

SELFSUSTAINED CROSS-BORDER CUSTO**M**IZED CYBERPHYSICAL SYSTEM EXPERIMENTS FOR CAPACITY BUILDING AMONG EUROPEAN STAKEHOLDERS

How to Write a Coherent CTTE Proposal?

Florian Fricke **Chair of the SMART4ALL Mentoring Committee**

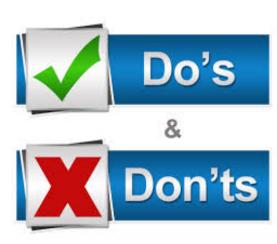


SMART4ALL CTTE Calls

- What is this presentation about:
 - What ideas are we looking for?
 - How to write a "coherent" a.k.a. successful proposal



- Administrative data/issues
- Geographic representation of partners
- Everything that is mentioned on the GfA



- PAE → technology transfer between academia
 ←→ industry and industry
 ←→ industry
 - Can be considered as a pre-seed funding
- Golden example:
 - A University Laboratory developed a technique/process/method, but University don't know how to commercialize it
 - This technology is useful for an SME to enhance its products or internal process
- A business scenario must be there backed up with a market case i.e., through this PAE the company must move one step forward
- This PAE idea must not be trivial
 - Counter example: an SME does not have the budget to buy a code versioning tool, so the target of the PAE is to build one



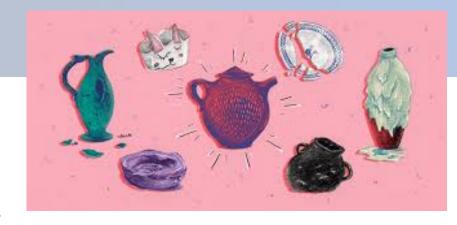
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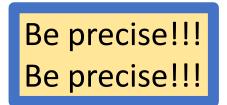
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- The technology transfer must be:
 - a new product or extra features enabled to an existing product
 - Reduction in power or energy consumption in % per device in % factor per device reduction in power or energy consumption → Good PAE if the power reduction can enable new features (new applications) or open new market verticals
 - Engineering/manufacturing processes improved
 - Cost savings in product engineering/manufacturing



The CTTE Consortium

- (1) Technology Producer
- (2) Technology Receiver
- (3) Productization partner



- (1) → Industrial or Academic or Research Center
- (2) → Industrial
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- Important: write in the proposal the role of each partner in one, concrete sentence

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Main Sections of a Proposal

- Tagline (your project in one sentence)
- Brief Description (What are the benefits for all organizations?)
- Select the vertical your project is addressing
 - Digitized Transport, Digitized Agriculture, Digitized Environment, Digitized Anything
- Excellence
- Impact
 - Market opportunity
 - Competition
 - Commercial Strategy and Scalability
- Implementation
 - Work Plan
 - Team
 - Resources





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- From academia: A lab is performing research on X topic → To which types of companies this X will be useful and how? → Try to identify these companies and start the brainstorming meetings
- From industry: An SME has a specific technology that cannot be commercialized by this company → Try to move this tech to other companies that can commercialize it
 - An academic partner can improve this technology or adapt it to other market segments by adding new features
- In the proposal: Mention why this technology can offer an added value to the productization partner → Try to be precise
- SMART4ALL offers the Marketplace service → technology offers and requests

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- Requested in the proposal
 - Experiment description
 - Differential advantages and enhanced value this PAE offers

 technology
 - Innovation level description
 - Novelty

 What this technology can offer at product level?
 - Soundness of the approach
 - Soundness means
 - Requirements of the industry define the requirements of this technology
 - Demonstration in field or in the lab is important
 - TRL before and after (e.g., TRL 5 → 7)
 - Finally: how the participating organizations will interact to achieve a successful outcome



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Indicative KPIs for Excellence

- New products or enhanced features to a new product
- Patent applications
- Licenses
- Contributions to standard
- New open source software packages released
- Scientific publications
- TRL elevation



Impact means ...



- Resulting added value for the industry partner and customers
- Benefits of the collaboration
 - How the competitiveness of the industry partners will be improved (for each Industrial Partner)?
- Market opportunity
 - Define the Target Market and its size. Be precise: if you add a new network protocol to an agriculture device DO NOT analyze the whole agriculture market
- Competition
 - PAE technology is included in other products/services?
- Commercial Strategy and Scalability
 - Pricing model and projected revenues after the end of project, in 3 years, in 10 years

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- Impact on sensitive social groups
 - In which way does your project improve or support the lives of people belonging to sensitive social groups

Indicative KPIs for Impact

- New jobs generated
- Products improved
- Processes improved
- Potential users/customers
- Investor pitches
- Revenue increase
- Operating costs
- Start-ups founded or in foundation
- Venture Capital granted



Implementation

Three main parts

- Work Plan
 - Full coherent with the Excellence part → Every *word* mentioned in the excellence part must be justified in the workplan
 - Breakdown into workpackages, tasks, deliverables, and responsibilities
 - Do not forget to add market and business related activities (if it necessary)
- Team
 - How the work is divided among the team members
 - Does the team have complementary expertise?
- Resources
 - Costs (in PMs) for every partner, for every workpackage, and task





Proposals will be prioritized if

 The consortium includes at least one member from one of the SEE countries



