

# Requirement Patterns – yes, ready to transfer!!

**Xavier Franch, Cristina Palomares, Carme Quer**  
RE'13 Ready-Set-Transfer session  
July 2013, Rio de Janeiro (Brasil)

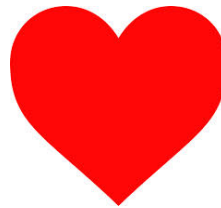


Group of Software Engineering for Information Systems  
UNIVERSITAT POLITÈCNICA DE CATALUNYA

## Is the PABRE framework ready to transfer?



## Reason 1. Industry collaboration

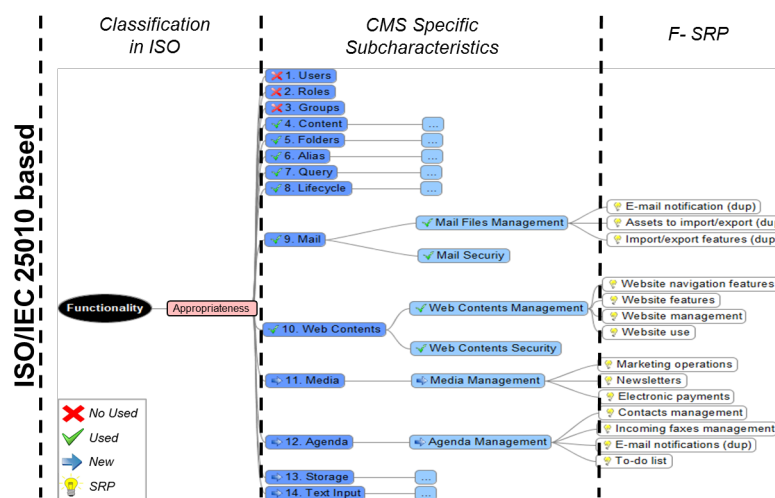


PABRE trademark (Benelux, Spain)



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## Reason 1. Industry collaboration

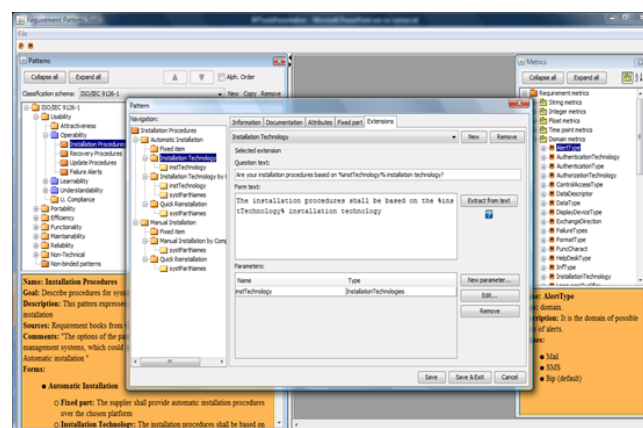


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## Reason 1. Industry collaboration

SRP: Supplier Economic Information	
Goal: Assessing the economic situation of the supplier	
Does the Customer requires specific conditions on the economic situation of the supplier?	
SRP Form	SRP Form
<b>Economic Situation Information Form</b>	<b>Economic Situation Prerequisites Form</b>
<b>SRP Parts</b> <ul style="list-style-type: none"> <li><b>Fixed:</b> The supplier shall provide economic information of its company.</li> <li><b>Extended 1:</b> The supplier shall provide information of it's company's turnover on the last <u>amountOfTime timeUnit</u>.</li> <li><b>Extended 2:</b> The supplier shall provide information of its company's net income on the last <u>amountOfTime timeUnit</u>.</li> </ul>	<b>SRP Parts</b> <ul style="list-style-type: none"> <li><b>Fixed:</b> The supplier shall fulfill some economic situation prerequisites.</li> <li><b>Extended 1:</b> The supplier's company shall have a minimum net income of <u>amount currencyUnit</u> on the last <u>amountOfTime timeUnit</u>.</li> <li><b>Extended 2:</b> The supplier's company shall have a minimum turnover of <u>amount currencyUnit</u> on the last <u>amountOfTime timeUnit</u>.</li> </ul>
<b>Constraints</b> <ul style="list-style-type: none"> <li><b>Fixed</b> part cannot be applied more than once.</li> <li><b>Extended 1</b> and <b>Extended 2</b> parts cannot be applied more than once.</li> </ul>	<b>Constraints</b> <ul style="list-style-type: none"> <li><b>Fixed</b> part cannot be applied more than once.</li> <li><b>Extended 1</b> and <b>Extended 2</b> can be applied more than once if they are applied with disjoint values for the parameters (<u>amount</u>, <u>amountOfTime</u>).</li> <li><b>Soft Constraint.</b> <b>Extended 1</b> and <b>Extended 2</b> applications should use the same <u>currencyUnit</u> and <u>timeUnit</u>.</li> </ul>
<b>Parameter Metrics</b> <p> <b>amount, amountOfTime:</b> integer (inv integer must be greater than 0)  <b>timeUnit:</b> domain {years, months, ...}  <b>currencyUnit:</b> domain {USD, EUR, GBP, JPY, ...}         </p>	

