



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 40th cycle

THEMATIC Research Field: THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE STRATEGIC RECONFIGURATION CHOICES OF MULTINATIONAL ENTERPRISES (MNES)

Monthly net income of PhDscholarship (max 36 months)

€ 1500.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field

Within an increasingly VUCA (volatile, uncertain, complex, ambiguous) context, reconfiguration of GVCs has become a mantra for increasing resilience and competitiveness at the firm and at the country level, thus implying the need for changes in strategic decisions concerning localization or entry mode choices in foreign markets. Digital-enabled, resilient and sustainable production and supply chain processes do play a crucial role in fostering reconfiguration and international competitiveness of companies, GVCs, and territories.

In particular, AI technologies have become essential tools for enhancing operational efficiency, decision-making, and innovation globally. In fact, AI technologies (e.g. machine learning, natural language processing, artificial neural networks, agent-based systems, genetic algorithms, among many others) can be instrumental in addressing the complex challenges associated with global operations as AI integration significantly empowers businesses in navigating intricate global environments by facilitating advanced predictive analytics, task automation, and leveraging data-driven insights. Using AI in business is critical for improving productivity, competitiveness, and decision-making, especially in the context of multinational enterprises (MNEs).

The present project aims to:

(i) develop a framework to integrate AI-supported decisions within traditional theories of international growth



	<p>and strategic reconfiguration.</p> <p>(ii) Develop scenarios and assess best practices for helping companies to navigate the increasing VUCA world by leveraging AI related and supported tools.</p> <p>Attention will be given both to large MNEs and smaller companies.</p>
<p>Methods and techniques that will be developed and used to carry out the research</p>	<p>The identified themes will be analyzed by adopting conceptual and empirical lenses. In fact, the research will be both theoretical (development of economic models based on academic literature) and empirical (gathering of primary and secondary data). Advanced statistic and econometric techniques will be applied in order to test research hypotheses. Some qualitative analysis (e.g. based on case studies) could be also considered to enrich the evidence and strengthen the development of policy implications.</p>
<p>Educational objectives</p>	<p>Acquiring a comprehensive knowledge of the literature on the adoption of AI and the impact on decision-making processes, also in a global context, and developing the capacity of elaborating frameworks to guide both companies and policymakers.</p> <p>Acquiring advanced statistical and econometric skills for testing theoretical hypotheses and/or developing qualitative case studies.</p> <p>Writing scientific papers to be published in top international journals but also developing reports for circulating knowledge to several stakeholders and increasing impact.</p>
<p>Job opportunities</p>	<p>AI technologies are adopted by multinational companies to deal with strategic decisions in increasingly complex and uncertain scenarios. Hence, students earning a Ph.D. in this field can yearn for not only an academic career, but also a career in multinational companies and research centers in national and international institutions.</p>
<p>Composition of the research group</p>	<p>2 Full Professors 1 Associated Professors 1 Assistant Professors 1 PhD Students</p>
<p>Name of the research directors</p>	<p>Lucia Piscitello, Luca Grilli</p>



Contacts
lucia.piscitello@polimi.it

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	750.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>Teaching assistantship, computer availability, desk availability.</p> <ul style="list-style-type: none"> •Involvement in projects: "For the overall development of their capabilities, PhD candidates will work on sinergical projects to favour empirical data collection and network development for their career. Projects will give candidates the opportunity to work in group (peers and other senior professors)". •Teaching and tutoring: "If coherent with the development of their doctoral program, the PhD candidate will have the opportunity to be involved in: teaching activities, tutoring to master students, tutoring to PhD candidates for administrative processes". <p>Funding for educational activities: 6.100,00 Euros for three years.</p>