

A Preliminary Report on Establishing an Industry Based International Capstone Exchange Program

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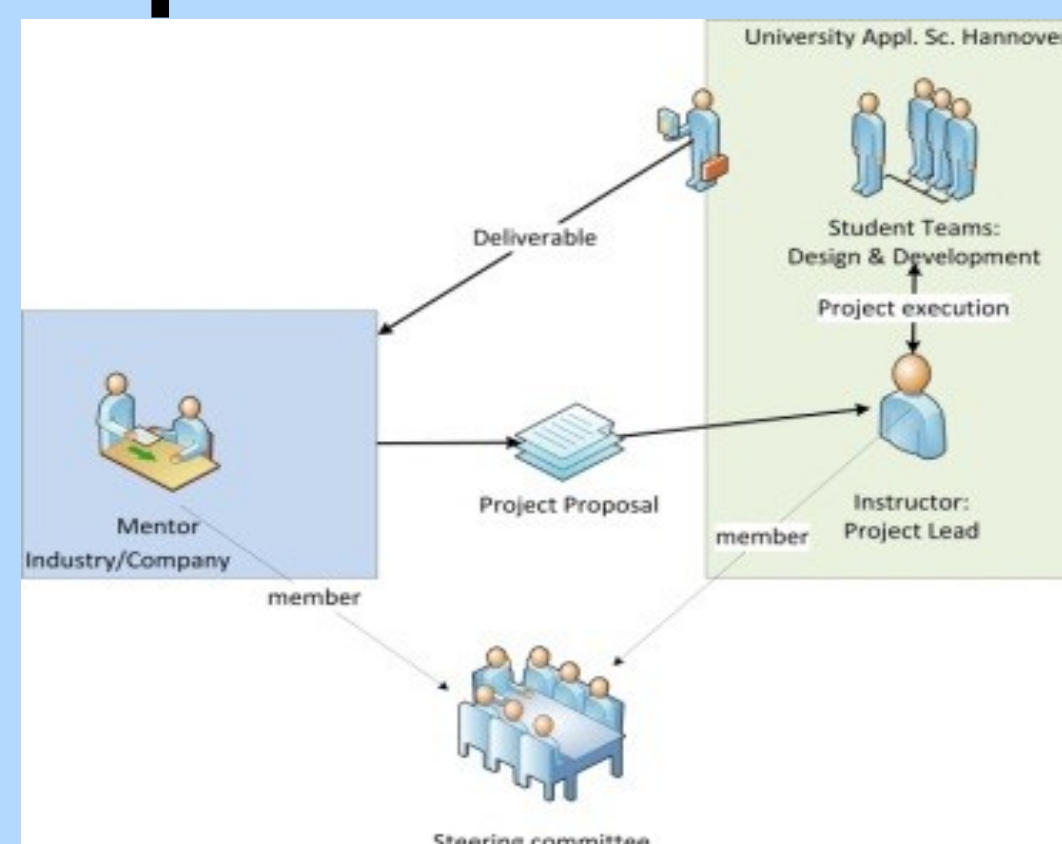
²University of Applied Sciences & Arts Hannover

