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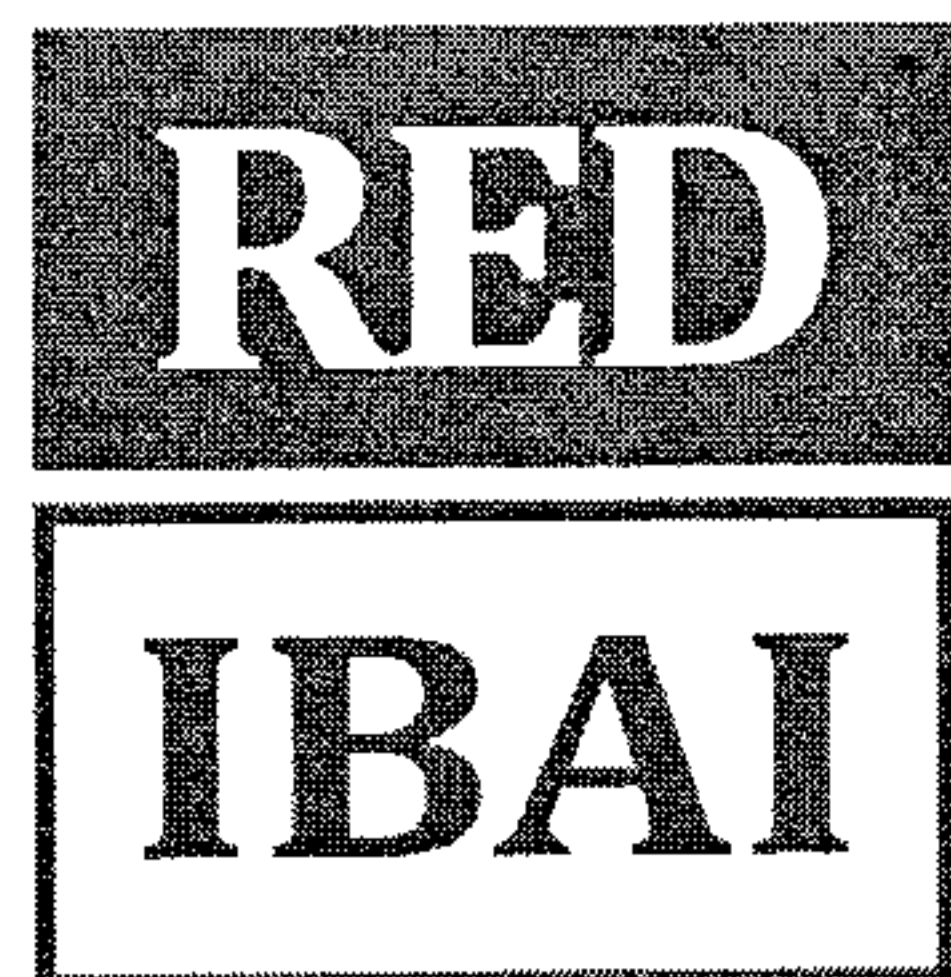
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**THE ROLE OF THE BALANCED SCORECARD IN EDUCATIONAL
MANAGEMENT IN LATIN AMERICA**

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THE ROLE OF THE BALANCED SCORECARD IN EDUCATIONAL MANAGEMENT IN LATIN AMERICA

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Resumen: Motivadas por la necesidad de profesionalizar su gestión, las organizaciones públicas han incorporado en los últimos años varias herramientas y conceptos generados para el sector privado. En este contexto, el Balanced Scorecard (BSC) fue el blanco de diversos estudios, como una alternativa para evaluar el desempeño y la gestión estratégica de una organización. Cuando las diversas metodologías administrativas se transponen de una empresa convencional a la esfera de las organizaciones sin fines de lucro, es necesario realizar diversos estudios que promuevan la reflexión sobre diversos aspectos del método y su implementación. Es de destacar que el sector de la educación superior tiene también sus propias peculiaridades y diferencias, las cuales deben ser consideradas y ponderadas al utilizar la metodología. Por lo tanto, el objetivo de la presente investigación es realizar un análisis de las experiencias que se tienen en América Latina con el uso del BSC en el ámbito de las instituciones de educación superior (IES). Con este fin, desde las perspectivas exploratoria y explicativa se examina críticamente la aplicabilidad del BSC con un enfoque cualitativo. Las estrategias de búsqueda incluyeron la investigación bibliográfica y documental. Específicamente se buscó identificar los factores relevantes a considerar para estructurar un BSC, ventajas, desventajas y limitaciones del uso de este enfoque en las IES latinoamericanas. Las principales ventajas del uso del BSC son la mejora en la gestión, el aprendizaje y la alineación estratégica, en la transparencia, la evaluación del desempeño y facilita la medición y presentación de resultados. El

principal inconveniente se relaciona con la falta de formación de los empleados. Algunos factores que deben considerarse para la aplicación del BSC son: los fundamentos estratégicos (misión, visión y valores) deben ser definidos claramente y promovidos; pueden adoptarse Perspectivas con enfoques distintos a la descripción original del BSC; es importante promover una cultura organizacional favorable para el BSC a todos los niveles; la fase de elaboración exige una participación voluntaria con representantes de los principales grupos de interés; se sugiere también contar con alguien que ofrezca asesoría técnica externa sobre diversos aspectos del BSC.

