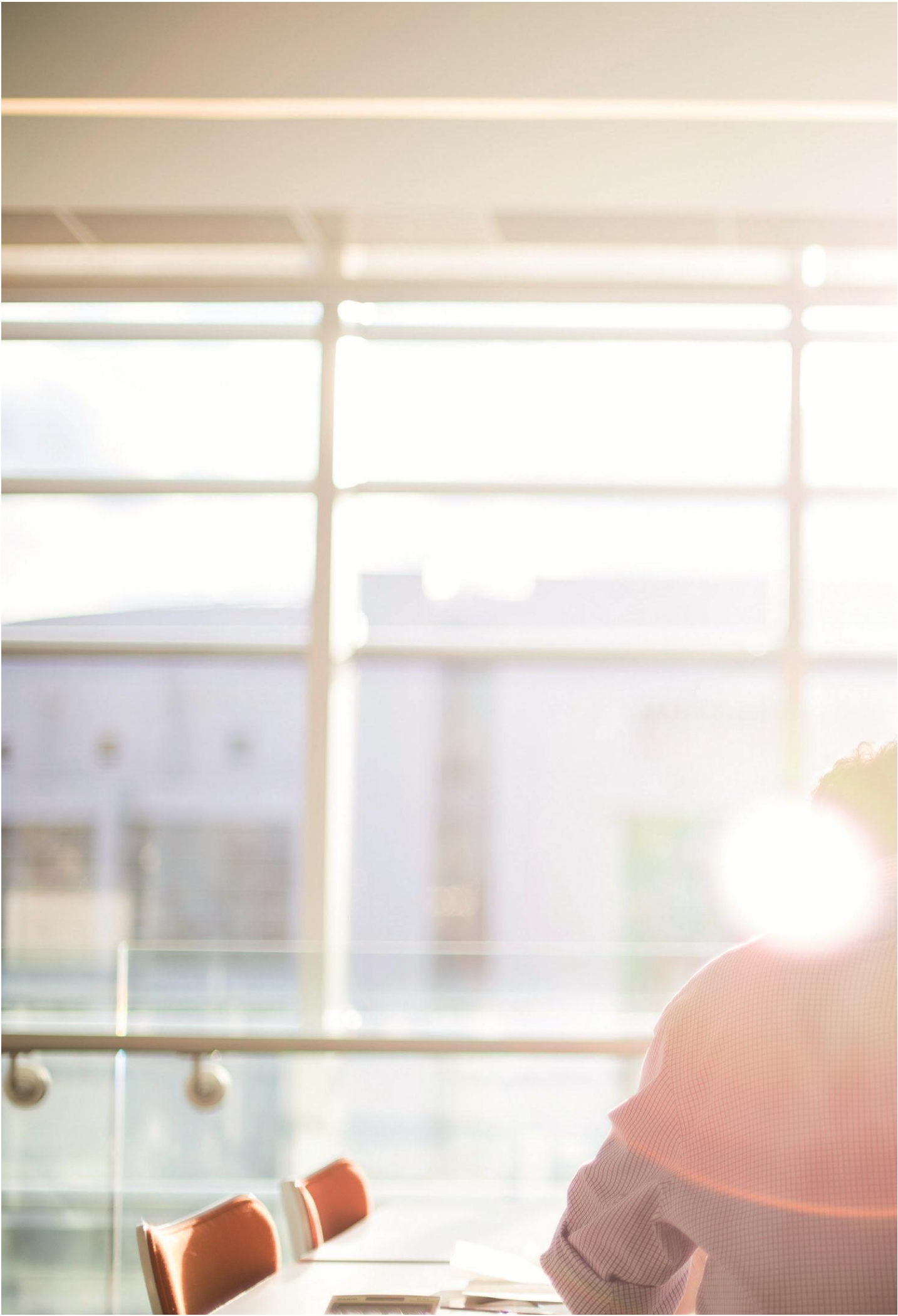# Working Paper

Digitalization of SSE: MutualData as an Innovative Tool
for Impact Measurement and Transparency in
the Portuguese Mutual Sector

Cátia COHEN, Rui COSTA & Vanessa PALMA

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Digitalization of SSE: MutualData as an Innovative Tool for Impact Measurement and Transparency in the Portuguese Mutual Sector[*]

Cátia Cohen[1], Rui Costa[2] and Vanessa Palma[3]

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Abstract

The Social and Solidarity Economy (SSE) constitutes a pivotal pillar of social cohesion and sustainable development, providing complementary responses to both the State and the private sector in the delivery of essential services. Nevertheless, the absence of structured and up-to-date data concerning the activity and impact of mutual associations continues to hinder their public visibility, institutional recognition, and influence in the formulation of public policies.

To address this lacuna, MutualData has been conceived as an innovative digital infrastructure that centralizes, digitizes, and analyses data on mutual associations in Portugal. Its primary objective is to strengthen information management capacities while promoting transparency, efficiency, and accountability within the sector.

Currently under development, MutualData seeks not only to collect and systematize data but also to establish a robust foundation for concrete action, enabling mutual associations to articulate their social and economic impact with clarity.

This article examines the development and implementation of MutualData, emphasizing the challenges of data collection within the SSE, the objectives of the platform, the adopted methodology, and the expected outcomes. By providing updated and accessible data on the activities of mutual associations, their economic and social impact, the scope of services delivered, and sectoral trends, MutualData aims to modernize the mutualist sector, strengthen its relevance both within the social economy and the wider economy, inform public policymaking, and promote greater recognition of mutual associations as pillars of social cohesion and the European social model.

Keywords: MutualData, mutual associations, social impact, data digitalization, social and solidarity economy, transparency

JEL Codes: L31, O35, H75, I38, D83, C81

Introduction

The Social and Solidarity Economy (SSE) has consolidated itself as a central pillar of social cohesion, economic sustainability, and social innovation, both in Europe and globally.

