

FORUM

Submitted 07.06.2020. Approved 11.12.2020

Evaluated through a double-blind review process. Guest Editors: Alessandra de Sá Mello da Costa, Ely Laureano Paiva, Marcus Vinícius Peinado Gomes and Vinicius Brei

Original version

DOI: <http://dx.doi.org/10.1590/S0034-759020200607>

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AN ENGAGED UNIVERSITY: RESCUING SMES DURING THE COVID-19 CRISIS

Universidade engajada: Resgatando PMEs na crise da Covid-19

Universidad comprometida: Rescatando PYMES durante la crisis de COVID-19

ABSTRACT

The economic effects of isolation policies resulting from the COVID-19 pandemic have led small and medium-sized enterprises (SMEs) to look for alternatives to survive. Within this crisis scenario, an engaged university has an important role to play in a regional context in addressing not only health issues, but also any resultant social and economic problems. An engaged university needs to take actions that go beyond its traditional missions of education and research - it has to deliver knowledge to society. This paper analyzes a university-community project in Brazil to identify the necessary elements that help promote a regionally-engaged university: the SOS-PME Advisory Network project, which was originally designed to assist SMEs during the crisis. As a result, we identified elements necessary for promoting the university's third mission - social engagement by way of a university-community project: an engaged team, multidisciplinary, project management, agility, alliances, a communication strategy, institutional support, and reputation.

KEYWORDS | Engaged university, engagement, COVID-19, SMEs, project management.

RESUMO

Feitos econômicos das políticas de isolamento da pandemia da Covid-19 levaram pequenas e médias empresas (PMEs) a buscar alternativas para sobreviver. Em cenários de crise, uma universidade engajada tem um papel importante ao abordar não apenas questões de saúde, mas também problemas sociais e econômicos em contextos regionais. Neste artigo, um projeto de universidade-comunidade é analisado com o intuito de apontar os elementos necessários para promover uma universidade regional engajada: a Rede de Assessoria SOS-PME, originalmente projetada para apoiar PMEs durante a crise. Uma universidade engajada entrega conhecimento para a sociedade, além de educação e pesquisa. Como resultado, identificam-se elementos para promover a terceira missão da universidade engajada – engajamento social: equipe engajada, multidisciplinaridade, gerenciamento de projetos, agilidade, alianças, estratégia de comunicação, e suporte e reputação da instituição.

PALAVRAS-CHAVE | Universidade engajada, engajamento, Covid-19, PMEs, gestão de projetos.

RESUMEN

Los efectos económicos de las políticas de aislamiento de la pandemia de COVID-19 han llevado a las pequeñas y medianas empresas (PYMES) a buscar alternativas para sobrevivir. En un escenario de crisis, una universidad comprometida desempeña un papel importante para abordar, no solo los problemas de salud, sino también los problemas sociales y económicos en un contexto regional. En este artículo, se analiza un proyecto universidad-comunidad con la intención de señalar los elementos necesarios para promover una universidad regional comprometida: la Red de Asesoramiento SOS-PME, originalmente diseñado para apoyar a las PYMES durante la crisis. Una universidad comprometida necesita llevar adelante acciones más allá de sus misiones tradicionales de educación e investigación; debe transferir conocimiento a la sociedad. Como resultado, identificamos cuáles son los elementos necesarios para promover la tercera misión de una universidad con compromiso social: equipo comprometido, gestión de proyectos, agilidad, alianzas, multidisciplinariedad, estrategia de comunicación y apoyo, y reputación de la institución.

PALABRAS CLAVE | Universidad comprometida, compromiso, COVID-19, PYMES, gestión de proyectos.

INTRODUCTION

Countries are implementing different degrees of lockdown and social distancing rules (World Health Organization [WHO], 2020). The effects of the COVID-19 pandemic have moved outside the border of health issues and created an economic crisis without precedent. Since any suspension of economic activities reflects on the gross domestic product (GDP) and employment rates, it is concerning that at least 600,000 micro and small enterprises have closed down their business due to this pandemic, while revenues have decreased in almost 88% of all businesses in Brazil (Serviço Brasileiro de Apoio às Micro e Pequenas Empresas [Sebrae], 2020). In 2018, these companies accounted for 54% of all formal jobs and 27% of the country's GDP (Sebrae, 2018), which increases the potential negative impact on the Brazilian economy by even more.

According to the Instituto Brasileiro de Geografia e Estatística (IBGE, 2020), by June 2020 70% of the companies operating in Brazil had reported negative impacts on their activities due to the pandemic – reductions in sales, production and services, and problems with keeping supply chains stocked and access to them open, although 13.6% of these companies reported positive effects. In August-2020, 40% of all construction companies and 39.7% of all retail businesses were suffering severe negative effects (IBGE, 2020).

In this scenario, universities that have a recognized trajectory of civic engagement, such as the Universidade Federal do Rio Grande do Sul (UFRGS), have had a major role to play in developing projects for addressing not only health issues, but also social and economic problems. The SOS-PME Business Advisory Network was developed within this context, to provide small and medium-sized enterprises (SMEs) that have been economically damaged by the COVID-19 crisis with viable solutions for facing up to it. But what is the role of universities in the face of this crisis? How can universities contribute to society in order to overcome the negative economic impacts triggered by this pandemic crisis? How can universities mobilize to help businesses that are threatened by the crisis?

Entrepreneurial universities comprise a variety of academic traditions, decision-making levels, research values, and sub-organization cultures that form a complex system that tries to become an important agent in society for economic growth and social change (Klofsten et al., 2019). The regionally-engaged university model relates to the task universities have of transferring knowledge to small and medium-sized local enterprises (Uyarra, 2010). In this theoretical approach, however, a gap remains with regard to the role of regionally-engaged universities (Perkmann et

al., 2013) in a crisis setting. The literature dealing with the civic engagement of higher education does not have the visibility and recognition that its results deserve, and it has been dominated by experiences from North America and Europe (Watson, Hollister, Stroud, & Babcock, 2011). Thus, this paper aims to analyze those elements that are mobilized within a project for supporting SMEs during the COVID-19 crisis and that help promote a regionally-engaged university within the Brazilian context.

