Session 14   Discussion Notes

Business Models for Materials Modelling Software

Introduction

Successful software for materials modelling has an expected lifetime of many decades. This long-term nature requires a sound legal and business foundation: the ownership of software must be clearly established and the license models need to be carefully thought through to ensure a sustainable development and maintenance of the software and impactful exploitation by both academic and industrial end-users. Different business models carefully need to be considered when developing a strategy for long term sustainability of software and sustainment of the operation.

Objectives

The objectives of Session 14 are to uncover business models already in place and raise awareness of novel strategies. We will discuss in particular how Business Models relevant to materials modelling software are evolving and what future contribution digital marketplaces can make. For further background, see the recent White Paper published by EMMC.

Background information and documents

- Goldbeck, Gerhard and Simperler, Alexandra. Business models and sustainability for materials modelling software.
  https://emmc.info/wp-content/uploads/2019/01/EMMC-CSA-D5.5_M22_vfinal2-PU-WEBa.pdf
- Goldbeck, Gerhard. The scientific software industry: a general overview. Goldbeck Consulting, 2017. http://doi.org/10.5281/zenodo.260408

Discussion points and questions

The following questions summarize the issues for this session.

- What do you consider the "perfect" ratio of services vs software sales?
- What can be done to use SaaS more as it regarded as a potentially way to attract customers who have not the means to get infrastructure and skilled staff in place?
- What attractive new ways are there to enable new materials modelling businesses?
- How is software sustainability best achieved?
- How can we enable a change in education and better recognition of the efforts involved in software sustainability?
- What role can Marketplaces play to facilitate a more dynamic materials modelling software ecosystem?
- How can Marketplaces be made sustainable, i.e. self-sustaining?
- What role could/should government support/EC play in sustaining marketplaces as a key facility for research and industry?