According to the European Commission (EC), the SSE in the European Union (EU) encompasses over 4.3 million entities (including cooperatives, mutual societies, associations, and foundations) and employs 11.5 million people, corresponding to 6.3% of total employment. Collectively, the sector generates at least 912 billion euros in annual turnover, with particularly significant contributions in healthcare and social services (3.3 million jobs), education (702 thousand jobs), and arts and culture (622 thousand jobs) (EC, 2024). Beyond its economic magnitude, the SSE contributes transversally to the achievement of the 2030 Agenda for Sustainable Development, having been recognized by the United Nations as a strategic actor with relevance across all Sustainable Development Goals (United Nations, 2024). This positioning underscores its importance as a structural pillar in advancing well-being, decent work, social equity, and sustainable economic models.

In Portugal, the Social Economy Satellite Account 2019–2020 (INE & CASES, 2023) reported 73,851 social economy entities, accounting for 3.2% of Gross Value Added (GVA) and 5.2% of total employment in 2020. Among these, 91 mutual associations play a distinctive role as non-profit institutions organized to promote mutual aid among members. They provide health and social security benefits intended to mitigate the consequences of uncertain and future events related to life and health, and hold the legal status of Private Institutions of Social Solidarity (*Instituições Particulares de Solidariedade Social*). According to the same source, in 2020 these entities generated 327 million euros in GVA and 189 million euros in wages, while sustaining more than 4,900 jobs. Furthermore, over 80% of Portuguese mutual associations are classified as "mature" (50–99 years) or "centenary" (≥100 years), attesting to their institutional resilience and longevity.

This quantitative profile highlights the socio-economic significance of mutual associations in Portugal, particularly in critical areas such as healthcare, social protection, solidarity-based action, and community welfare. Notwithstanding, the sector continues to face a structural deficit: the lack of systematized, comparable, and timely data on its activities and outcomes. This deficit curtails its visibility, weakens its capacity to influence policy design, and constrains the institutional recognition of its socio-economic contribution.

In response, Associação Portuguesa de Mutualidades (APM-RedeMut), the national representative body of Portuguese mutualities, launched *Observatório Mutualista* (Mutualist Observatory) in 2016 as the first initiative aimed at collecting and systematizing data on the mutualist sector in Portugal. Although limited in scope and primarily descriptive in orientation, *Observatório Mutualista* constituted a pioneering milestone by enabling for the first time the quantification and analysis of mutualist activity. Its original purpose was to provide APM-RedeMut with

a structured knowledge base capable of identifying existing benefits, mapping territorial needs in healthcare and social protection, characterizing social services and instrumental economic activities, and diagnosing organizational and training requirements. By establishing itself as a repository of reliable information, *Observatório Mutualista* aimed to support strategic innovation, reinforce institutional recognition of mutualities, and enhance their capacity to respond sustainably and complementarily to the needs of members and society at large.

The MutualData project emerges as the natural extension of this endeavor. Developed by APM-RedeMut in partnership with the Nova School of Business & Economics Data, Operations and Technology Knowledge Center (NOVA SBE DOT KC), it represents a substantial advance in the systematization and digitalization of data. By integrating the empirical knowledge of *Observatório Mutualista* with advanced methodologies of data analysis and visualization, MutualData constitutes a transformative initiative. Moreover, its inclusion within the Operational Programme for Demography, Skills and Inclusion (*Programa Operacional Demografia, Qualificações e Inclusão*), under the auspices of the Portuguese Social Economy Council (*Conselho Nacional para a Economia Social*), provides it with strategic and institutional reinforcement.

MutualData is thus conceived not merely as a technical platform but as a strategic instrument of sectoral modernization. By systematizing and digitizing data, it seeks simultaneously to strengthen the internal management of mutual associations, enhance their capacity to demonstrate socio-economic impact, increase public legitimacy, and contribute to evidence-based policymaking. This article examines the conceptual, methodological, and strategic underpinnings of MutualData, its expected outcomes, and its relevance for the future of both the Portuguese and European mutualist sectors.

Literature Review

Digitalization has been recognized by the EC as a strategic driver of transformation within the SSE (EC, 2020), generating efficiency gains, greater transparency, and enhanced innovation. At the same time, the adoption of digital technologies introduces significant challenges in terms of skills and resources, governance, and data security, while also requiring organizational adaptation. To ensure that the benefits are realized equitably, inclusive policies and continuous capacity-building are indispensable (OECD, 2024).

The Social Economy Action Plan (EC, 2021) identifies digitalization, social innovation, and the systematic collection of statistical data as central elements in enhancing the contribution of the SSE to the development of the EU. Among the proposed measures are the digital upskilling of organizations, the adaptation of legal and financial frameworks to foster technological adoption, and the creation of a code of conduct for data management and sharing within the sector. The plan further emphasizes the importance of mapping and gathering both qualitative and

quantitative information on the SSE, with a view to strengthening its visibility, credibility, and policy impact.

In convergence, the Transition Pathway for the Proximity and Social Economy (EC, 2023) places the digital transition, alongside the green transition, at the core of the EU policy agenda for this ecosystem. It highlights skills gaps, the need for systems interoperability, and the standardization of indicators for measuring results and impact. The document argues that structured and comparable data, investment in open data, and robust accountability mechanisms are preconditions for transparency and modernization within the sector.

Within this framework, the measurement of social impact acquires a central role for the sustainability of the SSE. According to the Organization for Economic Co-operation and Development (OECD, 2023), impact measurement enables the legitimation of the value created by SSE organizations, facilitates access to financing, and enhances influence over public policy. Complementing this, the joint OECD & EC guide (2024) stresses the importance of methodologies adapted to the diversity of the SSE, so as to adequately capture the plurality of models and practices in operation (OECD & EC, 2024).