In order to do so we conducted a case study of the UFRGS SOS-PME Advisory Network. This project, which was initially developed in the Management School, has quickly gained supporters from different departments in UFRGS and from other community participants. The main objective of the project is to help small and medium-sized local businesses co-create solutions for overcoming the economic crisis. To do so the Network offers a consultation process involving researchers and students from the university and community volunteers, thus promoting an exchange of knowledge between UFRGS and the community.

Universities have been entrusted with multiple missions (Sánchez-Barrioluengo & Benneworth, 2019). Besides their two main missions of education and research, they must translate this research into technological development, inspire change in social and government practices (Wadhvani, Galvez-Behar, Mercelis, & Guagnini, 2017), and engage in knowledge exchange activities, all of which will ultimately drive regional development (Perkmann et al., 2013; Sánchez-Barrioluengo & Benneworth, 2019). It is important to point out that knowledge exchange may be both direct and unidirectional by way of technology licensing, or less direct and bi-directional, involving partnerships with local businesses by way of consultancy and conversation (Brenzitz & Feldman, 2012). As the theoretical and management contributions of the research we identified those elements of a regionally-engaged university that were strengthened by way of a university-community project. These elements can help develop university projects that involve the third mission of UFRGS and other regionally-engaged universities.

To understand SOS-PME as being a project, in this paper we assume the definition of a project to be "a temporary organization to which resources are assigned to do work to bring about beneficial change" (Turner, 2006, p. 1). Thus, we used elements such as project organization, project management, outputs (direct results), and outcomes (benefits) to organize the presentation of the project. For the discussion, we used the theoretical elements of regionally-engaged universities as our analysis guidelines.

In the next section we present a literature review of entrepreneurial universities, more specifically of regionally-engaged universities and their theoretical elements. The third

section describes the methodological procedures we adopted in the research. We then explore the study results and present our discussion. Final considerations consider the main contributions and the research limitations.

A REGIONALLY-ENGAGED UNIVERSITY

Universities are evolving towards a more entrepreneurial model and no longer focus exclusively on education and research (Etzkowitz, 2004; Lazzeroni & Piccaluga, 2003). They can serve as a driving force for economic growth and prosperity (Guerrero, Urbano, Fayolle, Klofsten, & Mian, 2016), and during a crisis scenario, for the survival of the local economy. The role of an entrepreneurial university goes beyond merely generating knowledge products. Universities have a leading role to play in creating entrepreneurial thinking and actions, and developing entrepreneurship capital (Audretsch, 2014). Despite the discourse claiming that universities are ‘ivory towers’ and have no regard for the public good, many academics are motivated by their deep desire to make a difference by helping society (Renwick, Selkrig, Manathunga, & Keamy, 2020).

Taking a broader view, an entrepreneurial university empowers the whole of its community to commit to developing a mindset for generating knowledge, and of creativity, and innovation in times of uncertainty. Such universities assume the mission of solving complex problems and creating opportunities as a means of adding value to society and contributing to sustainable development, both locally and internationally (Listo, 2019).

To place the entrepreneurial transactions of the university in the context of organizational structure and the wider innovation system, we present three university models based on a set of typical third mission outputs, following Perkmann et al. (2013), Cohen, Nelson, and Walsh (2002), and Sánchez-Barrioluengo & Benneworth (2019): (i) the entrepreneurial university, which focuses on commercialization activities, such as patents, licenses, and spin-offs, is considered one of the best ways of measuring the market’s acceptance of academic products; (ii) considering its knowledge transfer potential, the engaged university that is involved with ‘soft activities’, like collaborative research, contract research or consulting, is more valued than if it registers university patents for many enterprises; and (iii) the regionally-engaged university that emphasizes engagement via soft activities for improving local absorption capacity and increasing the knowledge of its regional environment.

The regional contributions of a university are “knowledge spillovers” (Benneworth & Charles, 2005; Drucker & Goldstein,

2007) generated by regular interaction with stakeholders, like knowledge producers, users, intermediaries, and policy makers, for creating local networks (Cooke, Heidenreich, & Braczyk, 2004). Encouraging the formal/informal transmission of knowledge that does not involve financial compensation (Olmos-Peñuela, Molas-Gallart, & Castro-Martínez, 2013; Trippl, Sinozic, & Lawton-Smith, 2015; Wang, Hu, Li, & Pan, 2016) allows external actors easier access to knowledge-based resources (Ponds, Oort, & Frenken, 2010).

According to Cherrington, Scheckle, and Khau (2019), the key concepts for supporting the engagement of the university community itself and the community the university serves are: dialogical engagement, community, and active citizenship. To create such engagement requires a sense of community and cohesion, which is supported by collaboration, trust, and open communication. It involves constant dialogue and reflection, besides intentionality and the commitment of all stakeholders to collaborate.

Among the elements that mobilize and shape the engagement of the universities’ civic and social responsibility, as identified by Watson et al. (2011), are the extent of the community’s unmet needs; the commitment of institutional leaders to raising university engagement; government policies that promote or require student service and engagement programs; the university’s reputation; challenging financial constraints; greater incentives for research and teaching in the traditional academic system as an obstacle; and dependence on student expectations and leadership (this might be important experience, and relevant to their employment prospects, or it might be an activity that competes with their academic studies).

Putting the engagement role into practice might orient universities towards knowledge transfer outcomes, or more general contributions to regional economic development activities (Sánchez-Barrioluengo & Benneworth, 2019). When universities interact regionally they promote local innovation and economic development (Klofsten et al., 2019). This is true under normal circumstances, and crucial when there is a crisis. When economic prosperity is not possible, the regionally-engaged university may, at least, help mitigate the economic problems of companies. Universities can develop different, but equally valuable approaches for creating a contribution to society and improving these engagement models. Although there is no ‘one-size-fits-all’ model, a framework for the mobilized elements should guide university actions (Sánchez-Barrioluengo & Benneworth, 2019). Exhibit 1 summarizes the theoretical elements of a regionally-engaged university, arranged by category.

