

innovations

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Call for papers – Special Issue

Standards as a Means of Strengthening Innovative Business: New standards for a better world

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The world is facing environmental, climate, health and security challenges that have shown the interdependence of economies and societies and the need to address situations in a coordinated manner (Nadel et al., 2016), (Debref, 2017). Since there is no supranational governance, this coordination is more and more achieved through agreements, treaties, codes and practices defined in international organizations. In this special issue, we will focus on voluntary standards defined in international standardization organizations (ISO, IEC, ITU, CEN/CENELEC, ...). The use of these voluntary standards to address international environmental and societal issues is increasingly important, as shown by the exponential figures related to the adoption of ISO 9000 standards for quality certification, ISO 14000 for the environment, ISO 26000 for Corporate Social Responsibility and European programs aiming at transforming the economy (the European Green Deal, the Farm-to-Fork program) rely on standards as vectors of adoption of new behaviours.

Standards are devices, rules, codes and practices that define and provide common references. This special issue on standardization is justified in a context of innovation, since standards are essential to enable the transformation of inventions into innovations (EC Scoping Study, 2022). Whether the innovation is technical, organizational (Marcandella et al., 2012) or managerial, bringing it to market requires a precise definition, the specification of the properties, and a clear way of measuring and controlling the promised performances ; some authors speak of “frugal innovations” (Micaelli et al., 2016), (Haudeville et al., 2016). This requires different types of standards such as definitional, testing, product, organizational or service, public or private

standards, de facto or de jure, mandatory or voluntary standards. Standards are by nature voluntary but their adoption can be made mandatory by ministerial rules or European Directives. Since the New Approach was introduced in 1985, the reference to standards has increased tenfold and legal experts are surprised by the strength of these voluntary standards that they call “soft law”.

According to the definition of the EU Commission, standardization requires the collaboration between industry, consumers, public authorities and all relevant stakeholders to determine technical specifications based on a consensus. The process of making standards within Standard Development Organizations (SDOs) has been studied by many researchers, focusing on the actions (Cargill, 1989 ; Libicki, 1995 ; Jakobs, 1998 ; Jakobs *et al.*, 2001), the motivations (Mione, 1994, 2009 ; Leiponen, 2008 ; Riillo, 2013 ; Kurokawa, 2013 ; Wakke *et al.*, 2015 ; Blind, Mangelsdorf, 2016 ; Wiegman *et al.*, 2020 ; Blind *et al.*, 2021) and the strategies (Garud *et al.*, 2002 ; Castka, Balzarova, 2008, 2018 ; Balzarova, Castka, 2012 ; Yami *et al.*, 2015) of firms participating in Standardization Organizations. Some of them consider the companies playing a key role as institutional entrepreneurs (Eisenstadt, 1980 ; Di Maggio, 1988 ; Hargrave, Van de Ven, 2006 ; Weick, 2011 ; Narayanan, Chen, 2012 ; Jain, 2012 ; Hardy, MacGuire, 2017) and view the work they achieve as institutional work (Lawrence *et al.*, 2002 ; Greenwood *et al.*, 2002 ; Lawrence, Suddaby, 2006, Greenwood, Suddaby, 2006 ; Lawrence *et al.*, 2009). Other researchers analyze the drafting of the document which can pose problems (use of the English language for drafting standards, by experts who are not native English speakers) and the benefits of the use of new technologies to drafting standards (ontologies, Smart Standards, Digital Transformation) (Cutting Decelle *et al.*, 2018 ; De Ribaupierre *et al.*, 2021).

The use of this instrument and its success raise a certain number of questions, first of all related to the process of drafting standards :

- How can innovation results from research projects be best transferred into standards?
- What are the specific roles of cartel and lobbying in setting standards?
- What about the intellectual property issues related to the ex-ante definition of standards?
- Which factors affect the chances that firms will engage with the formal standardization process?
- Which factors affect the chances the firms will remain committed to the standardization process?
- What about the relations between labels and standards?

Once standards are developed in standards committees or consortia they enter the market and the question is thus to determine which factors affect the chances that they achieve dominance (Adatto, 2018). Firms involved in the standards organizations can try to influence the outcome of standards battles. Although ample research has focused on this stage of the standardization process these scholars mostly study a set of standards that compete for standards dominance and in that case multiple factors for standards dominance are taken into account (Van de Kaa *et al.*, 2011, 2017, 2018, 2021 ; Dean Hartigh *et al.*, 2016). Researchers analyse competitive approaches to consider standards wars (Shapiro, Varian, 2000), alliances to support standards, and cooperation (Mione, 2018; Riillo *et al.*, 2022). We are also specifically interested in research focusing on dominant designs and platforms and deductive types of research. Questions include:

- What is the effect of network characteristics around a standard on the chances that the standard achieves dominance?
- What is the effect of a standards support strategy (or elements thereof) on the chances that the standard achieves dominance?
- What is the effect of complementary assets (needed for pursuing the standards support strategy) on the chances that the standard achieves dominance?
- What are the situations in which rival standards coexist without dominance?

The following question is to know whether standards will really be adopted by firms. We call for research that studies standards that have become dominant but are not adopted by (specific) firms. We are interested in research that studies questions such as:

- What about the obligation to respect the standards (e.g. for semiconductors or electronic devices)?
- Which are typical examples of standards that have achieved dominance but are not adopted by stakeholders and which type of standards are most prone to this behaviour? / phenomenon?
- What factors affect the probability for a standard to be adopted?
- Can these factors be influenced and by whom?

Finally, we consider the effects, the results of the adoption of standards.

- What about the potential limits of standards?
- Are standards barriers to entry and mobility?

- Can effects be identified at the macro level, at the micro level?
- Does compliance with standards produce the expected effects?
- Do standards succeed in leading to a better world?

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Timetable for submission and acceptance of papers:

- **31/03/2023**: Deadline for complete manuscripts through online paper submission: <https://jiem.manuscriptmanager.net>
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- **31/03/2024**: Final notification for acceptance

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