The recent literature further demonstrates the close connection between digital transformation and social innovation. Studies have shown that digital transformation expands the capacity of social organizations to address complex problems and have identified positive correlations between digitalization, sustainability, and the Sustainable Development Goals (SDGs) (Nagy & Somosi, 2022; Nosratabadi et al., 2023). This theoretical reflection underscores the importance of systematic information gathering and the production of reliable, comparable data as prerequisites for strengthening the visibility of the SSE and its integration into public policymaking.

This theoretical reflection confirms the importance of systematically collecting reliable and comparable data as a means of strengthening the visibility of the SSE and promoting its integration into public policies. In Portugal, this need is addressed through the regular production of statistics by the Social Economy Satellite Account, which provides a macroeconomic overview of the sector, and through innovative initiatives such as the *Base de Dados Social* (Social Database). The latter, developed under the Social Equity Initiative in partnership with the "la Caixa" Foundation, BPI, and Nova SBE, has become the largest and most comprehensive open-data platform on the Portuguese social ecosystem.

Base de Dados Social has as its primary mission the promotion of transparency, collaboration, and visibility of the Portuguese SSE, representing a significant advancement in the sector's data landscape. At present, it includes the registration of more than 20,500 organizations, accounting for approximately 28% of the total universe of social organizations in Portugal. This breadth ensures that the platform offers a wide-ranging and diversified view of the sector, consolidating information that constitutes an important resource for enabling different stakeholders to access and effectively utilize the data.

Nevertheless, beyond such macro-level data, there remains a need for statistical analyses tailored to each organizational family within the SSE, in order to adequately capture their specificities and internal dynamics. In the case of mutual associations, this need is particularly acute given their focus on critical domains of social protection, healthcare, and community support—areas for which detailed empirical evidence is still scarce. The absence of systematic data not only constrains the planning and innovation capacities of mutual associations themselves but also undermines the design of appropriate and evidence-based public policies (Bouchard & Rousselière, 2015; Salamon & Sokolowski, 2016).

It is within this context that MutualData emerges as both an accountability mechanism and a policymaking resource, by producing rigorous and comparable statistical information on the activities of Portuguese mutual associations. The construction of specific typologies is essential for understanding the diversity of organizational models, a contribution that MutualData is particularly well positioned to provide to the mutualist sector (Defourny & Nyssens, 2017). Furthermore, as a resource for evidence-based decision-making, this initiative has the potential to strengthen sectoral transparency, support the formulation of organizational innovation strategies (Pestoff, 2014), and consolidate the recognition of mutual associations within the broader ecosystem of the SSE. This trajectory aligns with international trends that emphasize the diversity of organizational models in the third sector (Evers & Laville, 2004) and the growing salience of social innovation and its integration into public policy frameworks (OECD, 2023).

In this regard, MutualData positions itself as a complementary, mutualist-focused instrument, distinguished by its origins in the concrete experience initiated by APM-RedeMut through *Observatório Mutualista* (2016), now expanded and digitized in partnership with the Nova SBE DOT KC.

MutualData

MutualData arises from the need to address the statistical information gap concerning mutual associations in Portugal and is situated within the broader framework of the modernization and strengthening of the Portuguese mutualist sector. This is pursued through the integration of practices of digitalization, information management, and the measurement of social and economic impact.

The objectives of the project may be grouped into five principal dimensions:

i. To construct and consolidate a unified database on mutual associations in Portugal, intended as the first systematic and digital repository of information on mutualities in the country. This initiative seeks to overcome the current fragmentation and dispersion of available information, while enabling comparability across organizations and facilitating longitudinal analyses.

ii. To build the capacity of mutual associations in information management, fostering digital and methodological competences that enable organizations

not only to contribute to the database but also to employ the information for enhancing their own decision-making and strategic planning.

iii. To promote transparency and accountability within the mutualist sector by providing reports, dashboards, and indicators that clearly and accessibly communicate the economic and social impact of mutualism.

iv. To provide empirical evidence of the impact of mutual associations, encompassing both economic dimensions (revenues, expenditures, investment, employment creation) and social dimensions (beneficiaries reached, range of services delivered, contribution to social cohesion).

v. To contribute to the formulation of evidence-based public policies by providing updated and reliable data capable of supporting institutional dialogue with national and European policymakers, thereby reinforcing the integration of mutualism into SSE strategies on an evidential basis.

Thus, the objectives of MutualData are structured around three interrelated dimensions: the organizational (focused on internal capacity-building), the institutional (aimed at enhancing recognition and political influence), and the scientific (dedicated to the production of reliable and accessible data for research).

The project is intended to cover the entire spectrum of mutual associations currently operating in Portugal, independent of their size or degree of digitalization.

Methodology

The methodology of MutualData is grounded in a participatory and co-creation approach, combining the empirical knowledge of APM-RedeMut, which has coordinated *Observatório Mutualista* since 2016, with the technical and academic expertise of the Nova SBE DOT KC in the development of social databases and interactive visualization tools.

