs TagenahKayCaKrRbktRbECgyagxagCamyRbeTsed l GPvDércehy tamry³KNsm, tCa RbeTsed l manéfk l agB l kmTabsbreTAedayvtFatedim ngbeckvTüaf². mannnakarmy eTotektmaneLgerKayRbeTs]shkmf²)anekteLlg dcCa RkmhnnGaemrcmycnn)aneTaeFl vneyaKe lvsyp l tkmenARbeTsdéTed l mank l agB l kmTab ngnaykp l tp l rbsBkeK eTACtngGtfCnEtmg. manRbeTsCaeRch)anCRm j eGaym l dan beckvTüarbsBkxn rgmaEfmeTot ehlybE l gbeckvTüaTagenahETaCa value-added products and services. edayELkRbeTsenATnexSaePk]sahkmmycnn)anbnCRm j eGaymankarepr beck-

vTüakanEtxageLgtamry³begtbryakas l srab _{FDI} ngbBanFnFanmnSseTAerKbykbeckvTüaB
RbeTseCOne l One l BPBe l ak.

manRbeTS CaeRcncabepmeGaytème l sar³sxanénbeckvTüakgkarGPvDñesdkc

karbsGas (The Tigers of Asia)

cn (hgkg) kerxagt,g snhaBr ngétvanTT l)anPaBeCaKCyyagxage l kareprbeckvTüa
ehysBéfkaYCaKrRbECgmyrbsTpSarGnrCate l p l tdcxagerkam. BkeKmanCna j beckvTüa
dacedayELKBKadctaragerkam. edlm,eCosvagnvkarRbktRbECgKaxage l vsybeckvTüarbeTs
CaxakgGasTagenah)aneRCserisTpSareKa l edAngÉkeTserog²xnkgkarbe l gnvbeckvTüarbs
xneTACap l tp l Ed l man l dabfakBPBe l ak (world-class products).

 Audio Appliances  Telephones  Electronic Games China	 Memory Chips  Video Appliances  Aerospace S.Korea
 Software  Digital Communication  Biotechnology Singapore	 Application Chips  Computer Peripherals  PCs Taiwan

Intrafirm Technology Transfer

CakareprbeckvTüaEd l ektteLgBEpkmyrbsGgPaBeTAEpkmyeToténGgPaBkg l kN³Ca
RbBnngsanPaBkarBPakSaKa.

edlm, lGnv tmeFüa)ayenHeKRtvbegitRkmkargarmyCaca)acedlm, RKbRKgkgkareprenH.

RkmkargarmantnaTlkgkarbegitKerageB l ev l a KeragcNay erobcTlEng

eRCiserisngbNHbNa l bk l k.

kartRmgTismychinceBaHkarbegitRkmeprbeckvTüa

Several guidelines for setting up a transfer team:

- n RkmEd l mansmaCkkanEttckanEt l The smaller the team, the better.
- n RkmRtveFkarenAkgbryakas l eCOCak ngpaskPaB People work best in an atmosphere of trust and healthy competition.
- n karbegitkargarRkmngkare l kTkctsmackRkmCaKnHsxan Building teamwork and motivating the team members are critical.
- n karbgabbBaangmeFüa)ayTnakngKaRtveetc,as l as ngyl eda ysmackTagGs Chain of command and communication channels should be well understood by all.
- n manRbFanbT ngry³eB l c,as l as Clear topic and limited duration
- n PaBeCaKCyGaRsyelKNPaBénmnssSenAkgRkmEd l)aneRCiseriscedlm, lGnv tkargar Success is largely dependent on the quality of the people selected to perform the tasks.

VI-Snidan

kareprbeckvTüaCa teNlkarénkarTT l ykceNHdg Knt beckeTSBGkmanceNHdgeTA
Gkcg)anngRtvkarceNHdgenaH. karTT l ceNHdg tamry³mnsSCameFüa)aymydmanRbSTPaB
énkareprbeckvTüa. kareprbeckvTüamnEmneFeLgEtmgenaHeT vaCa skmPaBEd l RbRBteTACabn
rht. eKGaceprbeckvTüaBlkEngmyeTAKEngmytamry³karbegitkmvFbNHbNa l skasa l a
pSBpSa yCaSaFarN³Caedm.

BPakSaRkm

1-eh tGeKcatTk fakareprbeckvTüavaman sar³sxansrabTagkrtCa tngGgPaB?

2-crp l l]TahrNxH²BlkareprbeckvTüaEd l ektmanenAkg]sSahkmnanakgrbeTskmCa?

3-etGky lRsbbeTfakarTT lykbeckvTüavaman sar³sxansrabkarrikcerinrbsGgPaB
my?

4-eKfakareprbeckvTüaBtCamansar³srabNassrabkarGPvDene sdcRbeTskmCa
crBnü l ehtp l?

5-Reading case study “Technology Transfer in Taiwan”