Exhibit 1. Theoretical elements of a regionally-engaged university

Engagement	<ul style="list-style-type: none"> • academics really want to make a difference; • require student service and engagement programs; • dialogic engagement; • active citizenship; • sense of community and cohesion. 	Cooke et al. (2004); Watson et al. (2011); Cherrington et al. (2019).
Collaboration	<ul style="list-style-type: none"> • developing a mindset for knowledge generation, creativity, and innovation under uncertainty; • commitment of all stakeholders to collaboration; • regular interactions between stakeholders, like knowledge producers, users, intermediaries, and policy makers creating local networks; • collaboration, trust and open communication. 	Listo (2019); Cherrington et al. (2019); Cooke et al. (2004).
Value-added results	<ul style="list-style-type: none"> • solving complex problems and creating opportunities; • adding value to society and contributing to sustainable development; • helping mitigate the economic problems of businesses. 	Listo (2019); Sánchez-Barrioluengo & Benneworth (2019).
Institutional reputation and support	<ul style="list-style-type: none"> • commitment of institutional leaders; • university's reputation. 	Watson et al. (2011).
Knowledge as a process	<ul style="list-style-type: none"> • soft activities to improve the local absorption capacity; • formal/informal knowledge transmission; • allows external actors easier access to knowledge-based resources. 	Sánchez-Barrioluengo & Benneworth (2019); Olmos-Peñuela et al. (2013); Trippel et al. (2015); Wang et al. (2016); Ponds et al. (2010).
Knowledge as a result	<ul style="list-style-type: none"> • increasing the knowledge of its environment; • contributions are “knowledge spillovers”; • knowledge transfer outcomes or more general contributions to regional economic development activities. 	Sánchez-Barrioluengo & Benneworth (2019); Benneworth & Charles (2005); Drucker & Goldstein (2007); Sánchez-Barrioluengo & Benneworth (2019).

METHODOLOGICAL PROCEDURES

We carried out a case study of the UFRGS SOS-PME Advisory Network project to obtain a deeper understanding of this particular phenomenon (Yin, 2003) and the dynamics present in this particular setting (Eisenhardt & Martin, 2000). UFRGS is a nationally and internationally recognized education institution, which is ranked among the best universities in Brazil (UFRGS, 2020b), and qualified as an entrepreneurial university. The SOS-PME project, which initiated right after the beginning of the COVID-19 pandemic in Brazil, aims to help small and medium-sized enterprises (SMEs) that have been negatively impacted by the effects of this pandemic, and is important for showing how agile and responsive to the emerging needs of society an engaged university can be.

Data collection involved: a) 155 forms completed by business owners and providing information about their businesses, such as the number of employees, the sector, and the main products, as well as information regarding the reported impact of the pandemic on their business; b) 340 forms completed by multi-disciplined volunteers with information that includes their relationship with the university, their experience and areas

of expertise for assisting companies; c) 83 reports developed by business advisory teams, containing team formations, a diagnosis of the companies’ main problems and guidance on how to address them; d) 34 assessment forms filled out by business owners regarding their satisfaction with the advisory process, the platforms used and the service provided by the advisory team; and e) 42 assessment forms completed by volunteers regarding their satisfaction with the advisory process and their perception of the positive and negative aspects of the project. The data from these documents were consulted to describe the agents involved in the project and to identify, among other aspects, elements of their process of engagement, the aim being to identify via content analysis those representative elements of the project that promote an engaged university (Bardin, 1977).

Finally, by way of participant observation (DeWalt & DeWalt, 2002), and using the theoretical elements of a regionally-engaged university we were able to analyze the project’s relevant aspects for achieving the research objectives, such as the project’s organization and management process, including the communication strategies that were used throughout the advisory process and with different actors. Each of the project coordinators shared their observations in a weekly online meeting. These

project coordinators observed the dynamics of the teams and the results achieved during the weekly online meetings and project management boards, and the elements that were observed were registered in the meeting minutes. These documents were used as the basis for much of the project's qualitative analysis. Exhibit 2 summarizes the sources and data analysis strategy, arranged by research objective.

Exhibit 2. Sources and data analysis

Research Objective	Sources	Data Analysis Strategy
Understanding the demands triggered by the impact of the crisis on the observed community (small and medium-sized businesses)	155 forms filled out by business owners	Descriptive statistics
Understanding the community's involvement and team compositions.	340 forms filled out by volunteers 83 reports developed by business advisory teams 13 links in the Advisory Network Partners Map	Descriptive statistics Content analysis
Analyzing the team involvement with the advisory process, its dynamics, and results.	Trello board activity Observing alignment meetings Observing the advisory process	Content analysis
Identifying the effects of the activities carried out by the project, which may bring beneficial changes or deliver positive results.	25 Lives +2500 views Co-creation step observation (advisory process) 15 local and regional media interviews 34 business owner's satisfaction assessment 42 volunteer's satisfaction assessment 2 Projects derived and 1 new service	Descriptive statistics and Content analysis

To conduct this analysis, we used descriptive statistics for analyzing the data collected via forms in order to describe the business profiles, the impacts the companies faced as a result of the pandemic, and to map out their needs. We also used content analysis (Bardin, 1977) of the final reports that were prepared for each business and present the results that emerged from the analysis of all these organized data. As we said before, the SOS-PME is a project, and the Results Section describes its organization, management, outcomes and outputs, while discussion of the results is based on the theoretical elements of a regionally-engaged university.

RESULTS

Brazil was facing different degrees of social isolation when, on March 16, 2020, UFRGS suspended all non-essential on-campus activities, including teaching. In this scenario, and believing that universities have a major role to play in addressing social and

economic problems, at the end of March the SOS-PME UFRGS project was launched. One of the key drivers for engaging a university's civic and social responsibility is the severity of the community's needs (Watson et al., 2011). The critical situation of SMEs sensitized a group of academics who mobilized to create this project. Originally designed by a group of scholars from the Management School, it quickly brought on board the UFRGS Scientific and Technological Park, scholars from other units, and even other universities. Business owners and volunteers were invited to register to take part in the project. The company problems initially addressed were: finance and accounting, strategic and operations management, marketing, human resources, and information technology.

SOS-PME project organization

The project was organized into service teams, each led by a coordinator, usually a member of the university (a professor or one of the administrative staff), or an alumnus who is recognized

as a researcher or an acting senior entrepreneur, and at least three further volunteers. The team members were chosen by the coordinator to guarantee multidisciplinary and complementary coverage of the expertise needed for the business chosen for help. Most of the team members were graduate students who considered it to be a valuable learning experience, besides making a relevant social and economic contribution to society. It corroborates the importance of students' positive expectations when they engage in university-community projects (Watson et al., 2011), but also highlights the leadership role of scholars when they head them up.