The data collection strategy for the mutualist sector has evolved incrementally, generating progressive improvements in standardization, coverage, and auditability.

i. Excel Questionnaire (2016) – Exploratory Phase

- Objective: To identify and collect core variables concerning organizational activity, resources, and beneficiaries.
- Instrument: An Excel-based questionnaire distributed to mutual associations.
- Advantages: Low financial cost, rapid deployment, and proximity to the field context.
- Limitations: Heterogeneity in responses, heightened susceptibility to manual error, and limited traceability across versions.

ii.   Interview Based on the Questionnaire (2018) – Guided Validation Phase

- Objective: To enhance the semantic consistency of responses and reduce interpretative asymmetries.
- Instrument: Structured interviews conducted by the research team, employing the questionnaire script with pre-filled data from 2016.
- Advantages: Conceptual harmonization, real-time clarification, and reduced item non-response.
- Limitations: High consumption of time and resources, and slower coverage.

iii.   Electronic Questionnaire (2023) – Digitalization Phase

- Objective: To accelerate data collection, standardize formats, and incorporate automatic validation mechanisms.
- Instrument: An electronic form with embedded validation rules and mandatory fields.
- Advantages: Improved data quality, reduced risk of transcription errors, and structured data export.
- Limitations: Requirements for digital literacy and the need for technical support for less digitally mature organizations.

iv.   Online Questionnaire within Base de Dados Social (2025) – Platform and Integration Phase

- Objective: To consolidate a central repository with recurrent updates and audit trails (logs), enabling the construction of time series and benchmarking analyses.
- Instrument: Direct online data collection through a web-based platform with user authentication.
- Advantages: Interoperability, transparency through the public release of aggregated data, and strengthened data governance (profiles, permissions).
- Limitations: Continuous maintenance requirements, as well as the need for technical support and training.

These developments are also summarized in *Table 1*.

The incremental evolution of the data collection process enables (i) the harmonization of definitions and variables, (ii) the mitigation of errors and omissions, (iii) the enhancement of comparability across mutual associations and over time, and (iv) the establishment of conditions for both auditability and reproducibility. Such progress, however, necessitates digital capacity-building and targeted support for organizations with lower levels of technological maturity. To safeguard longitudinal consistency, a stable core of indicators has been preserved.

The transition to an online platform was accompanied by the implementation of comprehensive data governance procedures (including access profiling, edit logs, and validation protocols) as well as adherence to established principles of data protection, namely minimization, statistical purpose limitation, and aggregation

for public dissemination. These measures ensure conformity with the prevailing regulatory framework, in particular the General Data Protection Regulation.

Table 1 – Evolution of Mutual Data

Phase/Year	Instrument	Main Characteristics	Limitations
2016	Excel Questionnaire	Initial collection of core variables, low cost, close proximity to field realities	Heterogeneous responses, risk of manual error, lack of version traceability
2018	Structured Interview	Questionnaire-based script, conceptual harmonization, real-time clarification	High consumption of time and resources, more limited coverage
2023	Electronic Questionnaire	Digital form, automatic validation, standardization	Requirement of digital literacy, need for technical support
2025	Online Questionnaire within Base de Dados Social platform	Web-based data collection, interoperability, transparency, data governance	Continuous maintenance required, technical support and training

Source: MutualData, 2025

At the time of writing, the data collection process for MutualData remains in progress. Accordingly, the results reported in this article must be interpreted as provisional and subject to subsequent revision as additional responses are incorporated and validated.

The design of the MutualData questionnaire was guided by modular architecture, organized into thematic blocks that reflect the diverse dimensions of activity within mutual associations. This structure was conceived to integrate organizational characterization variables with variables related to activity and impact, thereby enabling the systematic collection of both quantitative data (e.g., membership figures, employment, service users, medical procedures, costs, and revenues) and qualitative data (e.g., organizational purposes, existence of conventions, and typologies of services). Such an approach facilitates the construction of comparable indicators across mutual associations while also enabling a comprehensive interpretation of the sector in five principal domains: organizational identification, healthcare, complementary welfare, social responses, and economic and instrumental activities.

The data collection strategy was designed to operate on an annual cycle, thereby supporting the construction of longitudinal time series capable of capturing the evolution of the sector. This methodological choice ensures sufficient periodic updating to inform public policy and strategic planning processes, while simultaneously avoiding excessive reporting burdens for mutual associations.

For the sake of clarity and systematizing the principal components of the questionnaire, *Table 2* presents a summary of its structure. The table delineates

the thematic blocks, the types of variables collected, and illustrative examples of specific fields.

Table 2 – Structure of the MutualData Questionnaire

Thematic Block	Type of Variables	Examples of Fields/Variables
Organizational Identification	General entity data	Name, year of establishment, NACE code, territorial scope, membership in representative structures
Infrastructure	Real estate assets	Number of owned/rented buildings or units; transfer to third parties
Membership and Governance	Associative structure	Number of individual members (by gender/age), collective members, composition of the General Assembly, Board of Directors, and Supervisory Board (by gender, qualifications, age)
Workforce and Services	Human resources	Number of employees (by gender, age, qualifications), employees with disabilities, service providers, volunteers, and voluntary board members
Mission and Activities	Areas of activity	Healthcare, complementary welfare, social responses, instrumental activities
Healthcare – Activity	Health services provided	Consultations, hospitalizations, surgeries, diagnostic and therapeutic tests, nursing services, alternative medicine
Healthcare – Conventions and Financing	Relationship with the Portuguese National Healthy System (NHS) and sustainability	Conventions, costs and revenues
Installed Capacity	Resources and infrastructure	Number of health units, medical offices, specialties with shortages, occupancy of medical offices
Complementary Welfare	Benefit schemes	Types of schemes; number of subscribers; mathematical reserves
Social Responses	Social Services	Types of services; installed capacity; number of users; costs and revenues
Social Responses – Cooperation Protocols	Relationship with Social Security	Cooperation protocols with Social Security
Economic and Instrumental Activities and Other Services	Economic activities	Services provided; associated financial data

Source: MutualData, 2025

The structure of the questionnaire, by virtue of its thematic breadth (encompassing operational data, impact variables, and sustainability indicators) and the level of detail of the variables collected, provides the basis for a transversal and integrated analysis

of the mutualist sector. Its modular design ensures comparability across organizations, supports the construction of longitudinal time series, and enables differentiated analyses by domain of activity.

