



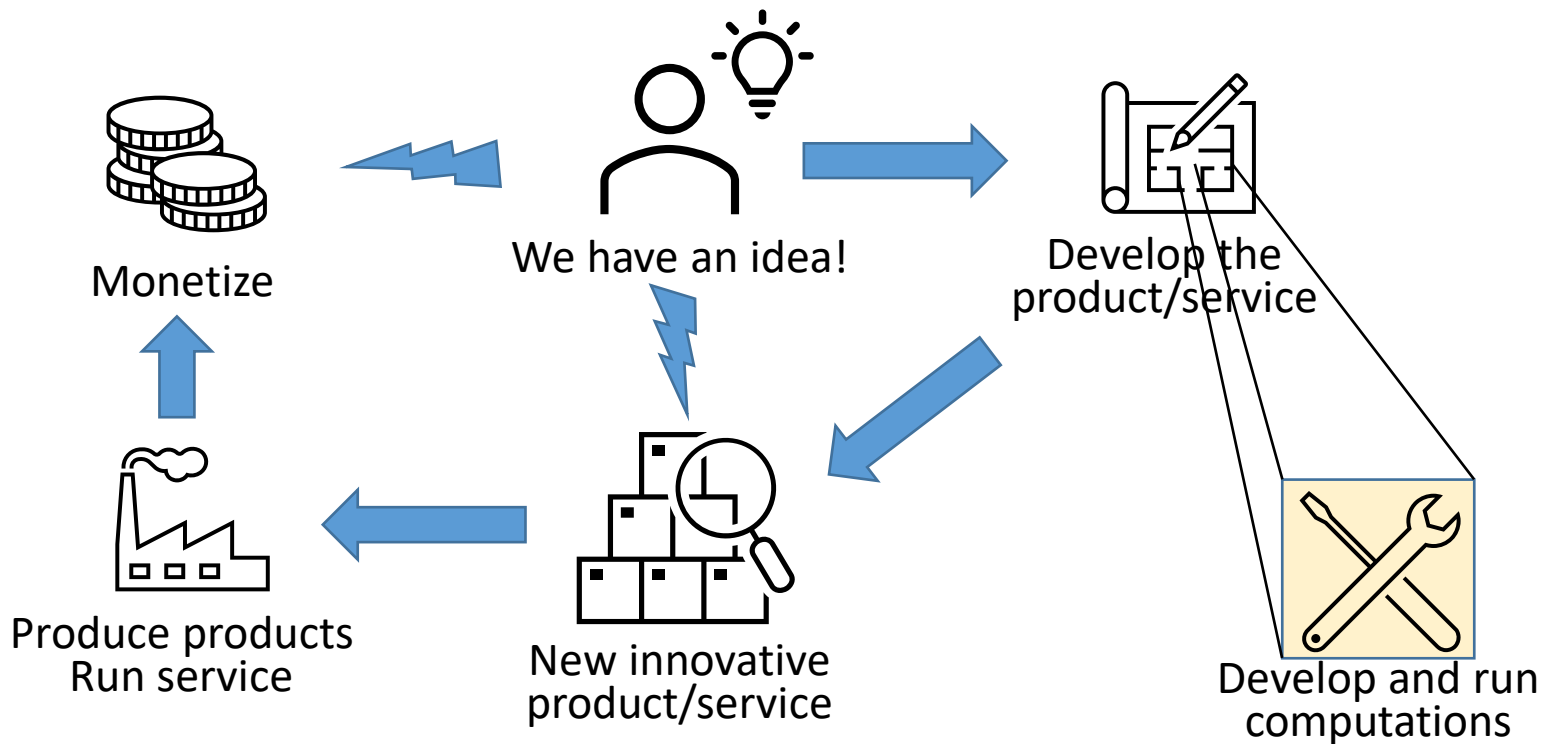
**Warsaw University  
of Technology**

# How to make data work for you

BalticLSC low-code computing platform

Michał Śmiałek, Warsaw University of Technology

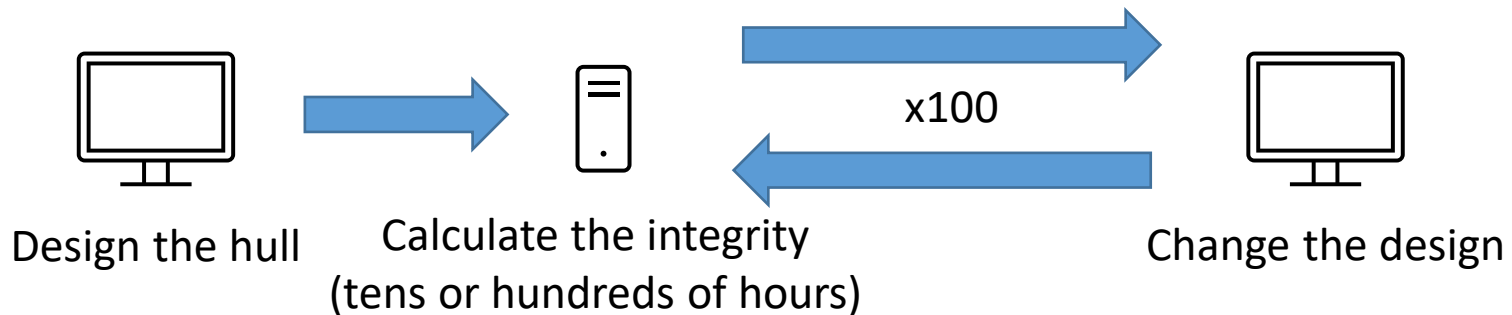
# Turning great ideas into ready solutions



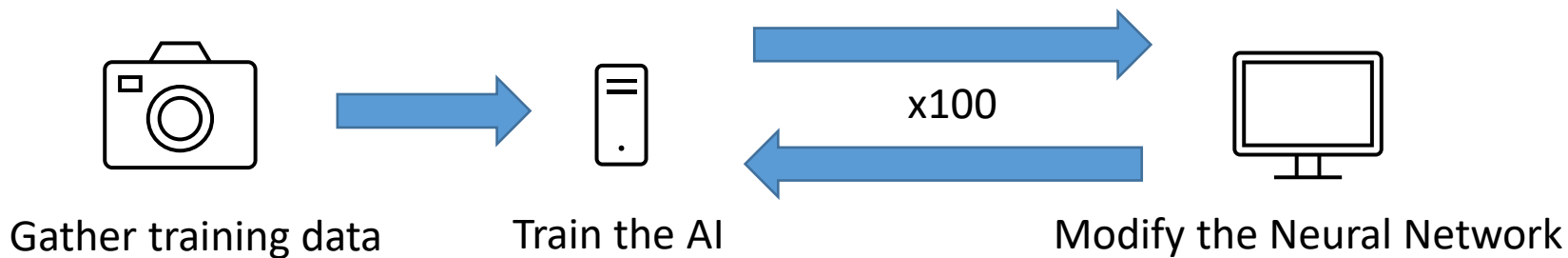
P: New Catamaran Yacht  
P: New Virus Vaccine  
S: New Airport Security System  
S: New Weather Forecasting Service

Calculate yacht's hull aerodynamics...  
Compute DNA sequences of a virus...  
Train a neural network (AI system)...  
Test weather forecast algorithms...