³Linköping University

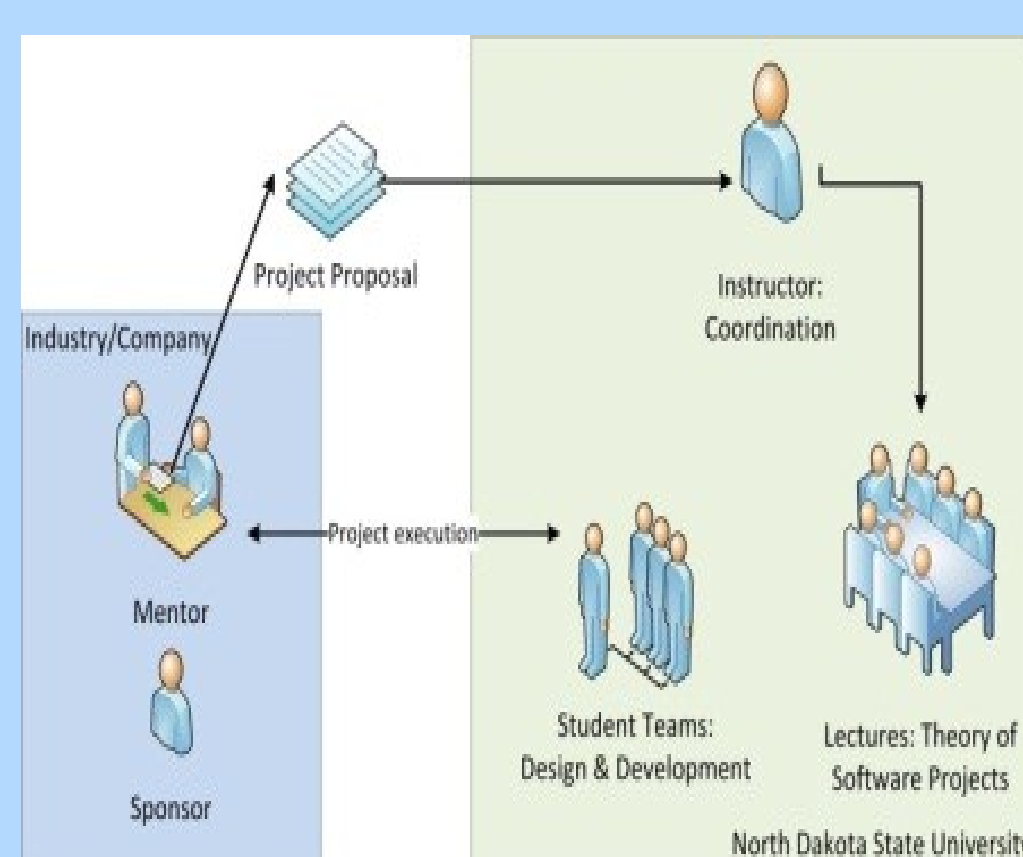
ABSTRACT

Our paper presents preliminary results on the establishment of an industry based international capstone exchange program. North Dakota State University in the United States, the University of Applied Sciences and Arts Hannover, Germany and Linköping University in Sweden as well as industrial sponsors in each country participated.

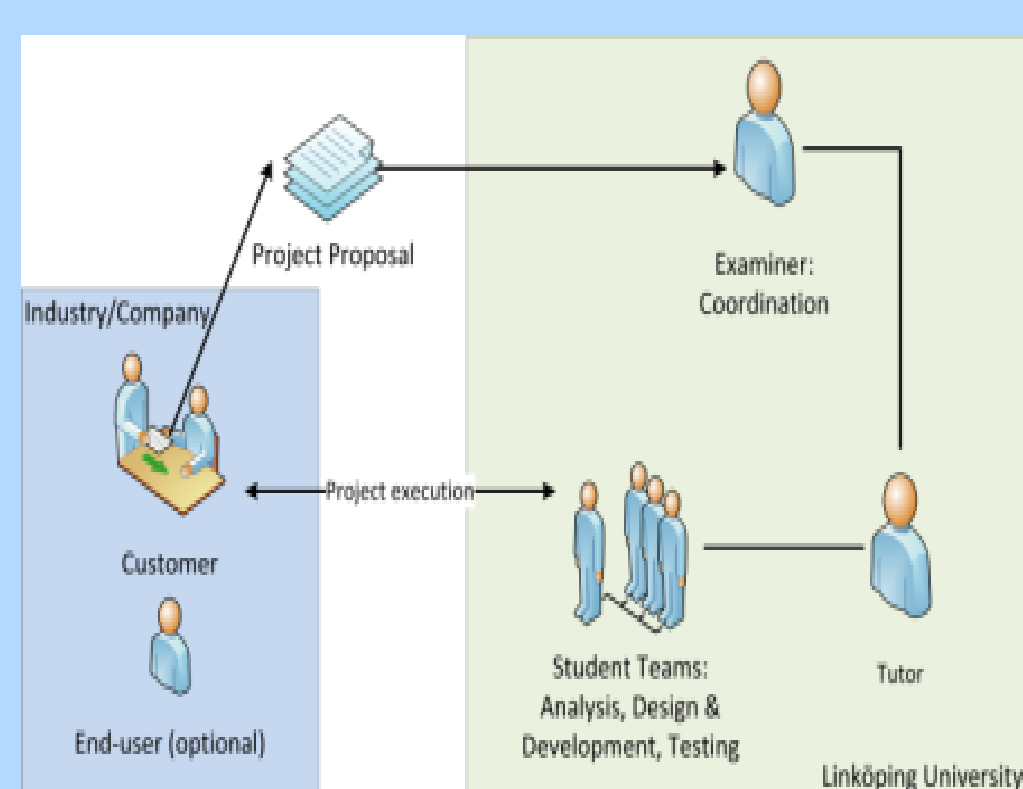
Capstone Processes



Hochschule Hannover



NDSU



Linköping

INTRODUCTION

Capstone programs can be improved by including an international experience.

- Students gain insight into how international teams work
- Common for international companies
- Students work remotely from their home school
- Can be a challenge to organize
- Hard to find companies in other countries willing to sponsor these student projects
- Need a model for how to set up international experiences
- Pilot an international capstone project exchange program

Establishing Industry Sponsors

- Need to find industry sponsors willing to host such an international project
- Best if experienced in doing projects locally
- Great if mentors/sponsors have had previous personal experience with international projects in their professional career