The operationalization of this methodological architecture necessitates a phased and iterative implementation process.

i. Technical Development of the Platform

- Definition of functional requirements and key indicators in consultation with mutual associations.
- Construction of the questionnaire and its integration into the dedicated webpage of each mutual association within Base de Dados Social.
- Development of an aggregated data page within Base de Dados Social Platform.

ii. Testing and Presentation

- Pilot testing with a subset of mutual associations to assess comprehensibility and identify potential difficulties, followed by technical refinement and adjustment of questionnaire fields.
- Organization of a dedicated session on MutualData with mutual associations.
- Provision of a user manual for accessing both Base de Dados Social platform and MutualData.

iii. Data Collection and Analysis (2024)

- Implementation of the online data collection process. The questionnaire was distributed to mutual associations previously identified by APM-RedeMut and registered in Base de Dados Social platform, thereby ensuring coverage of the relevant universe.
- Reopening of the questionnaire after the first round of responses, accompanied by individualized support sessions to address gaps and harmonize interpretations.
- Statistical processing through descriptive analyses (means, distributions, percentages), regional comparisons, and correlation tests.

iv. Results and Public Dissemination

- Availability of the aggregated data page.
- Preparation of public reports and visualizations, with presentation of results in institutional and academic events.

The innovative character of the methodology lies in its dual dimension: scientific, through the application of advanced statistical and visualization methods, and participatory, through the direct involvement of mutual associations in the design, collection, and validation of data. Moreover, the inclusion of information on unused installed capacity makes it possible to identify growth potential and additional partnership opportunities with the state. This approach ensures that MutualData

is not merely a technical instrument but a process of organizational, sectoral, and forward-looking transformation.

From a technological innovation perspective, the development of MutualData is grounded in the use of existing digital resources, in particular Base de Dados Social platform, which provides the infrastructure for online data collection, secure storage, and the public dissemination of results. Integration within this architecture avoids duplication of efforts and ensures interoperability.

Preliminary Results

Although the data collection process is still underway, MutualData has already generated a set of preliminary findings, which remain subject to revision as additional information is incorporated. While not yet representative of the entire sector, these outputs provide valuable indications of emerging trends, as well as delineating the analytical categories and core variables underpinning the structure of the questionnaire.

It must be underscored that these findings are exploratory in nature: they serve primarily to demonstrate the methodological architecture of the project and to illustrate the first responses collected, but they do not yet allow for conclusive or generalizable inferences about the mutualist sector as a whole.

The preliminary results are based on responses from 26 mutual associations (29% of the total universe of 91 mutual associations recorded in the Social Economy Satellite Account 2019–2020). The survey was distributed to 81 organizations (representing 89% of the universe), which, in the context of MutualData, were considered active. Among the respondents, 96% correspond to mutual associations affiliated with APM-RedeMut.

The initial analysis of the data reveals that the mutual associations participating in MutualData display heterogeneous organizational profiles, encompassing both first-degree and second-degree mutual associations, the former composed of individual members and the latter of organizations of the first degree.

Their activities are predominantly national in scope, although they also have a regional and local presence, confirming the capillarity and territorial proximity characteristic of mutualism, as illustrated in *Figure 1*.

Figure 1 – Territorial Scope of Mutual Associations (Preliminary Data, 2024)
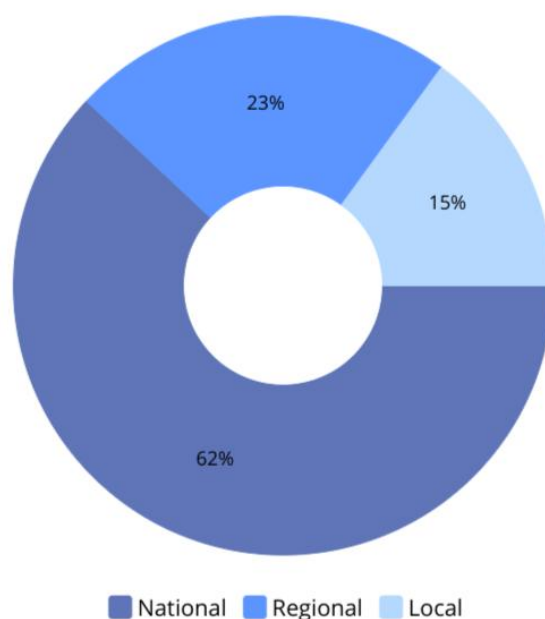
Source: MutualData, 2025

In terms of membership, the reported universe exceeds 780 thousand members, with a balanced gender distribution and an age structure dominated by individuals between 45 and 64 years of age (33%), followed by those aged 65 to 80 (34%).

With regard to governance, the statutory bodies (the General Assembly, the Board of Directors, and the Supervisory Board) remain predominantly male. Nonetheless, a high level of educational attainment is observed, with between 60% and 70% of board members holding a higher education degree. The age profile of leadership is concentrated mainly among individuals over 45 years of age.

With regard to human resources, the entities reported more than 1,400 employees, the majority of whom are women (80%), with medium to high levels of education (75%), and aged over 45 years (56%).

The survey also includes information on infrastructures, quantifying the existing real estate assets (such as buildings and units, whether owned or rented) used either for direct purposes or made available to others.

Regarding the activities carried out, illustrated in *Figure 2*, mutual associations demonstrate a diversified portfolio of healthcare services (61% of mutual associations), including medical consultations, surgical interventions, diagnostic and therapeutic examinations, nursing care, and alternative medicine. Their presence extends across all regions of the country, thereby evidencing broad territorial coverage. The identification of unused installed capacity highlights the potential for growth and for strengthening partnerships with the State, particularly through the establishment of protocols with the Portuguese NHS.

The data thus indicate that mutual associations play a decisive role in facilitating access to quality, community-based healthcare, ensuring the provision of humanized services. Their intervention effectively complements the Portuguese NHS by alleviating pressures on the public sector and by promoting greater equity and territorial coverage. This contribution reinforces the importance of mutual associations as strategic partners in consolidating a fairer, more sustainable, and more resilient health system.

