Improving IP Literacy among Brazilian SMEs: the Creation of an Innovative E-learning Platform based on the Concepts of Design-science Research.

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Agenda

• Research Expertise and Scholarship
• Introduction about SMEs, Brazil and IPR
• Objectives of the Research
• Designing tools
  • Overview of the Tools
  • Methodology
  • Developing the Criteria
  • Analysis
  • Design Recommendations
• Comments and Discussion
Research Expertise and Scholarship Program

- Internationalization of research
- Development and innovation

- Promotes and evaluate the National Graduate System of Education
- Science without Borders

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About Brazil, SMEs and IPR

• SMEs are **99% of the companies** and responsible for **60% of employment** in Brazil (SEBRAE);

• SMEs have a relevant impact in improving the technological process in the economy through new processes and inventions (Brant & Lohse);

• Brazil has been making some **efforts towards innovation** stimulating SMEs to invest in R&D;
About Brazil, SMEs and IPR

- SMEs lack knowledge about IPRs (Evans: IPR awareness is one of the major issues to be improved to boost innovation);

- Reasons provided by the WIPO:

  - lack of awareness regarding the system and how to use it;
  - high level of complexity and perceived high costs;
  - lack of easily accessible teaching, training and/or professional assistance.

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Research Premises

• IP Awareness needs to be raised among SMEs – Small companies lack the knowledge about IPR

• E-learning is an easy and efficient way of improving this knowledge among these companies.
Research Objectives

• Analyze the current tools in the market

• Select an industry in Brazil and analyze their needs regarding IPR

• Develop the tool based on the results of the analysis;

• Evaluate the first draft of the tool with Brazilian IP experts and industry

• Improve the tool based on the results and re-evaluate
Designing tools: results of the first step

Importance of analyzing the existing platforms in order to develop a new one.

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Designing tools: Methodology

Design-science Research

- Developing a new artefact in order to solve an organizational problem
- Under Information Systems Research
- Build and Evaluate Loop

Emerging Technologies for Learning

- Concepts for creating the criteria

Selection of the tools

- 26 tools selected
- Based on IP related organizations/projects and papers
- Learning feature/teaching purpose
- Innovative
Designing tools: Overview of the tools

Some examples of interesting and innovative tools
Designing tools: Overview of the tools

European Commission:
- IPR Help Desk
  - Europe
  - Asean
  - China
  - Mercosur

www.iprhelpdesk.eu
Designing tools: Overview of the tools

Spanish Patent and Trademark Office:
how to search in the international patent database

www.oepm.es/cs/OEPMSite/contenidos/elearning/Es pacenet1/player.html
Designing tools: Overview of the tools

WIPO and KIPO (Korean):
IP Panorama - General Information on IP for SMEs

Designing tools: Overview of the tools

European Commission:
Network for National IP Offices

Toolbox

www.innovaccess.eu
Designing tools: Overview of the tools

IP Office Malaysia:
Mobile Campaign for IPR awareness and network fostering

www.myipo.gov.my/kempen-promosi
Designing tools: Overview of the tools

UK IP Office:

The Armour Game: choosing the most suitable IPR for the given assets

www.ipo.gov.uk/whyuse/armour.htm
Designing tools: Overview of the tools

Do you know any other tool that we could add to the analysis?
Designing tools: Developing the Criteria

How should this analysis be

Eleven Criteria were created based on

- Literature
- Features of the tools
### Designing tools: Developing the Criteria

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Sub-criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of IPR</td>
<td>Copyright, Patents, Trademarks, Industrial Design and Geographical Indication.</td>
</tr>
<tr>
<td>Country of Origin</td>
<td>There are no pre-defined sub-criteria. The country or region of origin will be named.</td>
</tr>
<tr>
<td>Media and Technology</td>
<td>Text, Audio, Visuals, Video, Games and Simulations, Lectures Face-to-face or Online and Integration.</td>
</tr>
<tr>
<td>Learning Activities</td>
<td>Sub-criteria: Assimilative, Adaptive, Communicative, Productive and Experimental.</td>
</tr>
<tr>
<td>Languages</td>
<td>There are pre-defined no sub-criteria. The languages available will be named.</td>
</tr>
<tr>
<td>Technology Use</td>
<td>Augmented, Blended and Online.</td>
</tr>
<tr>
<td>Workload</td>
<td>Few minutes, Few hours, Approximately a day, Less than a week, Approximately a week, Less than a month and Regular interaction.</td>
</tr>
<tr>
<td>Geographical Reach</td>
<td>Regional, National, Group of countries and Global.</td>
</tr>
<tr>
<td>Target Group</td>
<td>IP Managers, SME Executives and Basic Learners.</td>
</tr>
<tr>
<td>Evaluation Methods and Certificates</td>
<td>Evaluation and Certificates, Only Evaluation, Only Certificates, Simple Evaluation within the process and No Evaluation or Certificates.</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Level of accessibility through pay-walls. Sub-criteria: Payment required, Registration required and Free Access.</td>
</tr>
</tbody>
</table>
What other criteria do you think should also be analyzed?
Designing tools: Analysis

- Analysis of the Educational/Academic Tools
- Analysis of the Innovative Online Tools
Designing tools: Analysis

- Types of IPR
- Country of Origin
- Media and Technology
- Learning Activities
- Languages
- Technology Use
- Workload
- Geographical Reach
- Target Group
- Evaluation Methods and Certificates
- Accessibility
Designing tools: Analysis

<table>
<thead>
<tr>
<th>Criteria</th>
<th>IP Panorama</th>
<th>MyIPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of IPR</td>
<td>All types of IPR</td>
<td>All types of IPR</td>
</tr>
<tr>
<td>Country of Origin</td>
<td>Europe/Korea</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Media and Technology</td>
<td>Integration of Text, Visuals and Videos</td>
<td>Integration of Text, Visuals and F2F Lectures</td>
</tr>
<tr>
<td>Learning Activities</td>
<td>Assimilative, Experimental</td>
<td>Assimilative, Communicative</td>
</tr>
<tr>
<td>Languages</td>
<td>English, Spanish, Arabic, French, Thai, Hungarian and Vietnamese</td>
<td>English</td>
</tr>
<tr>
<td>Technology Use</td>
<td>Online</td>
<td>Augmented</td>
</tr>
<tr>
<td>Workload</td>
<td>Less than a week</td>
<td>Less than a week</td>
</tr>
<tr>
<td>Geographical Reach</td>
<td>Global</td>
<td>National</td>
</tr>
<tr>
<td>Target Group</td>
<td>SME Executives, Basic Learners</td>
<td>SME Executives</td>
</tr>
<tr>
<td>Evaluations Methods and Certificates</td>
<td>Simple Evaluation within the process</td>
<td>Not informed</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Free Access</td>
<td>Not informed</td>
</tr>
</tbody>
</table>

**Customization:** Based on the criteria: Learning Activities, Languages, Geographical Reach and Target Group.
Designing tools: Recommendations

- **Customization** – New tools should be more customized for each single user to reach the SMEs and prepare them according to their real and specific needs.

- **Interaction** – Tools should engage the user while having them participating and contributing with the learning process. This can be achieved with more interactive activities within the tool.

- **Reliability** – Users will trust tools that are providing high quality content, structured by a reliable organization and providing ways for the user to evaluate the content and provide feedback to improve it.
Designing tools: Recommendations

What else would you recommend while designing a tool?
Any thoughts about the questions asked?

Here they are again:

1. What other criteria do you think should also be analyzed?
2. Do you know any other tool that we might add to the analysis
3. What else would you recommend while designing a tool

Any other suggestion or comment?
Thank you!

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