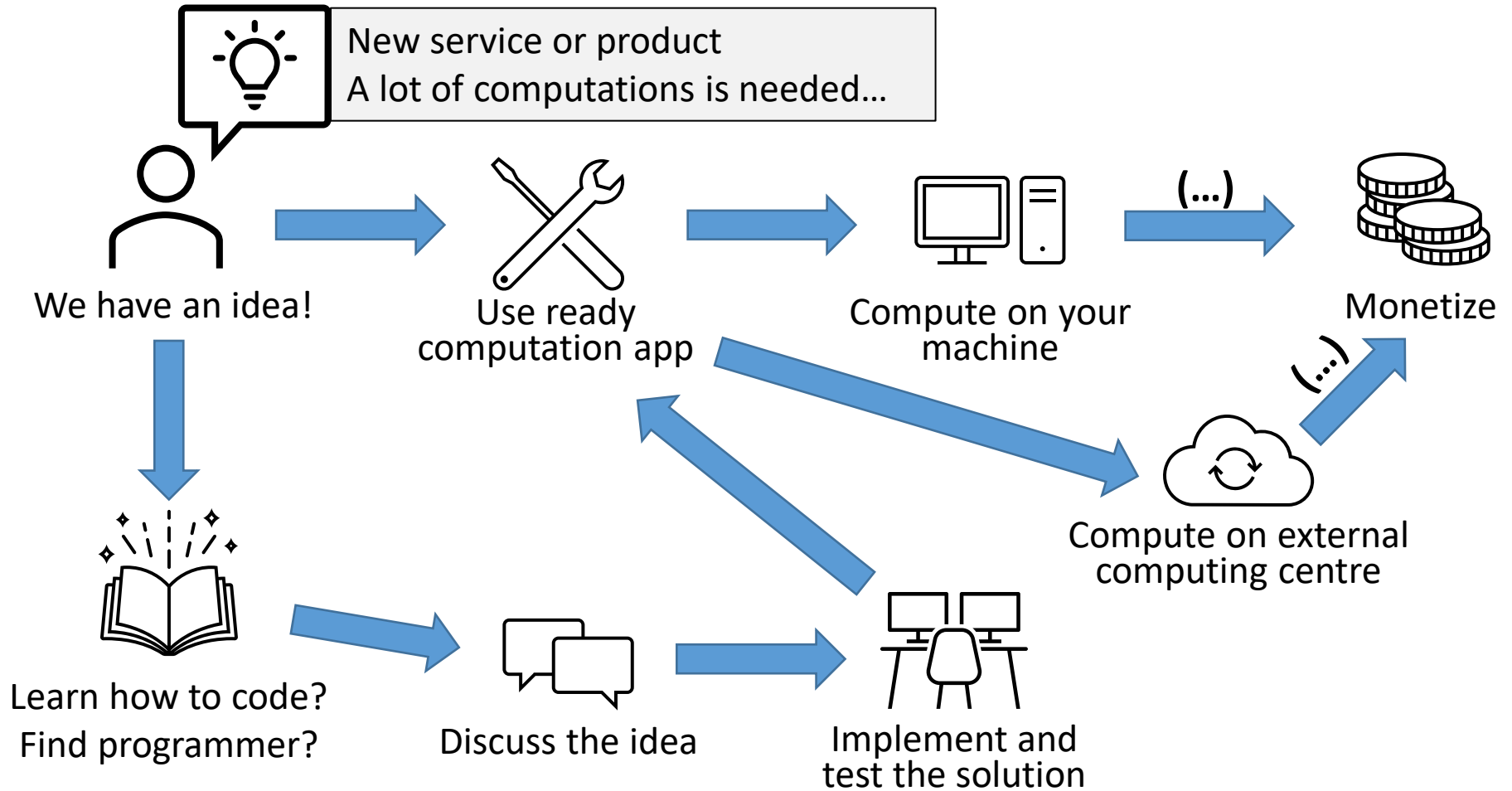
# Ship's hull optimisation



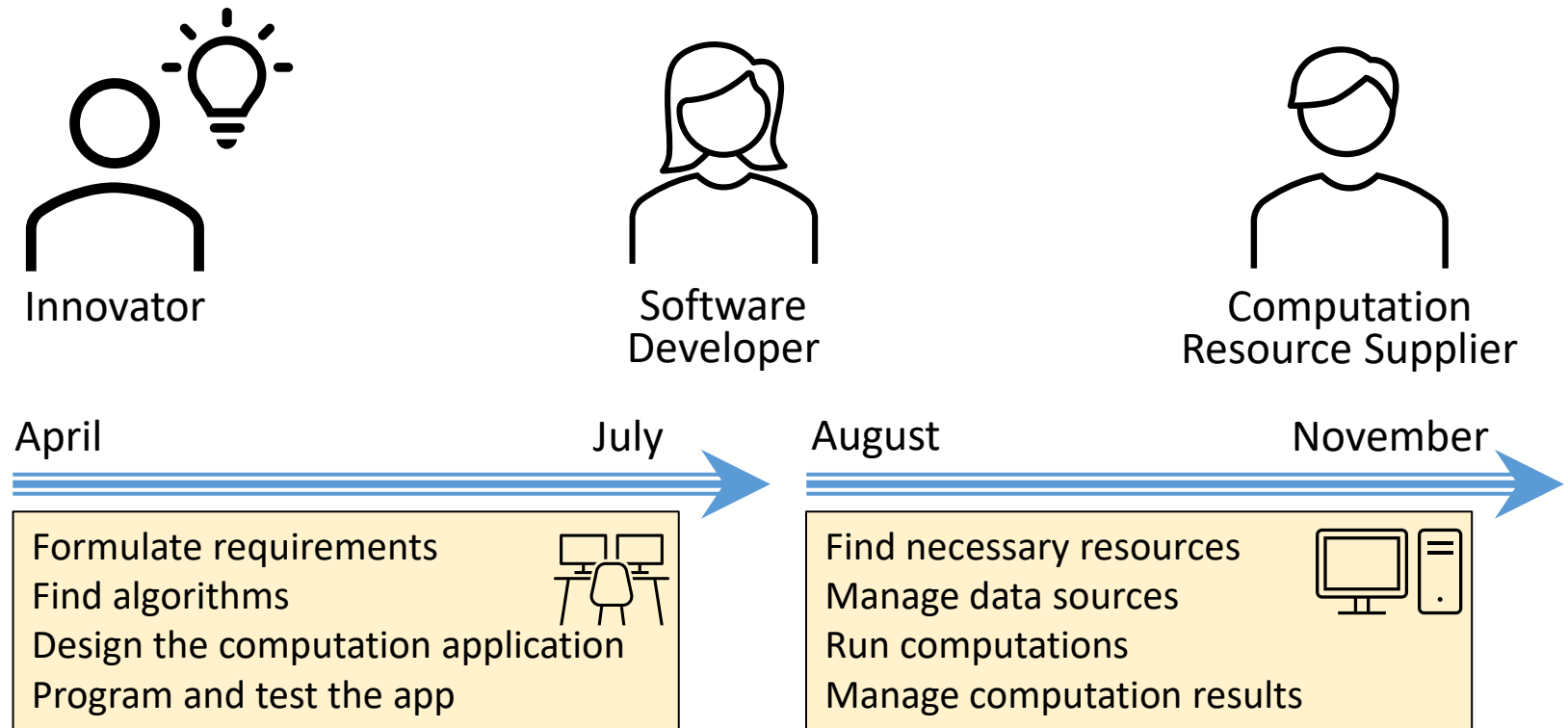
# AI welding quality inspection



# How to develop an innovation?

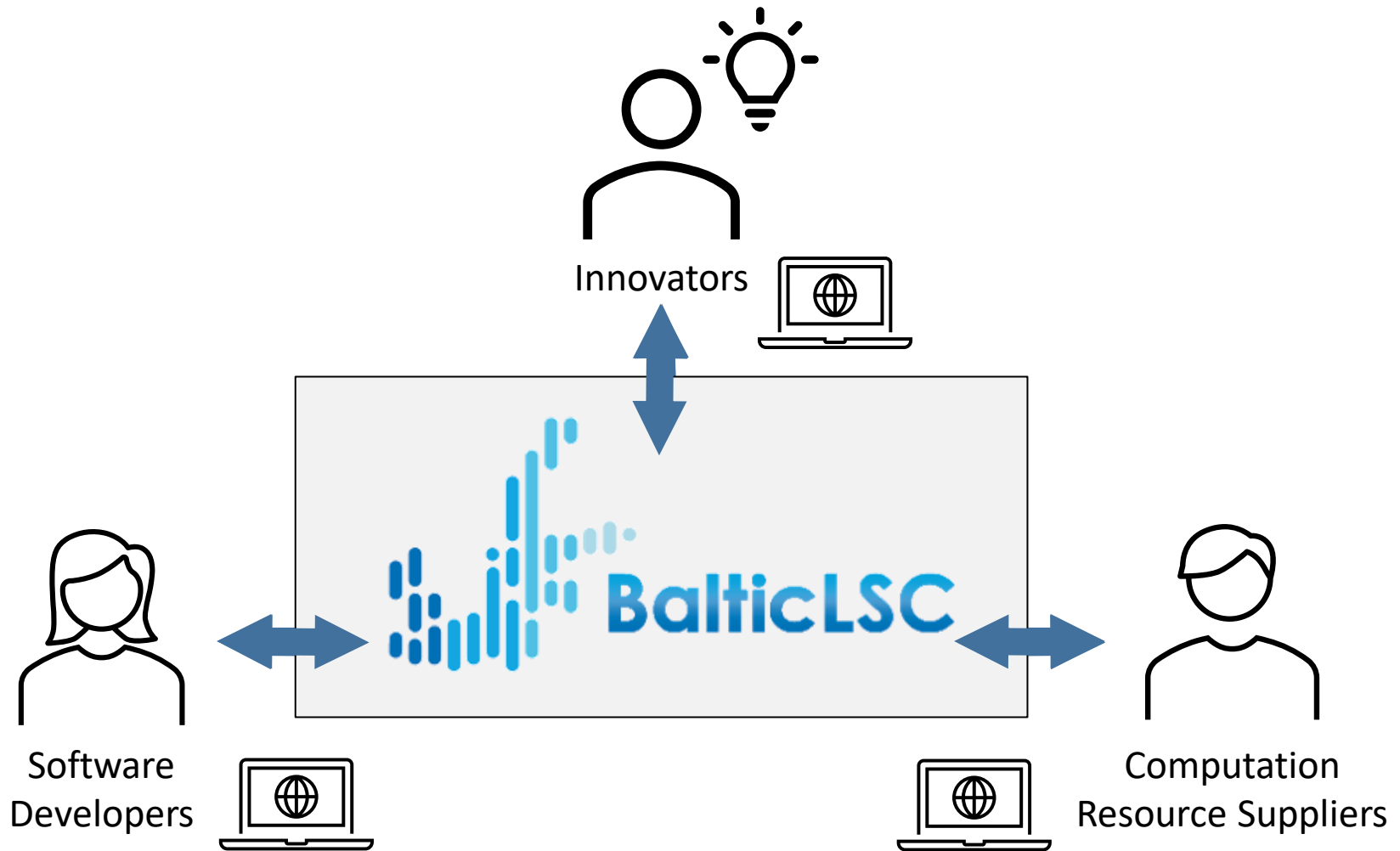


# How long does it take?



**Goal: shorten this significantly**

# One place to connect everyone



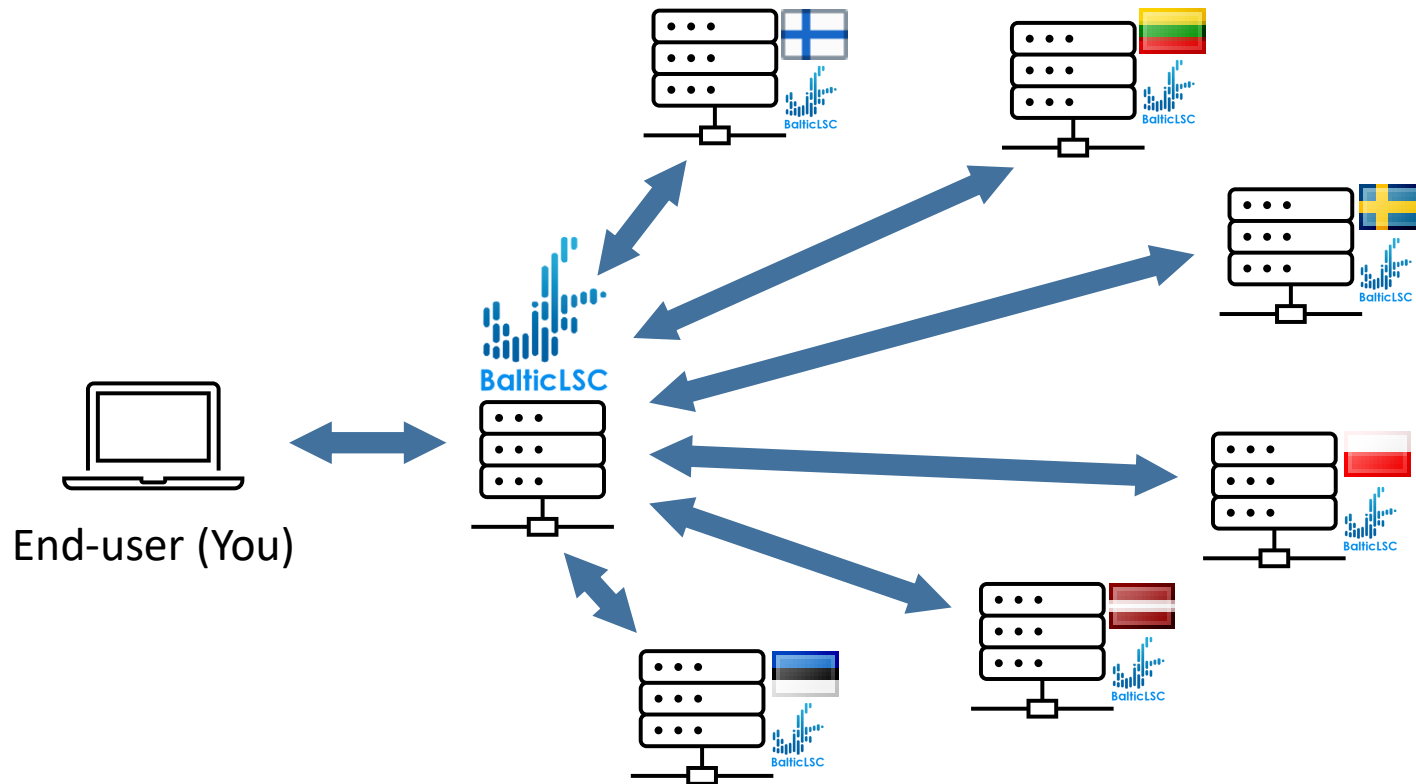
# Select or easily develop your computation apps

The image shows a screenshot of the BalticLSC App Store interface on the left