In the domain of complementary welfare (46% of mutual associations), mutual associations provide a range of benefits, including capital schemes, funeral allowances, and monetary benefits for old-age and disability.

The evidence collected underscores that these benefits constitute an effective contribution to strengthening social protection in Portugal, operating as a complement to the provisions guaranteed by the public system. Through complementary welfare schemes, mutual associations are able to respond to situations of economic and social vulnerability that are often insufficiently covered by Social Security. This reality illustrates, in practice, the prominent role already conferred upon mutual associations by the basic law on Social Security within the framework of the complementary welfare system, thereby underscoring their importance as strategic partners for social cohesion and for the long-term sustainability of the solidarity-based model of protection.

In the field of social services (31% of mutual associations), interventions focus primarily on family and community support in general (59%), followed by support for older people (28%)—including services such as home care, day centers, and residential facilities—support for children and young people (13%), through nurseries and preschool services, and support for victims of domestic violence (1%).

The evidence confirms that, while relevant, the activity of mutual associations in the area of social responses remains secondary to their primary mission in healthcare and social protection. The results further indicate that most of these services (nurseries, pre-school, elder care, and support for victims of domestic violence) are delivered predominantly within the framework of the Protocol of Cooperation with Social Security, which regulates funding and establishes conditions of operation. This finding demonstrates that the social intervention of mutual associations is anchored in a structured partnership with the state, thereby reinforcing their complementarity and integration into the national social protection network.

The evidence also reveals that a subset of mutual associations undertakes instrumental economic activities (8%), such as cooperative savings banks, pharmacies, tourism, and leisure services, which expand the range of services available to members. These activities, provided for and regulated under the basic law on Social Economy, are particularly significant because they generate economic value that can be leveraged to support the social projects of mutual associations, thereby ensuring their financial sustainability. More than a mere diversification of activities, they constitute a direct mechanism for reinforcing the social mission, allowing financial surpluses

to be reinvested in the improvement of healthcare, complementary welfare, and social support services, and thus strengthening the capacity of mutual associations to fulfil their function of general interest and solidarity.

Figure 2 – Activities Carried Out by Mutual Associations (Preliminary Data, 2024)
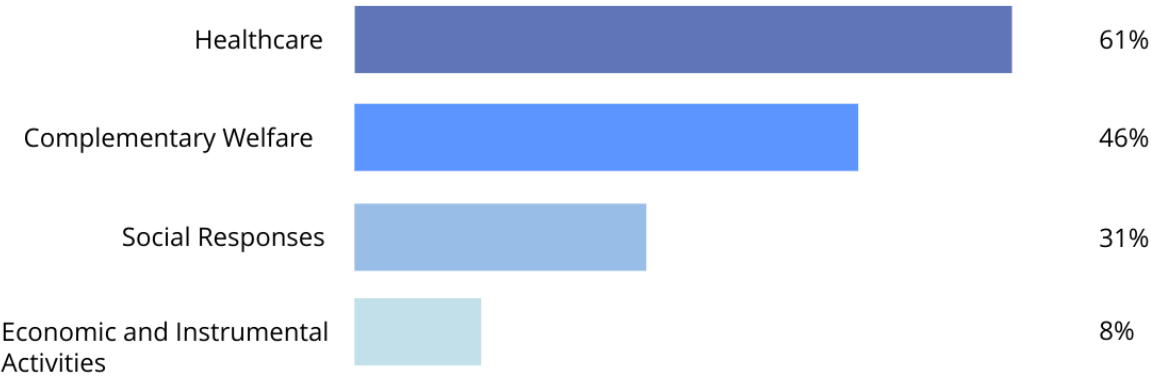
Source: MutualData, 2025

Although not yet consolidated, the preliminary data already reveal discernible trends within the mutualist sector. The primacy of healthcare as the core domain of mutual associations' mission is confirmed, as reflected in the direct and diversified provision of services delivered in proximity to local communities. At the same time, the findings highlight the salience of social responses, particularly in early childhood care and elder care, implemented predominantly within the framework of the Protocol of Cooperation with Social Security. This underscores the structured complementarity of mutual associations in relation to the state. Complementary welfare also emerges as a strategic axis, in line with the role assigned by the basic law on Social Security, by providing additional protection in circumstances of old age, disability, or death. Furthermore, the data point to the existence of instrumental economic activities (such as pharmacies, cooperative savings banks, and tourism services) whose significance lies in their contribution to financial sustainability and their capacity to support the social mission directly, in accordance with the basic law on Social Economy.

Notwithstanding the limitations inherent in an ongoing data collection process, the available evidence already supports conclusions of strategic relevance.

First, the results confirm the feasibility of digital data collection in the mutual sector: the instrument was administered online and succeeded in obtaining a satisfactory number of valid and usable responses, indicating both adherence to the process and reporting capacity on the part of the mutual associations. This is of particular significance insofar as it illustrates that digital forms with embedded validation mechanisms can be integrated into recurring data collection cycles, thereby generating efficiency gains and strengthening traceability. Second, the results attest to the analytical adequacy of the categories defined, as these accommodate the diversity of the sector while enabling observation of organizational, activity-based, and

outcome-related dimensions (e.g., healthcare, complementary welfare, social services, governance, and resources). The modular design of the questionnaire has proven effective in capturing heterogeneous realities while preserving comparability, thereby reinforcing the robustness of the methodological framework.

Finally, the findings substantiate the potential of MutualData as a benchmarking instrument, even at this preliminary stage. The standardization of variables and the availability of comparable indicators across associations create the conditions for identifying patterns and divergences, as well as for constructing longitudinal series in future cycles. Such features open avenues for both intra-sectoral (between associations) and intertemporal (across years) comparisons, which are critical for strategic decision-making within the sector and for the evidence base of public policymaking.