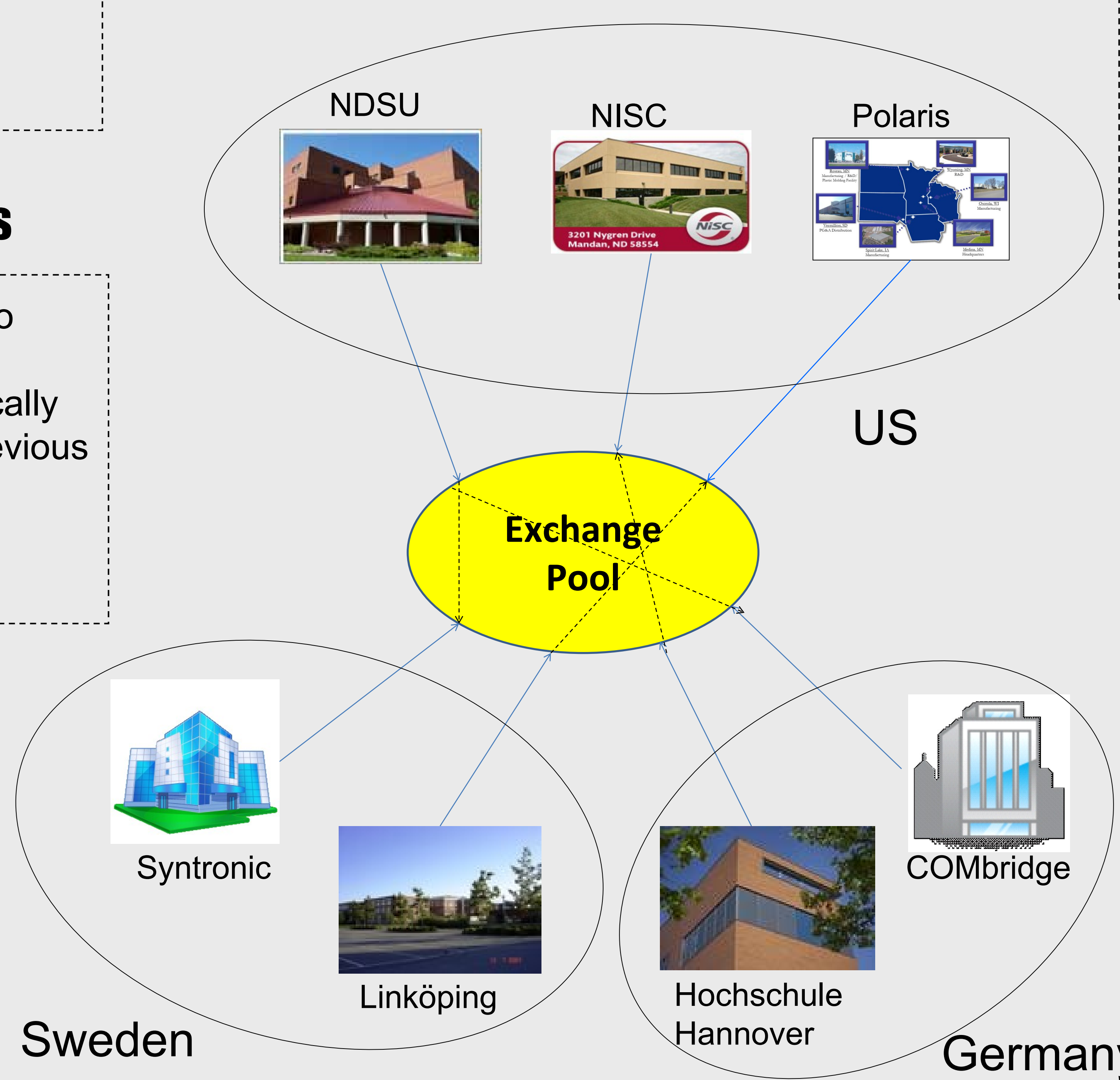
Determining Feasible Projects

- Value to sponsor
- Sponsor believes in value of industry cooperation
- Willing to provide a mentor
- Not too much domain knowledge
- Well defined interface to customer
- Involves new technology
- Project is scalable
- Mentor is good coach
- IP issues can be worked around
- Language issues are kept to a manageable level

Lessons Learned

- Free/cheap video conferencing tools like Skype or Google+ work well, improve understanding and simplify discussions (although not as good as face-to-face meetings)
- Need to account for lack of equipment (e.g. laptop) by students – video conference at off times
- Only small timeslots to hold video conferences, may want Wikis or forums
- Daylight savings times vary
- Language has not been a major issue – some smaller issues with NDA documents
- Companies should spend extra time defining the projects up front
- Shared documents, shared desktops allow for better understanding (diagrams are useful since less language dependent)
- Need to understand holiday schedules
- Although documentation may all be in English, it is not uncommon to see variable names in the local language
- Having limited times when teams can communicate leads to better thought out questions

Current Exchange Program



Future Work

- Need to establish official Intellectual Property policy
- Establish a plan for how to handle options for various capstone models (free vs. fee, one semester vs. two semesters, various team sizes)
- Expand to other universities, departments
- Establish a pool of industry/university partners interested in international capstone exchanges

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