and a graphical Computation Application Language (CAL) diagram on the right. The app store lists various applications such as 'YetAnotherImageProcessor', 'Dev Spectral Analysis App', 'Hull Optimizer', 'Simple Image Processor', 'Greying Image Processor', 'My Reworked Film Processor', 'FaceRecognition', 'WildlifeRec', 'Covid-2 Ana', and 'Edging Image Processor'. A red box highlights 'My Reworked Film Processor' with a red arrow pointing to the CAL diagram. The CAL diagram illustrates a workflow: 'Video Inputs' and 'Sound Inputs' feed into 'folder1' and 'folder2' respectively. These folders feed into a 'synchronise File Synchroniser' module, which outputs 'files1' and 'files2'. 'files1' feeds into 'Video Input' and 'files2' feeds into 'Sound Input'. Both 'Video Input' and 'Sound Input' feed into a 'mix VS Mixer' module. The 'mix VS Mixer' outputs 'Output Film', which then feeds into 'Output Films'.

- Select a ready app from an **App Store**
- Or: select ready computation modules
- Compose your application from modules
- Use easy-to-understand graphical Computation Application Language (**CAL**)



# Run your computation apps efficiently



- Easily connect Computation Clusters that have **unused resources**
- **Save money** on computations – no need to reserve resources

Warsaw University  
of Technology



## Contact

BalticLSC Secretariat  
balticlsc@ee.pw.edu.pl  
tel. +48 22 234 7350  
www.balticlsc.eu



EUROPEAN UNION

EUROPEAN  
REGIONAL  
DEVELOPMENT  
FUND