In conclusion, the preliminary results provide validation of the technical, conceptual, and methodological architecture underpinning MutualData, thereby warranting the continuation, consolidation, and progressive refinement of this data collection effort.

Discussion

Digitalization should not be understood merely as the introduction of technological tools, but rather as a structural transformation in the ways in which mutual associations collect, manage, and utilize information. MutualData exemplifies this shift: by introducing standardized mechanisms of digital data collection, it fosters a culture of evidence-based management that compels organizations to reassess internal routines, administrative processes, and, ultimately, their organizational culture. This transition constitutes a challenge, particularly for smaller associations, but also an opportunity for modernization and for reinforcing sectoral relevance.

The implementation of MutualData has revealed a persistent deficit in digital literacy and analytical capacity among mutual associations, with implications for data collection, analysis, and strategic use. Culturally, the emphasis placed on proximity-based service delivery, often constrained by limited staff capacity and cumulative operational demands, tends to relegate systematic data collection to a secondary position. Within this context, digitalization is at times perceived less as a strategic resource and more as an external imposition, with information-sharing viewed as a potential loss of autonomy or exposure to scrutiny.

Capacity-building thus emerges as a necessary condition for the success of MutualData. This requires the establishment of structured training programs addressing digital literacy, database management, and data protection. Such measures should be complemented by individualized support for less digitally mature associations, through tailored assistance in data reporting, as well as incentives for the creation of communities of practice that promote peer learning, exchange of experiences, and collective problem-solving. Leadership also plays a critical role in achieving the project's objectives: fostering a strategic vision that positions data

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as a vital organizational asset is essential. In this sense, MutualData should be regarded not merely as a technical initiative but as a process of collective learning, capable of fostering cultural change and organizational modernization.

For MutualData to operate on a regular basis, its continuity cannot depend solely on the motivation of individual associations. Instead, internal reporting routines must be institutionalized to ensure consistency and sustainability over time. Likewise, the establishment of interoperability mechanisms with administrative systems constitutes a necessary condition for reducing duplication of effort and improving efficiency in the reporting process.

Despite these challenges, MutualData opens new strategic opportunities for the mutualist sector. The modernization and digitalization of data collection and management practices align Portuguese mutualism with European and international trends in the SSE, while simultaneously addressing internal demands for efficiency, standardization, and comparability. This is particularly significant in a sector marked by heterogeneity in organizational scale, services, and resources, which complicates the development of a comprehensive and aggregated view.

By making data available in accessible formats (through reports and visualizations) MutualData enhances transparency and accountability. This dimension is crucial for reinforcing the trust of members, partners, and public institutions, thereby creating a virtuous cycle of increased legitimacy, greater potential to attract financial support, and the establishment of new partnerships. Transparency, in this context, moves beyond a regulatory requirement to become a strategic instrument of institutional positioning.

One of the most significant expected contributions of MutualData lies in its capacity to generate robust empirical evidence, indispensable for influencing public policy. The absence of reliable data has historically constrained the sector's ability to engage with policymakers on equal terms. MutualData seeks to remedy this gap by quantitatively demonstrating the impact of mutual associations in areas such as healthcare, social protection, and social services. In doing so, it contributes to aligning the sector with the priorities of the European Social Economy Action Plan and the European Pillar of Social Rights.

Through the provision of periodic, systematized, and comparable data, the Portuguese mutualist sector strengthens its national recognition while simultaneously creating opportunities for international projection. MutualData holds the potential to position Portugal as a pioneer in a model of digitalization that could be extended to other areas of the SSE. Its replicability may evolve into a European good practice, thereby increasing the visibility of Portuguese mutualism within the European and international social model.

The innovative nature of MutualData derives precisely from the combination of its digital architecture, the standardization of indicators, and the public availability of results. This represents an unprecedented initiative in the Portuguese context to quantify and communicate data on the mutualist sector within an open platform,

such as Base de Dados Social. This pioneering condition positions Portugal at the forefront of innovation, offering a replicable model for other national contexts and contributing to the advancement of knowledge on mutualism and the SSE more broadly.

In the longer term, MutualData has the potential to become a reference model, interoperable with European and international databases, incorporating emerging technologies such as Artificial Intelligence, and extending its scope beyond mutual associations to include other segments of the SSE.

Nonetheless, MutualData faces methodological limitations characteristic of its initial phase. Data coverage remains incomplete and tends to over-represent larger and more structured entities, thereby limiting sectoral comprehensiveness. In addition, reliance on voluntary participation renders engagement fragile, requiring ongoing incentives and clear demonstrations of added value for mutual associations. Furthermore, the heterogeneity of the sector complicates full comparability, necessitating sustained efforts at indicator harmonization. The integration of new indicators, particularly in the domains of environmental impact, innovation, and digital transformation, will be essential to capture evolving social needs and European policy priorities.

The success of MutualData will therefore depend on its capacity to broaden coverage, ensure data quality and comparability, secure financial and institutional sustainability, and foster a genuine cultural shift within the sector. Should these conditions be met, MutualData may position Portugal as a leading example of statistical innovation applied to the SSE.

Conclusion

The mutualist sector in Portugal has historically assumed a pivotal role in the provision of healthcare, complementary welfare, and a spectrum of social services. Despite this significance, the sector has remained largely statistically invisible, characterized by fragmented, limited, and scarcely comparable information.

The establishment of MutualData constitutes a strategic response to this structural deficit, functioning as a technological infrastructure for the systematic collection, organization, and dissemination of data on Portuguese mutual associations. Anchored in the prior experience of *Observatório Mutualista* of APM-RedeMut and in partnership with the Nova SBE DOT KC, the initiative consolidates both its technical robustness and academic legitimacy.

