

Promoting the Creation of a Software Development Cluster: Opportunities for Online Technology Transfer Skills

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Software Development Cluster In Tijuana

- A binational collaboration
- Funded by CONAHEC as part of its Border PACT Initiative
- Officially launched at CETYS University in Tijuana November '03 with projected final wrap-up May '04

Vision of the project

- **project vision:** stimulating a software development cluster in Tijuana
- one of the **five areas** the *Economic Development Council of Tijuana* has identified as key for Tijuana
- The **vision** is one of stimulating supply and demand through technology transfer through binational collaboration

Details of Software Development Project: Supply Side

- educate a cohort of 30 vocational students in Tijuana (not university students) who will take, at no charge, two on-line courses on database management with the *GlobalMind Center of Alliant International University*
- the classes last approximately two months each, with some face-to-face meetings

Details of Software Development Project: Demand Side

- grants awarded to fifteen small Tijuana businesses who work with paired student teams during and after the course to implement and customize the database software to improve their businesses
- CETYS Universidad provides computers, an internet connection, lab time, recruits the vocational students and manages the business interface
- The Confederacion Patronal de la Republica Mexicana (COPARMEX) was also be involved in recruiting and coordinating the Tijuana companies.

Underlying Management Theory

- Self-efficacy refers to a judgment of one's capability to accomplish a certain level of performance or desired outcomes
- unlike personality traits, which are relatively stable characteristics, self-efficacy grows with hard won achievements
- According to Bandura (1986) individuals gradually accumulate their self-efficacy through prior cognitive, social, and physical accomplishments and learning
- A high level of self-efficacy can help individuals maintain their efforts until their initial goals are met

Self-efficacy and entrepreneurship

- Many studies have demonstrated a link between self-efficacy and entrepreneurial success
- Information systems technology self-efficacy
 - Stimulated on both demand and supply sides
- Mexican economy needs greater entrepreneurship and IST (esp. At SME's)

Lessons learned

- It is ambitious to work with 15 companies for \$15,000....perhaps 5 companies is possible with this amount
- If you want people to do things, they need to be paid to encourage accountability
- Would like to extend this project, to include accounting software
- Other possibilities of extension are other developing countries

Conclusions

- This is a grass roots technology transfer initiative that is appropriate for many developing countries and can be delivered on-line with some in-situ support from a university and chamber of commerce or other business professional association
- It is a simple design and it works!

La ultima palabra...

- Your questions and comments...