PhD in DESIGN - 38th cycle

PNRR_351_PUBBL_AMMIN Research Field: DIGITAL AND INTERACTION DESIGN IN THE TOURISM FIELD

<table>
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<th>Monthly net income of PhD scholarship (max 36 months)</th>
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<td>€ 1195.5</td>
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<td>In case of a change of the welfare rates during the three-year period, the amount could be modified.</td>
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<th>Context of the research activity</th>
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| Italy is one of the most affected countries by the economic crisis resulting from the pandemic, especially in the tourism sector. However, COVID19 has been an "opportunity" to rediscover the sector's relevance for our country, creating an innovative, sustainable, digitized and accessible travel experience to meet tourists' changing needs. In this context, an immediate challenge faced by the Ministry of Tourism is the restart of tourism with policies and projects that can overcome the sector's weaknesses. In this context, the Ministry has fielded long-term measures to relaunch the sector, such as NRRP and other funds. Among these measures, there is the "Tourism Digital Hub", the digital transformation program launched by the Ministry of Tourism as part of the M1C3 component of the NRRP. The ambitious goal of this program is to create a Tourism Digital Hub (TDH), enabling the connection of the entire tourism ecosystem and adopting a data-driven approach. The Hub will also provide a minimum set of digital services and tools, enabling operators to increase the quality of the digital offer.

Motivation and objectives of the research in this field

In particular, Tourism Digital Hub aims at 3 strategic objectives: Hub as a bridge between tourists and the whole ecosystem: the tourist and its user experience is at the heart of the Hub. The Hub will digitize information related to the touristic offer to support touristic journey in destination choice and travel planning. Hub as Big data aggregator and data asset enhancement in an open data approach. Thanks to the interoperability of information systems, the Hub will...
collect, aggregate, process and expose sectorial data, exploiting data analytics and artificial intelligence tools. These data will be accessible to all Operators, enabling the segmentation of the demand (for example, by the profiling of tourism flows) and hence the customization and the improvement of their offering. This information will support decision making processes and public policy choices as well. Hub as an integrated system to increase the digitization of the tourism offer. The Hub will make available a set of information services and tools to public and private operators currently lagging behind, so that they can accelerate the process towards digitization. In this way, it will be possible to support them in expanding and boosting the quality of services provided. In this context, the PhD research could better frame the three objectives by moving from a human-centred design approach, defining implementing strategies and metrics to assess its potential impact. Furthermore, it is essential that skills and methodologies of service design and co-creation of services, as well as UX/UI, are included and used. The PhD research will be further supported by Aarhus University, which has decades of experience in interaction design/humancomputer interaction. It will host the candidate for six months, helping both with the methodological robustness of the research and its assessment. The PhD research will be carried out with an Action Research approach, exploiting the strong relationship with the Ministry to conduct experimentations on the field. Analyzing operative items, the PhD student will focus her or his activity on the definition and creation of interface features that will constitute the user experience of future consumers. In this area, the main goal is the generation of a digital service developed on the principal of user centricity, which means to make the user journey on the Hub efficient, accessible and practical. During the permanence at the Ministry, the PhD student involved in the research will be part of the teams.
composed by referents of the Ministry, various stakeholders (such as Region, Privates,..) and the product providers, with variegate competences, that will exploit the agile, the co-working and the co-design approaches in order to implement high value digital services.

On the one hand, the paradigm of co-working, together with the agile approach, will be used in the creation of dedicated teams with a multitude of skills that are going to design the digital services; on the other hand, the co-design approach will be used to define, schedule, design and create requirements for our products.

### Educational objectives

The PhD scholarship is finalized to form experts able to bring the design methodology within the Public Administration. This competence will be integrated by elements from other disciplines like graphic design, visual arts, and information technology, aspects of the field of the tourism and the methodologies used in the program, such as agile, co-working and co-design. The PhD student will be able to operate in a Public Administration setting, understanding its dynamics and being able to bring innovation.

### Job opportunities

The PHD student will be prepared to take on roles in the public administration as interaction design/digitization expert with the ability to perform activities such as:

- **Defining and projecting digital services of the hub by working in agile teams.**
- **Defining and projecting the artistic and visual strategy of the IT product**, in order to optimize the user experience of the client.
- Caring the **graphic and the visual communication of user interfaces**, to make it accessible and friendly for the final user.
- Caring the visual communication and the interactions between user and the touchpoints, **through a dynamic view of the product**, focusing on the user experience to optimize the digital journey of the community.
Converting the graphical and interactive requisites projected into code, considering the different forms of tenant through which the service is exposed (mobile app, website, computer app, ...).

| Composition of the research group | 1 Full Professors  
|                                | 1 Associated Professors  
|                                | 0 Assistant Professors  
|                                | 0 PhD Students  
| Name of the research directors | Davide Spallazzo  

**Contacts**

email: davide.spallazzo@polimi.it, phone 02.23997809

**Additional support - Financial aid per PhD student per year (gross amount)**

| Housing - Foreign Students | --  
| Housing - Out-of-town residents (more than 80Km out of Milano) | --  

**Scholarship Increase for a period abroad**

| Amount monthly | 834.85 €  
| By number of months | 6  

**National Operational Program for Research and Innovation**

| Company where the candidate will attend the stage (name and brief description) | Ministry of Tourism  
| By number of months at the company | 12  
| Institution or company where the candidate will spend the period abroad (name and brief description) | Aarhus University  
| By number of months abroad | 6  

**Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information**

Educational activities (purchase of study books and material, funding for participation in courses, summer schools, workshops and conferences):

financial aid per PhD student

max 4,872,90 euros per student (total for 3 years)

Teaching assistantship: availability of funding in recognition of supporting teaching activities by the PhD student there are various forms of financial aid both for research and teaching activities. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.

Computer availability: 1st year, 2nd year and 3rd year: Each research group will supply PhD
student with a computer, if necessary. Desk availability: 1st year, 2nd year and 3rd year: Each research group will supply phd student with a desk.