The analysis presented in this article demonstrates that MutualData operates as a structuring mechanism across multiple dimensions. Substantively, it organizes indicators in domains of critical relevance (healthcare, complementary welfare, social services, installed capacity, economic activities, and institutional features) thereby generating a comprehensive and integrated representation of the sector. In infrastructural terms, it functions as a sustainable data system, underpinned

by annual digital collection and the public dissemination of results through Base de Dados Social.

Although still at an embryonic stage, MutualData has already produced preliminary outputs that confirm the relevance of the analytical categories defined and reveal its potential to deliver reliable and comparable information. The implementation process has nonetheless exposed persistent challenges—digital illiteracy, resistance to information-sharing, and constraints in human and technical resources. Yet, these challenges simultaneously point to strategic solutions, namely capacity-building programs, individualized technical support, and broader cultural transformation.

Academically, MutualData advances the literature on the social economy and digitalization by offering a novel case study of statistical innovation applied to an underexplored institutional family. Politically, it provides an evidence-based instrument capable of informing public policy, in alignment with national and European agendas, notably the Social Economy Action Plan and the Transition Pathway for the Social Economy.

Crucially, MutualData represents more than a statistical instrument: it constitutes a cultural and organizational transformation within the mutualist sector. By institutionalizing digital and systematic data collection, it creates conditions for enhanced transparency, accountability, and institutional recognition.

If consolidated and scaled, MutualData could evolve into a national reference model for data collection in the mutualist sector, thereby positioning Portugal at the forefront of modernization and innovation within the SSE. In doing so, it would reinforce the role of mutual associations as essential pillars of social and territorial cohesion.

Beyond the national context, MutualData also assumes a pioneering role at the European and international levels, positioning Portuguese mutualism at the vanguard of digital transparency within the SSE and offering a replicable model of statistical innovation capable of informing evidence-based policy in comparative and transnational contexts.

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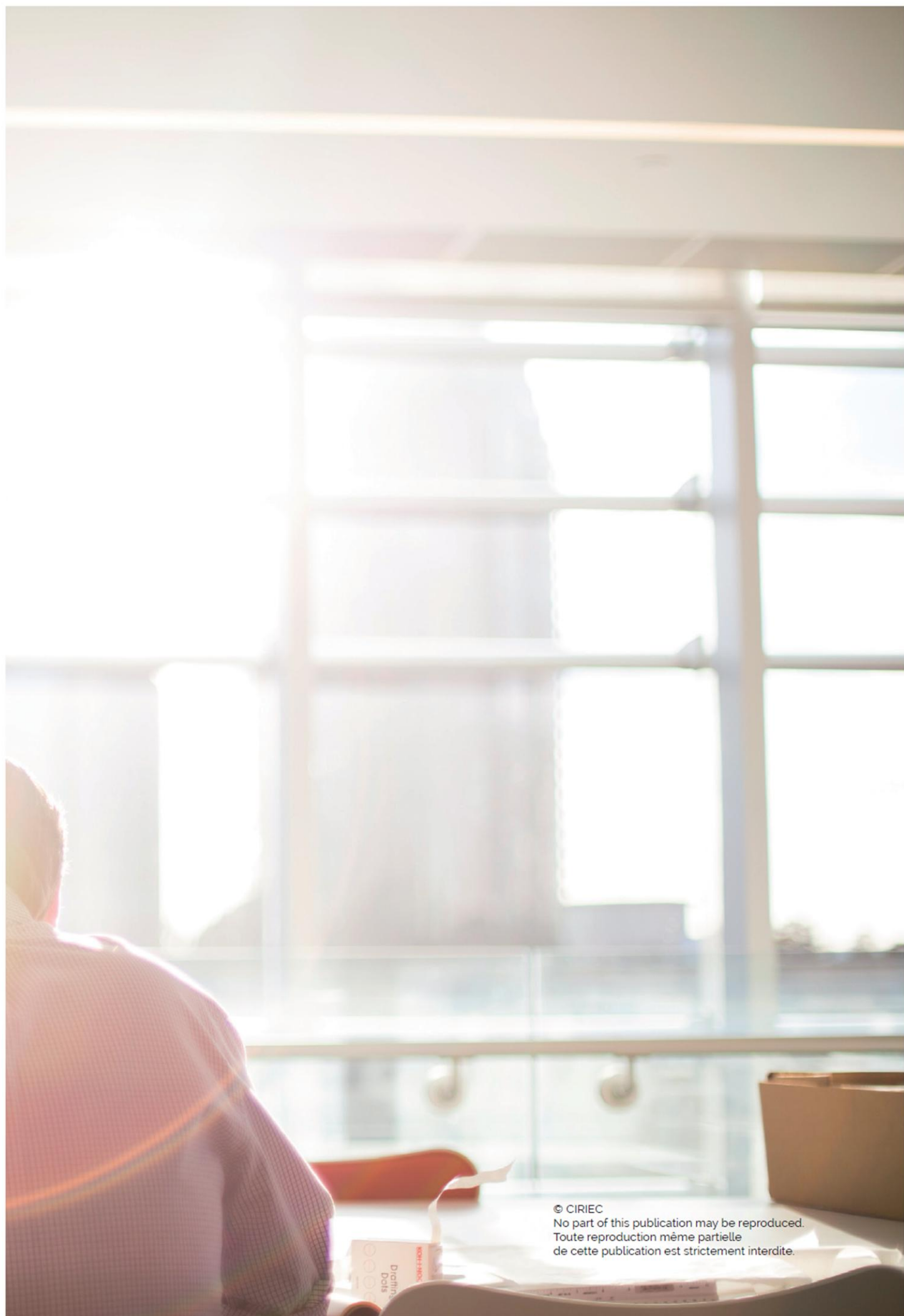
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