The teams were involved in the process of assisting entrepreneurs and could count on specific help from special task forces. It is important to highlight that the internal organization of the team meetings did not consider hierarchies when helping the businesses. During the meetings, members interacted in a 'flat' manner, with university members, entrepreneurs, and volunteers engaged because of the importance of the personal knowledge they have and to ensure that contributions would be multidisciplinary. This symmetrical exchange and co-creation of knowledge favored the commitment, dialogue, and reflection of all stakeholders, and supported university-community engagement (Cherrington et al., 2019).

Special task forces were also created with volunteers from different units. They acted on specific subject-matters that were identified as being critical, including communication, financial analysis, and conflict mediation to support specific teamwork demands with regard to crucial points of service. The partnerships also worked with Junior Enterprises and other projects helping businesses that were suffering from the impact of the pandemic, such as COVIDesign. An alliance with another university has also been set up to expand the network and, hence, the number of businesses being assisted. Participants in the project are filled with a sense of cohesion, which is strengthened by the open communication and collaboration that are decisive elements in university-community engagement (Cherrington et al., 2019). This has boosted the positive impacts, resulting in a large number of both satisfied companies and volunteers.

Figure 1 shows how the project timeline evolved, including when the partners have joined the project. Figure 2 shows the 13 inter- and intra-institutional links that were created in the advisory network partners map, indicating the different university centers and partners that are supporting the project. In four months, the project involved 155 SMEs and 340 volunteers, including academics, administrative staff, students, alumni, and professionals from the community.

Figure 1. Project timeline

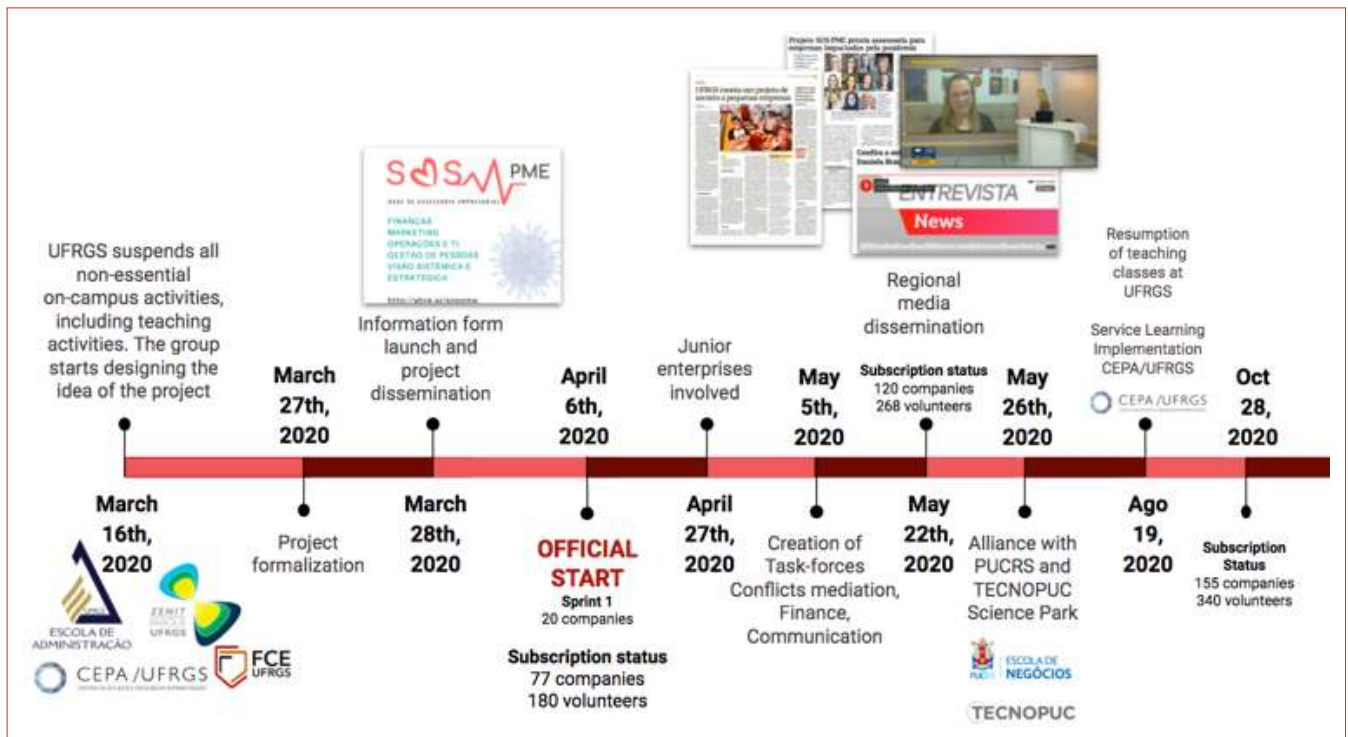
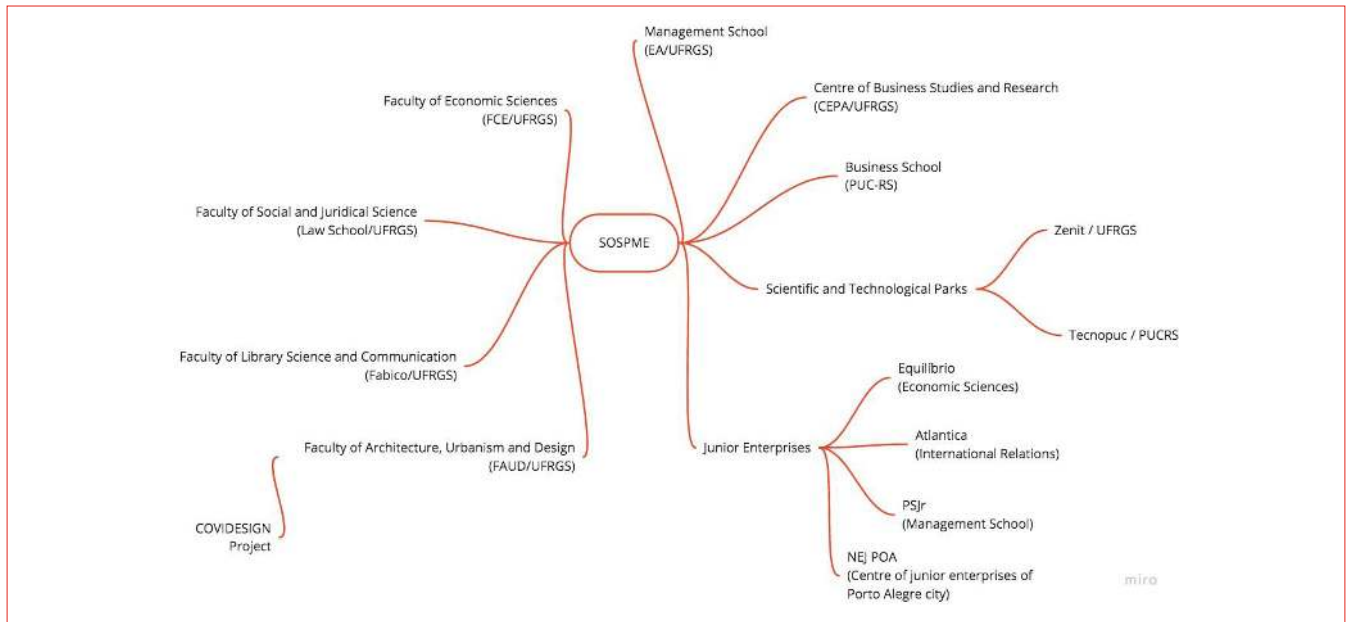


