

### The Future of Modelling in Continuous Casting

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SWERI/M

Ssidenor

RI A



BFI





Ssidenor

RIR



Materials Processing Institute

BFI

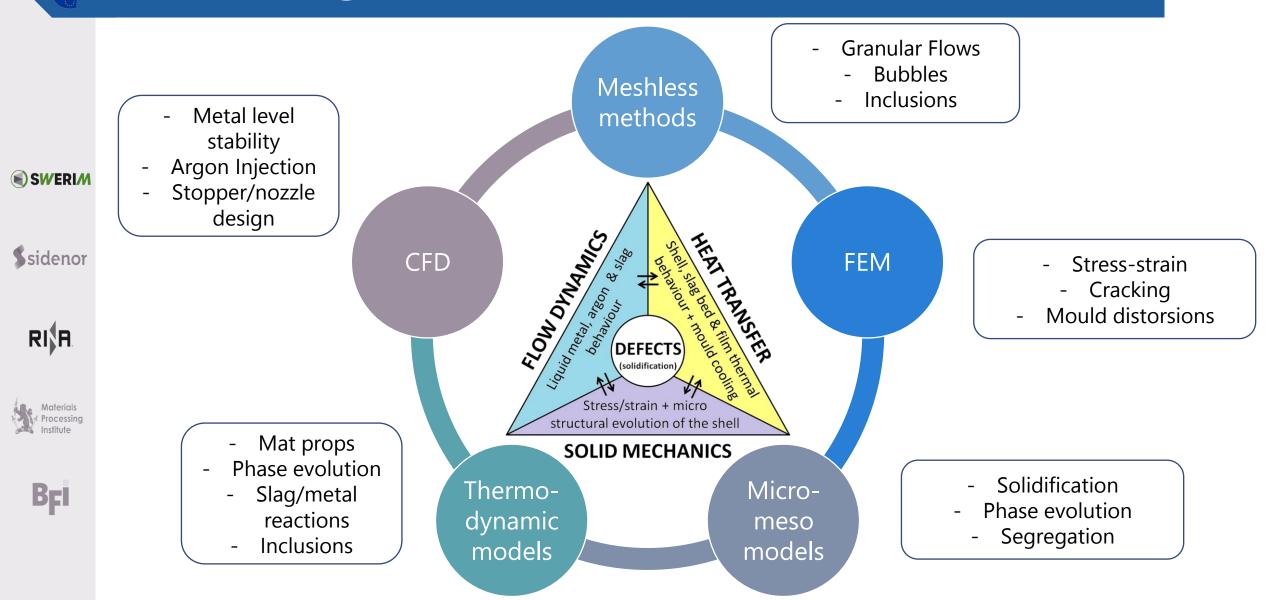
## **Previously on VALCRA**

#### Modelling overview



Continuous Casting machine SWERIM CFD & FEP A flow inside the mould Thermodynamic Ssidenor **Summary of** Sing infiltration and shell growth modelling RI R Mesoscale techniques, physical Dendrite growth Materials Processin phenomena and Micro-scale length scales in BFI continuois Casting Meters 1 x 10<sup>1</sup> 1 x 10<sup>-3</sup> 1 x 10<sup>0</sup> 1 x 10-6

### **Modelling Classification**



CRA





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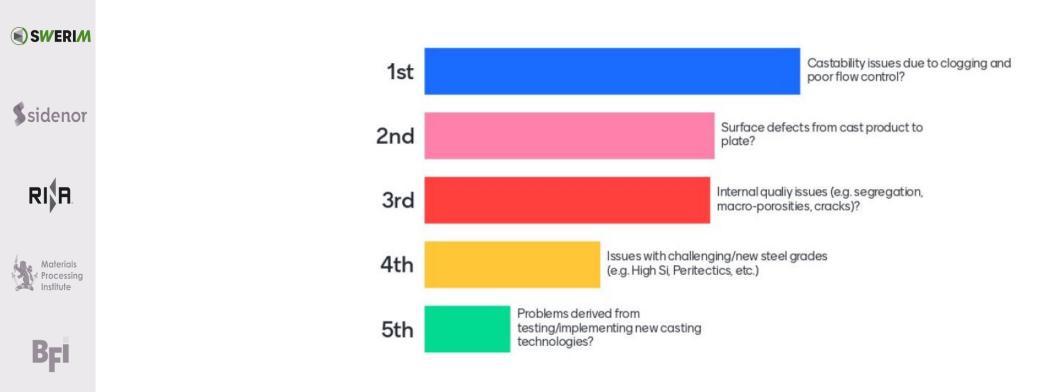
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## **Feedback from previous** sessions