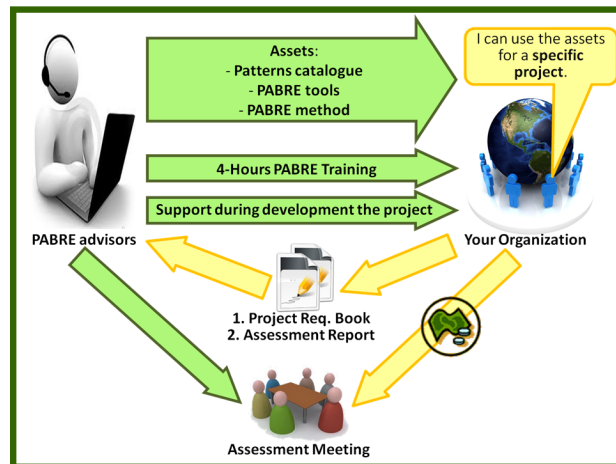
## Reason 2. Tool support



## Reason 3. Collaboration pathways

### **Guided Experimentation**

If you want to use our framework in a specific project without any modification

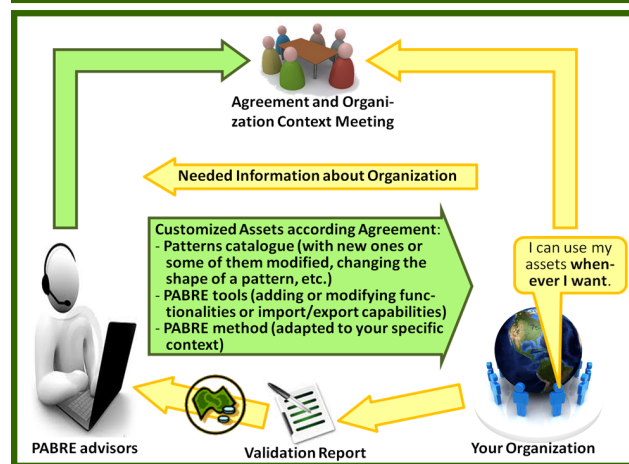


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## Reason 3. Collaboration pathways

### **Assets Customization**

If you want to customize our assets for your specific context



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## Reason 4. Trying to base on evidence

<http://www.upc.edu/gessi/PABRE/Survey.html>

### Requirements Reuse and Patterns



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Xavier Franch



Carme Quer

#### Goals of the Survey

- To know current requirements engineering practices related with essential aspects for the definition of requirement patterns.
- To analyze the current and potential use of patterns in industry.

#### Target Audience

Any practitioner and academic with different levels of experience on requirement engineering.

- Requirements engineer working in Industry
- Academic with significant experience in Industry
- Academic with some knowledge of Industry practices
- Academic without any exposure to Industry



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## Reason 5. Cost model for RoI

$$ROI = \frac{Benefits - Costs}{Costs}$$

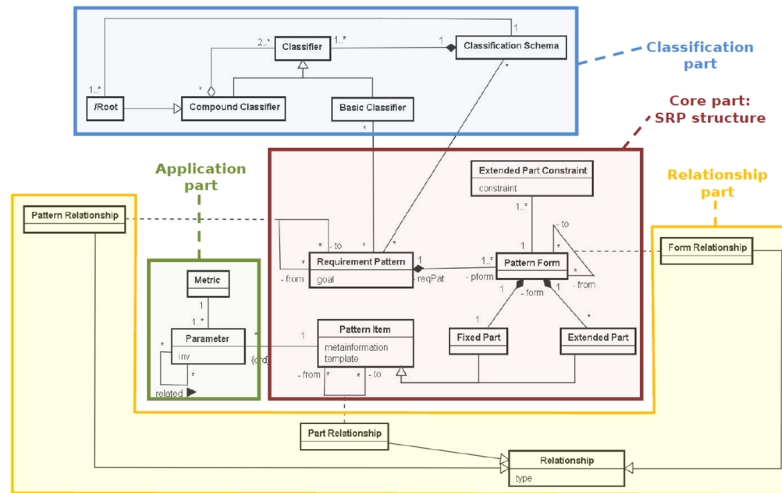
$$Benefits = \sum_{i=1}^n \overline{ECA_i} + SCA_i$$

$$Costs = AEC + AMC + CEC + \sum_{i=1}^n \overline{UEC_i}$$



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## Reason 6. And still, research foundations



ready. set.  
go!

# Requirement Patterns – hope we convinced you!

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