Figure 2. Advisory network partners map

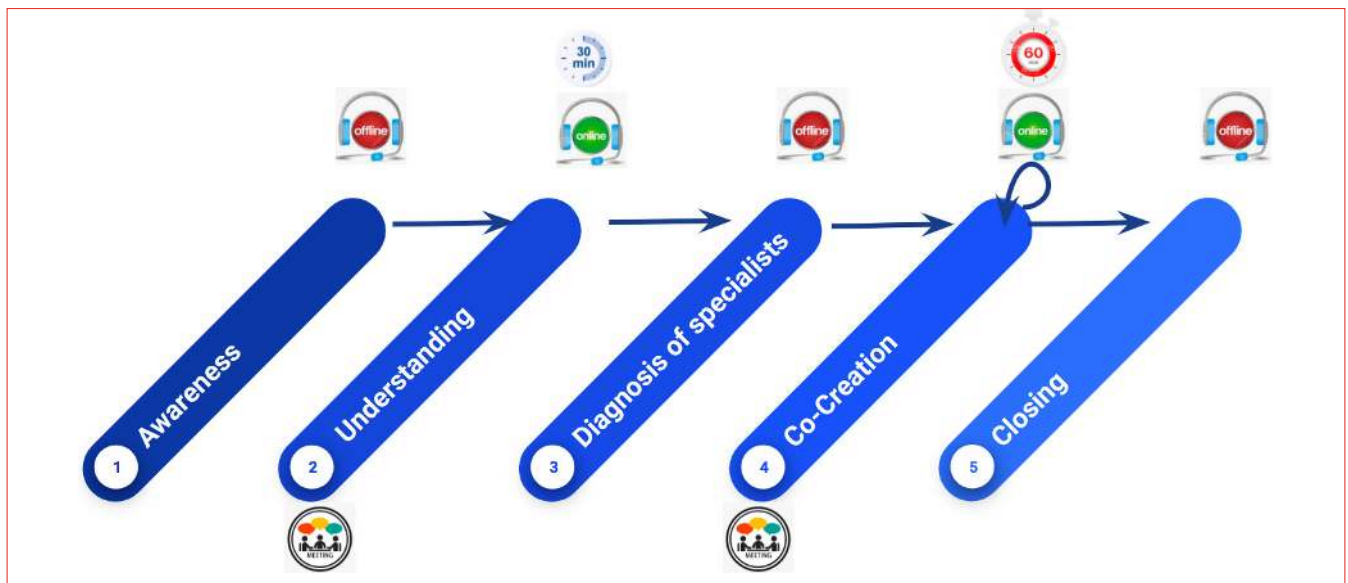


SOS-SME project management

Because of social distancing, all projects were managed and executed entirely online, with coordinators, volunteers and business owners using interaction mechanisms. The projects are managed in sprint cycles, based on the Scrum Agile Framework (Schwaber & Beedle, 2002). Each sprint backlog comprises a set of prioritized businesses taken from the project backlog of all registered businesses. The team coordinators have weekly meetings to discuss sprint progress, and to share advisory tips

and any other emerging issues. At the end of each sprint, there is a collaborative review of the process during the meeting to reconfigure the advisory process or to prioritize criteria. Once the sprint backlog is established, each team coordinator chooses a business to assist and the volunteers for his/her team, according to the knowledge that needs to be addressed relative to the requirements of the business. The advisory process takes place in five main stages: awareness, understanding, diagnosis, co-creation, and closing (Figure 3).

Figure 3. Advisory process



The coordinator of each advisory team is responsible for communicating with the business owners and volunteers. Each advisory process takes approximately 10 days to finalize. The business assistance provides mainly customized guidelines and alternatives, considering the context, the business situation, and the business owner's involvement in the co-creation of alternative pathways for their particular problems. By the end of the assistance, a report with recommendations is delivered to the business owner, along with a link to the satisfaction assessment form. Businesses with special requirements may receive further advice from project partners.

In managing these activities, SOS-PME coordinators use a combination of collaborative and free, online support tools, such as: Google Drive and Forms for collecting data and storing and sharing project files, Elos.vc platform for online meetings; WhatsApp for communication; *Padlet* for sharing knowledge internally and externally, and developed as a tips board for disseminating general information and providing support materials for the advisory teams, business owners, and volunteers; while Trello, the platform used to run the entire project, centralizes knowledge, and works as a tool enabling advisory teams to communicate among themselves. The business assistance provided is managed on this platform, on which business information, team members, and volunteers are included, task forces are tagged and the history of responsibilities is registered.

SOS-PME outcomes

A common weakness of several of the business owners was their inability to react at the beginning of the pandemic. The sudden need to close physical stores, the global need for digital transformation, and the prospect of reduced revenue have emotionally destabilized many business owners. They were unable to consider possible alternatives and act on the changes required. Listening to community problems and mobilizing volunteers with different expertise, the SOS-PME teams were important for indicating alternatives and bringing positive perspectives to business owners as knowledge was exchanged in co-creation activities involving university staff (researchers, students, and administrative staff) and society (volunteers and businesses owners).

