

licensed by <u>CC E</u>

SAP Next Lab Collaborative International Industrial Project – Polytechnic of Porto and Victoria University

October 20, 2022



The Team



Scott Bingley

- Senior Lecturer, researcher in Information Systems
- Director of SAP ACC at Victoria University
- Director of SAP Next Gen Lab at Victoria University



Rosalina Bessa Babo

- Coordinator Professor at the Information Systems Dpt.
- P. Porto Porto Accounting and Business School

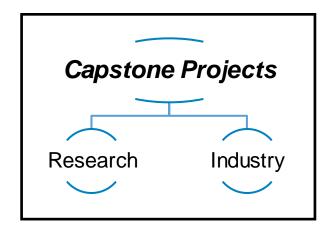
SAP University Alliances & SAP Next Gen Lab at P. Porto

Background

International collaboration can bring several benefits for business and academic institutions.

Capstone projects:

- present the students real-world experiences
- are beneficial to students and organisations



An International Industry Sponsored Capstone Project present to the students:

- the complexities of real-world problems
- an opportunity to work with people from other cultures and countries

SAP next-gen

"SAP Next-Gen is a community for youth all over the world who are passionate about innovation and technology and want to shape the intelligent enterprise as future decision-makers".

The community leverages

- 2,717 educational institutions in 111 countries,
- 153 SAP Next-Gen labs/hubs, and
- 117 SAP Next-Gen chapters through partnerships.

This project bought together two SAP Next Gen Labs to work on the same project: Polytechnic of Porto and Victoria University.

Source: https://www.sap.com/about/company/innovation/next-gen-innovation-platform.html?sort=events_upcoming&tag=date-range:next-12-months

Real World Industry Problem

Case A – 2021

Aim: present a resolution proposal and prototype for a SAP consulting company based in Melbourne, Australia.

The company: a large agricultural business which uses large and expensive sorting machines to sort fruit.

Problem: the machine produces a stand-alone batch files with the details of the sorting that has occurred over the previous batch.

Solution: develop **SAP Fiori** apps (**SAP**'s Business Application **Studio**) to read, and organise, the batch report to a database and develop visualisations of reports, add-on features and innovative ideas.

Teams: two groups composed of students from both universities that worked together to develop the project.



Real World Industry Problem

Case B – 2022

Aim: improve the organisation internal processes, namely in the HR Department using SAP.

The company: an international organisation that manufactures glass containers and employs 26,500 people in 78 plants in 23 countries.

Problem: some departments have some of its processes implemented in Excel and Word (outside of SAP)

Solution: with a series of Excel files, generated and downloaded from the organization's ERP and other systems, the students have to analyse and setup a series of dashboards using **SAP Cloud Analytics**. Then, answer a series of important questions to have a better understanding of the workforce trends.

Teams: the students worked individually but had to present results collaboratively, thus teaming up to assist each other.



Conduct of the Semester



- Student organised their own meetings
- Weekly meetings with their own supervisor/lecturer
- Weekly meetings as a group

Main goal of this study:

understand the impact this initiative had on the students involved

Is the use of an international collaborative approach an opportunity for the students to gain all necessary skills? What are the main challenges faced by the students in an international collaborative environment?

Methodology

- case study methodology
- quantitative and qualitative approach
- collection method: survey with Likert scale and open-ended questions
- convenience sampling composed of:



Students' opinions about the international project



Most agreed statements

- helped learn project management, develop soft and technical skills, improve the knowledge of software development
- motivated the students to attend group meetings and/or classes and encouraged the students to be better prepared
- boosted the enthusiasm for studying and motivated the students to learn
- encouraged the students to participate more in classes and helped them to be more attentive and more focused than in other courses
- improved problem-solving skills, autonomy, responsibility, and time management
- it should be used in future semesters

Students' opinions about the international project

Less agreed statements

- helped to better learn remote working
- being less interested in the topics taught if they did not have the international project
- easiness to schedule meeting times with their group members
- the necessity to have more meetings with their supervisors
- improvement of originality in thinking



Students' opinions about the international project

Advantages

- "being able to communicate and getting to meet different people from across the world and working on projects that would otherwise never have been possible" (S2.A)
- *"working in different timezones gives us a trail run when we work for other companies in the future"* (S13.B)

Disadvantages

- **S6.A.** stated the difficulty in *"figuring out the meeting schedule"* due to *"the huge gap between timezones"*.
- It is necessary more time to conduct the project since it "involves students with huge discrepancies in timezones" (S1.A)

Suggestions

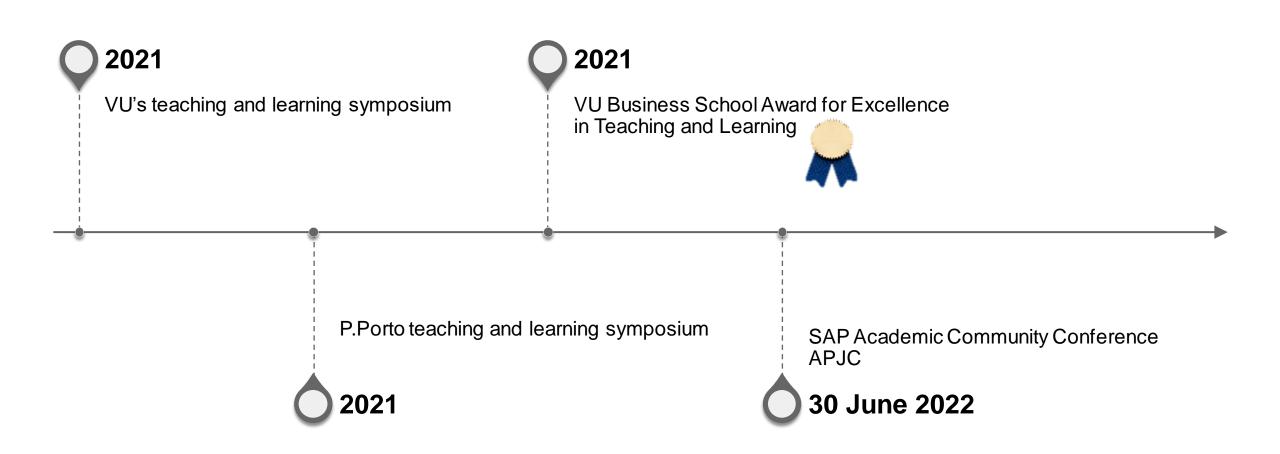
- "the project should be implemented again in the future" (S6.A)
- S10.A expressed that for future project work it should involve "remote working with people across the globe".

Conclusions

The Collaborative International Industrial Project

- allowed the students to gain experience with collaborative work and different software tools
- allowed the students to use an ERP and contact with a real-world industry project
- allowed the students to grasp an idea of professional context
- provided the opportunity to contact with different cultures
- allowed the students to improve and develop important skills

Awards and Presentations



Thank you.

Rosalina Bessa Babo

Polytechnic of Porto, Portugal

babo@iscap.ipp.pt

Scott Bingley Victoria University, Australia

scott.bingley@vu.edu.au