# What kind of "events" you observe more frequently?



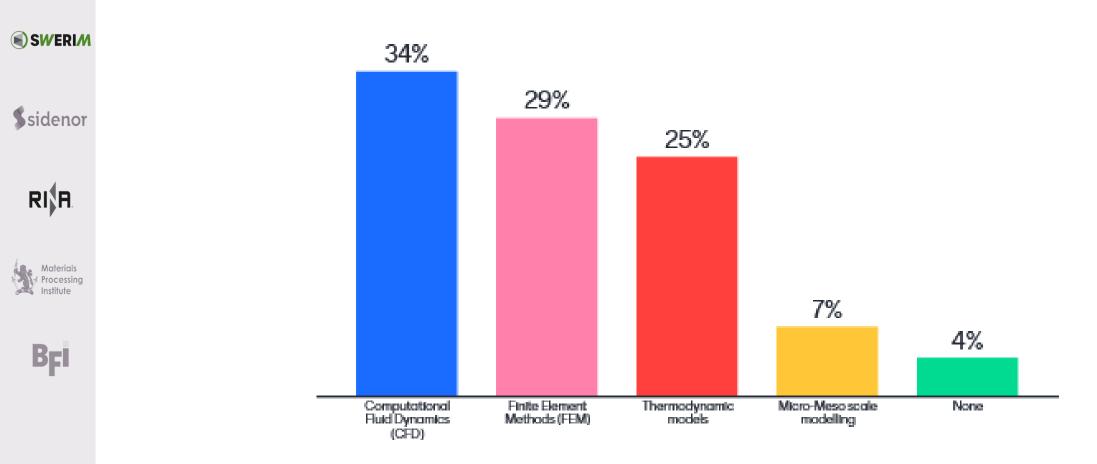


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# Which modelling technique are you more familiar with?







