

Marketplaces: emerging business opportunities and impact on digital society

Introduction

Materials Modelling Marketplaces are emerging platforms that provide all stake holders- modellers, industry and translators - ample opportunities to interact, collaborate online and conduct transactions. Marketplaces host various services such as:

- Match making e.g., helping industry find and connect with modellers and experts (and vice versa),
- Modelling services e.g., as simulation tools as Software as a Service (SaaS) that enable industry to run and perform simulations online without the hassle of local installations or cutting thus licensing and maintenance costs,
- Development and use of customized simulation tools, workflows and Apps, e.g., enabling industry connecting to modellers to develop customized solutions for their workflows and providing this on the Marketplace platform or on premises behind a firewall,
- Training and education services,
- Data repositories and curation solutions,
- Collaboration services,
- And much more...

Emerging Marketplaces should foster an ecosystem integrating all stakeholders and relevant or beneficial information in a sustainable and efficient manner. Marketplaces provide novel business opportunities for exploitation of modelling knowledge and related data.

Objectives

While the emerging Materials Modelling Marketplaces possess huge potential for exploitation, it is yet unclear which business models might be suitable for a sustainable operation or can be expected to be most successful and which impact on the digitalization of society they will have. Hence, the objectives of this session are to present and discuss:

- Business opportunities to all stakeholders: modellers, software owners, industrial users, translators/consultants and teachers/trainers
- Promising exploitation opportunities for third parties on the platform
- Sustainability and longevity of private entities operating Marketplaces
- Marketplaces as a public infrastructure?
- Best governance, data integrity, community involvement and general demands for thriving online marketplace community

Background information and documents

- <http://emmc.info>

H2020 Materials Modelling Marketplace Projects

- <http://the-marketplace-project.eu>
- <http://vimmp.eu>

EMMC International Workshop 2019

Further relevant Marketplaces

- <https://www.scienceexchange.com/>
- <https://www.fortissimo-project.eu/>

Discussion points and questions

- What are marketplace services that you would pay for?
 1. Fee for basic usage
 2. Online Consulting
 3. Match making: search for expertise
 4. product search: search for available and suitable software products
 5. Advertisements in general
 6. Advertisements of products
 7. Advertisement of your expertise
 8. Data repository access
 9. Software as a Service/ Hardware as a Service
 10. Configuration and/or execution of simulations or simulation workflows
 11. Other
- What license schemes for Apps and software services would you prefer?
- What would be the type of enterprise/institution profiting most from a Marketplace ?(e.g. academia, SME, industrial R&D labs, software vendors, academic software developers, others)
- How do you expect the marketplace to help do your job better?
- Can you imagine services/tools/expertise that you would like to exploit on such Marketplaces?
- Describe your top three beneficial features of a materials modelling marketplace
- What requirements do you have for the marketplace regarding security / data privacy and confidentiality / performance / data storage?
- What must the marketplace absolutely offer for you to consider its use at all?
- Which functionality should a marketplace offer so that you would use it every day?
- If there would be more than one materials modelling marketplace – e.g. less comprehensive, but more focused ones - would this mean you are less inclined to use it? How would this impact the chances to use it?