Figure 4 shows the characteristics of the businesses and the situation they were in when they applied to the project. The main problems they reported were systemic vision and strategy, finance, and marketing (70%). These problems, however, were

not necessarily confirmed during the meetings. A shortage of cash as a result of the pandemic, for example, pointed to finance as a requirement, when the real need was actually related to other areas, such as marketing, sales, strategy, or operations. Most business owners said that the state their companies were in was either an emergency (32.9%), or urgent (47.1%). The impact of reduced revenue was reported by 76.1% of the businesses, with 52.9% of them indicating a reduction in revenue of more than 50%, while more than half intended to close or greatly reduce their operations. Poor management controls and a lack of tools were also identified. Some businesses were already facing financial difficulties that had been aggravated by the sharp drop in revenue caused by the pandemic, and few enterprises had savings to face up to unexpected events, like the current crisis.

The main business sectors helped were services, food processing, retail and trade, and distribution. With regard to the age of the companies and the number of employees, they have been operating, on average, for 11 years, and have 5 employees, excluding outliers. The situation reported by the entrepreneurs, sensitized the project staff, thereby ensuring a sense of urgency, greater involvement, and speed of delivery.

After the advisory process, the main problems found were: a reduction in revenue; adaptation of the business operation; keeping a financial balance; retaining employees; and obtaining loans. As a result of the advisory process, the teams provided the business with possible solutions and alternatives, with recommendations as to the short and medium-term efforts needed to increase revenue and reduce expenses (Exhibit 3). The scientific knowledge and previous reputation of the university, combined with the knowledge acquired from analyzing the data and helping the businesses, provided the researchers and volunteers involved in the project with practical knowledge of the real impact of the pandemic on local businesses. This led to the project and the university being recognized in the community, as a reflection of which team members were invited to participate in interviews for 15 local and regional newspaper articles, and take part in TV and radio interviews over a period of 6 months.

The volunteers expressed their satisfaction with the project, as the following report testifies: "Participating in the SOS-PME project has been very gratifying. I learned a lot from the situations and experiences of the business owners and I had the opportunity to apply my knowledge to solve the real problems of these people and their businesses".

Business owners also expressed their satisfaction with the project. Common quotes from them were similar to the following: "Listening to the opinions, understanding the problems and getting ideas from the advisory group was all

very valuable and contributed to solutions emerging for overcoming the crisis and surviving it". Overall, the feedback from all the participants has been extremely positive and of great gratitude.

Figure 4. Businesses situation

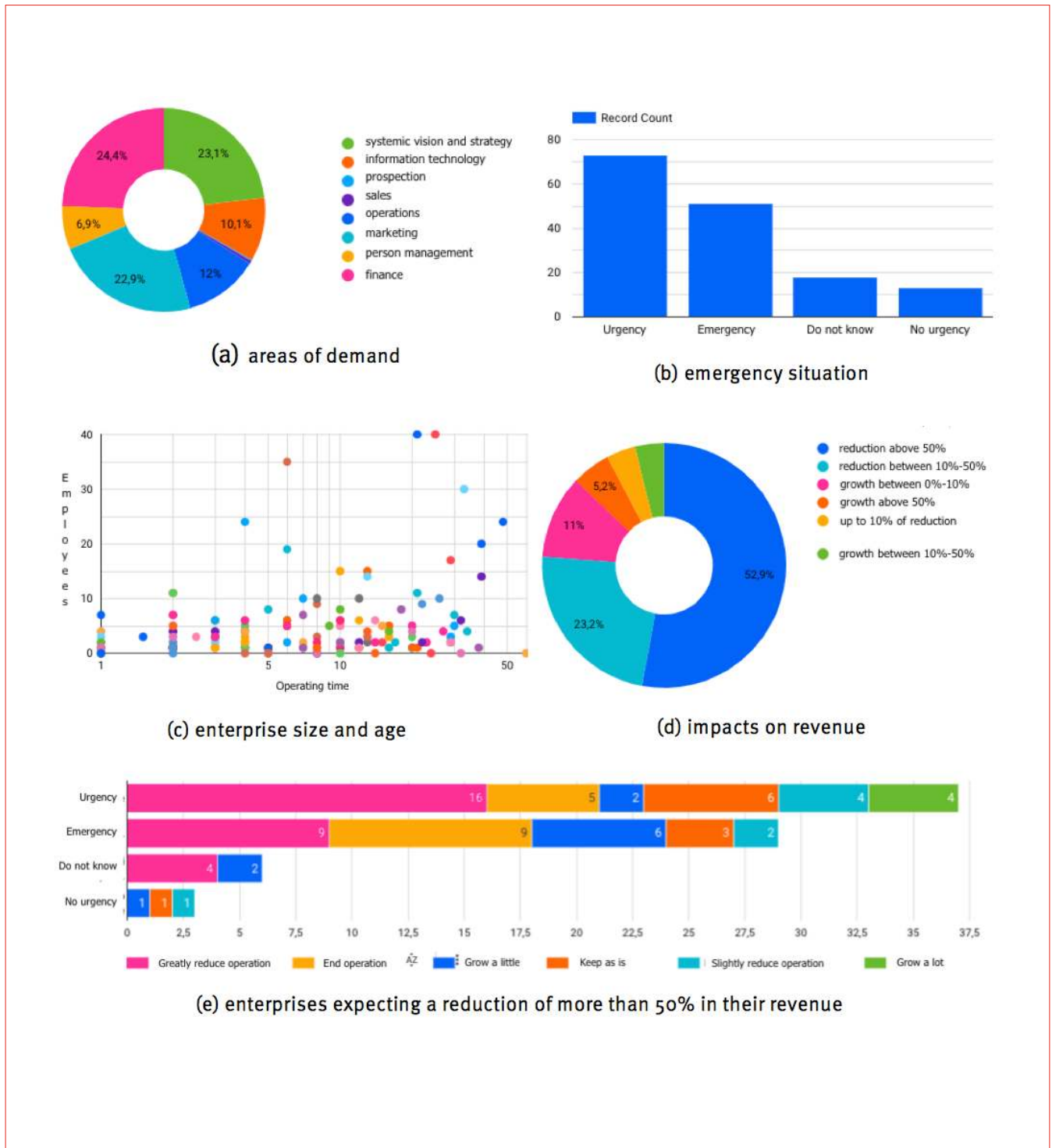


Exhibit 3. Main recommendations

Efforts to increase revenue	Efforts to reduce expenses
<ul style="list-style-type: none"> • Adapt sales/services/communication to digital media; • Product delivery; • Sales promotions/customized sales; • Offers of new products/services; • Market expansion through digital platforms (courses, e-commerce, social networks); • Expansion of business partnerships; • Communication efforts: <ul style="list-style-type: none"> * Strengthening communication in digital media/social networks; * Generating content to strengthen relationships with customers; * Positioning/repositioning of the business/brand. 	<ul style="list-style-type: none"> • Cash flow management; • Tax management; • Inventory management; • Operational/business process improvements; • Negotiation with suppliers/customers; • Implementation of control tools; • Use and implementation of management tools; • Managing and retaining employees; • Control/reduce cash withdrawals from members; • Reduced product offer (focus); • Strategic pricing of products/services.