#### What are the limitations you see to apply modelling in your job?

Ssidenor

SWERIM

RI R







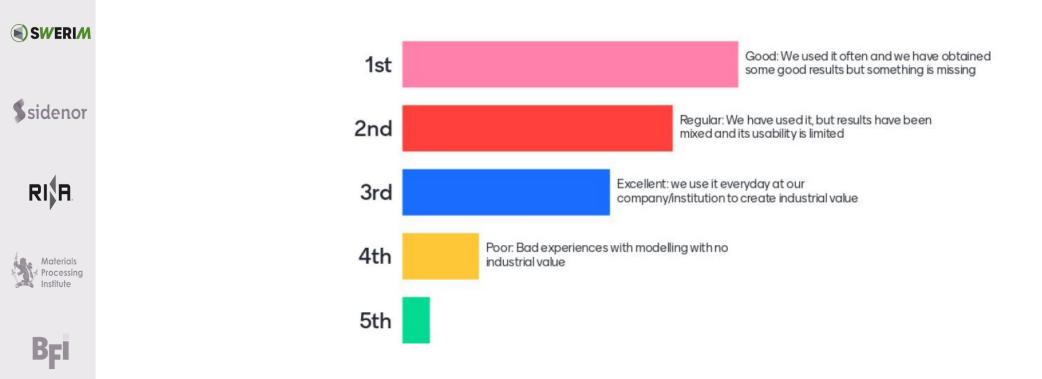








# In general, how has been your experience with modelling?









Ssidenor

RIR





## **Open Q&A session**

## Feedback outcome: modelling



#### What part of the process/caster should models focus on?

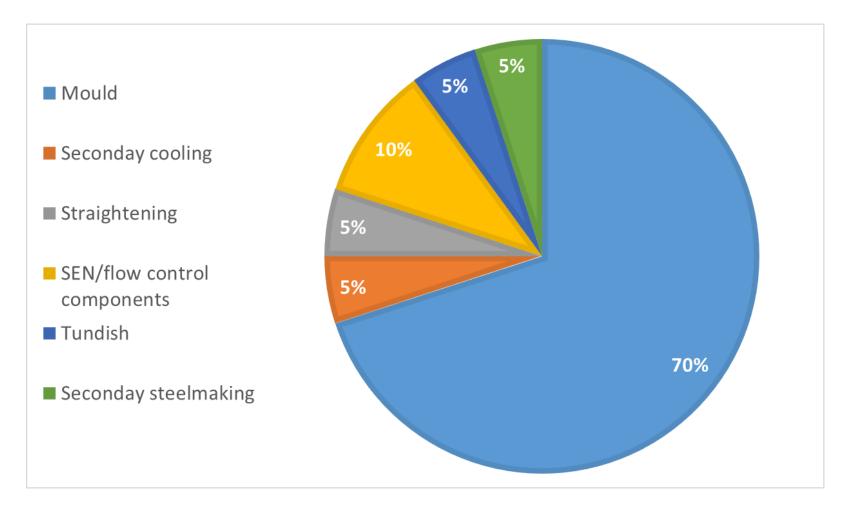
SWERIM

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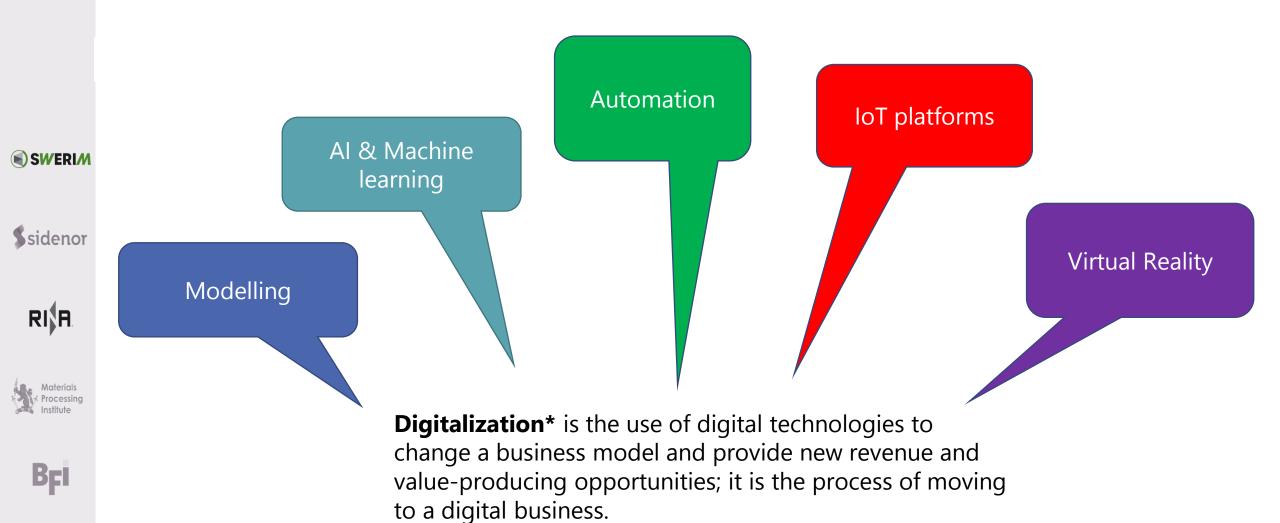






### Digitalization









Ssidenor









## **Practical solutions for the** Roadmap



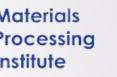






B<sub>F</sub>i







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