SOS-PME outputs

In this section we describe the direct outputs of the project. Over and above the companies that have been helped, two new project propositions have emerged and a new service has been started. In addition to the assistance that was provided, in order to guarantee that there was an exchange of knowledge between researchers, volunteers, and business owners, Instagram lives were held on topics that were relevant to the main needs that had been identified. These videos, which were viewed more than 2500 times, were open to the community, with invitations being specifically sent to all entrepreneurs and volunteers registered with the project.

Because of doubts about layoffs involving the businesses that were helped, as well as numerous questions about whether the careers of these entrepreneurs would continue, a new project was developed for helping the unemployed, or those seeking a new direction in their careers. The project entitled *SOS Carreiras* brings together researchers and volunteers from the people management research area, and since June 2020 has been providing 63 people with career guidance and introducing them to entrepreneurship as a possible new career.

With the resumption of teaching activities at the university, we saw the opportunity to combine the advisory services for business owners with the learning activities on undergraduate courses. In this sense, service learning, active teaching, and learning methodology have emerged as an opportunity for community development using the project experience as an instructional strategy to meet learning goals (Jacoby, 1996). A pilot service was created within the scope of the UFRGS Center for Studies and Research in Business, with nine undergraduate courses from the two main state universities becoming affiliated; together they will assist more than 40 entrepreneurs.

Another important project derived from SOS-PME is the Mentoring Network, which aims to construct a network to bring

together volunteers who want to connect with the university in order to be mentors for entrepreneurs who are involved with activities of the School of Administration in business development and entrepreneurship. They would help by working with research projects, undergraduate learning disciplines, and other initiatives. The project includes the development of a recommendation system in partnership with a federal institute in Southeast Brazil to guide the process of matching volunteer expertise with the needs of entrepreneurs.

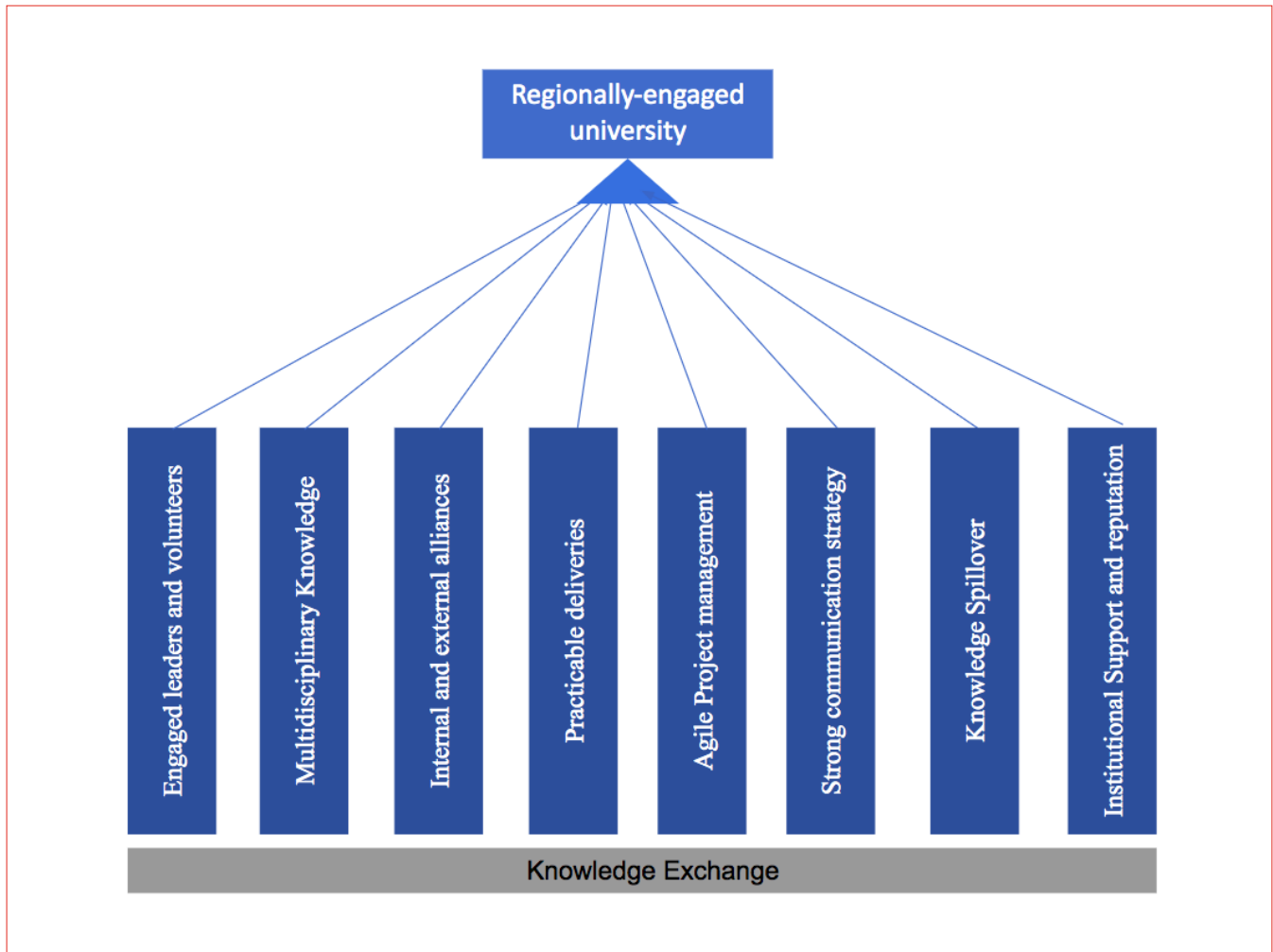
DISCUSSION

By analyzing the SOS-PME project, it was possible to identify features that were considered essential for its performance. These features were arranged in categories as shown in Figure 5, which is explained below.

Initially, we can understand how important knowledge exchange is. We see it as a mainstream action that is the basis of the SOS-PME project initiative. It is found in planning actions for making the project operational and in the results.

The first element that was mobilized during the project was engaging leaders and volunteers from the university community, including faculty members, undergraduates, graduates and former students, thereby promoting interactions between stakeholders, like knowledge producers and users (Cooke et al., 2004). The second element is multidisciplinary knowledge. As the volunteers have different backgrounds, task forces in specific topics were created, which enabled different knowledge to be exchanged (Olmos-Peñuela et al., 2013; Tripl et al., 2015; Wang et al., 2016) with local SMEs (Uyarra, 2010). This was important for mobilizing the different areas of knowledge. The multidisciplinary nature of the project favored the establishment of internal and external alliances that offered a variety of services in accordance with the necessities of the businesses, and created local networks among stakeholders (Cooke et al., 2004).

Figure 5. Elements mobilized for the SOS-PME project that promotes a regionally-engaged university



Klofsten et al. (2019) state that regionally-engaged universities must be capable of promoting local innovation and this can be noticed when we consider two of the identified elements. One is the importance of agile project management. Because of the context of the pandemic, the project coordinators used free online tools for managing it virtually and for interactions between companies and volunteers. The other element, which was inspired by agile methodologies, used short interactions to achieve practical outcomes by way of a standard and fast advisory process to ensure quick responses, as a strategy for increasing volunteer engagement and for delivering results to business owners in urgent and emergency situations.

A strong communication strategy is very important for guaranteeing regional engagement and social recognition. SOS-PME's communication, which used social networks and the general media, added value to the project and the local community, attracted participants, and facilitated access to

knowledge-based resources (Ponds et al., 2010). A sense of urgency was also essential for guaranteeing engagement.

Knowledge spillover occurred during the interaction with the general community, as pointed out by Benneworth & Charles (2005) and Drucker & Goldstein (2007). Instagram lives, the SOS Carreiras project, and the Mentoring Network project were means of spreading the knowledge that was exchanged when helping the entrepreneurs.

Finally, institutional support and reputation were essential for including society and guaranteeing the seriousness of the project to all participants, whether business owners, volunteers, or other partners.

Using the theoretical elements determined by the literature review, we were able to relate them to the elements we found when categorizing the features of the project. The final result was that we proposed the formation of a close relationship between the theoretical element of a regionally-engaged university and the elements of initiative of the SOS-PME project. Exhibit 4 shows this.

Exhibit 4. Relationship between the theoretical elements of a regionally-engaged university and SOS-PME initiative elements

Theoretical Elements of a Regionally Engaged University	Elements of the SOS-PME Project	Identified Features
Engagement	Engaged leaders and volunteers	Team work; Volunteers involvement; Co-creation activity between the university and society
	Strong communication strategy	Listening to community problems; knowledge sharing among teams; use of knowledge sharing platform (Padlet, Trello, social media); Community and media recognition
Collaboration	Internal and external alliances	Multiple departments and other organizations involved; Co-creation activity between the university and society
Value-added results	Practicable deliveries	Short interactions; Easy and known tools; Standardized advisory process
Institutional reputation and support	Institutional reputation	Community and media recognition;
	Institutional support	Multiple departments and other organizations involved; Task forces for post attendance; Pilot service learning implemented
Knowledge as a process	Multidisciplinary knowledge	Teams multidisciplinary; Knowledge sharing among teams; Easy and known tools; Volunteers involvement; Co-creation activity between the university and society
	Agile Project Management;	Short interactions; Easy and known tools; Standardized advisory process
Knowledge as a result	Knowledge spillover	Instagram lives; SOS Carreiras project; Mentoring Network project

FINAL CONSIDERATIONS

The conclusion we draw is that an engaged university needs to take actions over and above its traditional missions of education and research; it needs to take the knowledge it has developed within its boundaries to society. In times of crisis, such as the COVID-19 pandemic, this positioning is even more critical. Starting from these assumptions and using the SOS-PME Advisory Network/UFRGS case, we identified key elements for promoting regionally-engaged universities.

From the theory we used it was possible to determine six theoretical elements of a regionally-engaged university: engagement, collaboration, value-added results, institutional reputation and support, knowledge as a process, and knowledge as a result. We found eight elements of the SOS-PME Project for promoting a regionally-engaged university that relate to these categories: engaged leaders and volunteers, a strong

communication strategy, internal and external alliances, practical deliverables, institutional reputation and support, multidisciplinary knowledge, agile project management and knowledge spillover.

The university’s interactions with society strengthen its mission. The relationships established by way of the SOS-PME Project enabled knowledge to be collectively constructed. This result represents a very important signal for the advancement of UFRGS’s engagement in the region. It also reinforces the role of universities, particularly knowledge-based activities, in the regional economic progress, improving their local absorption capacity and the knowledge of its regional environment, creating knowledge spillovers (Benneworth & Charles, 2005; Drucker & Goldstein, 2007) through formal and informal exchange of knowledge that does not involve financial compensation (Olmos-Peñuela, Molas-Gallart, & Castro-Martínez, 2013; Trippl, Sinovic, & Lawton-Smith, 2015; Wang, Hu, Li, & Pan, 2016).

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Daniela Francisco Brauner, Fernanda Maciel Reichert, Raquel Janissek-Muniz, Aurora Carneiro Zen and Lisiane Closs worked on the conceptualization and theoretical-methodological approach. The theoretical review was conducted by Aurora Carneiro Zen, Fernanda Maciel Reichert, Daniela Callegaro de Menezes and Lisiane Closs. Data collection was performed by Wendy Beatriz Witt Haddad Carraro, Carla Simone Ruppenthal, Fernanda Maria Müller, Marcelo Soares Lubaszewski and Marisa Ignez S. Rhoden. Data analysis included Daniela Francisco Brauner, Fernanda Maciel Reichert, Raquel Janissek-Muniz, Wendy Beatriz Witt Haddad Carraro, Aurora Carneiro Zen and Daniela Callegaro de Menezes. All authors worked together in the writing and final revision of the manuscript.