Palabras clave: América Central y del Sur, educación superior, indicadores de desempeño, administración estratégica

Abstract: Motivated by the need to professionalize their management, in recent years public organizations have explored several tools and concepts generated for the private sector. In this context, the Balanced Scorecard (BSC) has been the target of several studies as an alternative to evaluate the performance and the strategic management of any organization. However, when the diverse administrative methodologies are transposed in a conventional company into the realm of non-profit organizations, various studies are needed to promote reflection on several aspects of the method and its implementation. It is noteworthy that the higher education sector has its own peculiarities and differences which must be considered and weighted when using this methodology. Therefore, the objective of this research is to analyze the experiences that have been accumulating in Latin America with the use of the BSC by higher education institutions (HEIs). To this end, from the exploratory and explanatory perspectives the applicability of BSC was critically examined with a qualitative approach. Strategic search included bibliographic and documentary research. Specifically, it was sought to identify the relevant factors to consider in structuring a BSC, as well as the advantages, disadvantages and limitations of using this approach in Latin American HEIs. The main advantages of using the BSC are improved management, learning and strategic alignment, transparency, better performance evaluation and the facilitation of measurement and presentation of results. The main drawback is related to the lack of

training of employees. Some factors to be considered for the implementation of BSC are: the strategic foundations (mission, vision and values) must be clearly defined and promoted; different perspectives approaches other than the original description of BSC may be adopted; it is paramount to promote a positive organizational culture to the BSC at all levels; the development phase requires voluntary participation with representatives of key stakeholders; it is also suggested to get external technical advice on various aspects of the BSC.

Key words: Central and South America, higher education, performance indicators, strategy management

Introduction

Education is a current priority since it is considered as a mean for helping developing countries to participate into the global arena in terms of competitiveness and development reducing concurrently their social and economic backwardness (Comboni and Juárez, 2002). This also explains the interest that international economic organizations such as OCDE, CEPAL, and the World Bank have expressed in recent times for education, when in the past their interest was confined to economic issues (Sánchez, 2001).

Higher education system faces unprecedented challenges that require us to rethink its structure and organization. Several Latin American countries are restructuring their higher education systems to accommodate to trends like higher education globalization, pressures to improve and expand their productivity with the same or even less resources, and for institutional reforms to improve transparency and accountability (Schwartzman, 1999).

As in other countries, higher education in Mexico exhibits certain traits and trends, including: anarchic growth resulting from the absence of a national education plan, massification and privatization of higher education (Combini *et al.*, 2002). Additionally, all Higher Education Institutions (HEIs) face demands for quality standards, competitiveness, better return on investment, accountability, and social relevance, as

well as a growing budget decrease, problems of internal governance, and management, organizational bureaucratic and administrative deficiencies that require a constant search for competitiveness, permanence, legitimacy, and positioning (Parker and Estenssoro, 2010). It is therefore imperative to develop innovative systems and management styles through structural and cultural changes that replace the traditional paradigms and allow for continuous, timely and correct decision making. Innovative university management systems must avoid isolated data processing and the use of indicators unrelated to objectives and strategy. Also, outdated teaching models must be overcome and a new identity for the public university must be found.

HEIs are under pressure from society to bring their productivity at the levels found in the private sector. To achieve this change managers face enormous difficulties, especially: a dense legislation with countless regulations, an anachronistic bureaucracy, a restricted budget in a shrinking trend for many years, the inability to hire, fire or even to give an economic recognition to employees by an improvement in financial performance, restrictions for fund relocation from one chapter to another, and many other issues.

Among other alternative models of strategic management, the Balanced Scorecard (BSC) has earned an important place in academic discussions, which has received the attention of researchers. Hence, the aim of this paper is, through a literature review, to determine if indeed the BSC can be a useful tool for educational management at the Latin American HEI.

I. Management Education

The professionalization of management has proven to be essential for a complete organizational development. The HEIs request their managers to exhibit creativity in the formulation of models and approaches that allow them to operate in a complex environment characterized by, among others, fuzzy goals, multi-technology, academic freedom, and great sensitivity to environmental management factors. To carry out its work, the university manager should possess not only technical and political knowledge but also skills to manage expectations, intentions, fears, frustrations and needs of

people in the organization (Meyer Jr. and Meyer, 2004). Moreover, as in other sectors, indicators of higher education tend to be historical, and usually cannot alert the institutions in a timely manner about underway changes. In addition, emphasis has been placed on academic measures, as they are easier to obtain. These measures offer no real view of the complex situation of an institution or reflect many of the dimensions of the strategic direction and operation of a university (Ruben, 1999).

The changes in modes of production and transmission of knowledge also generate changes in management and organization, so that a new university that meets the emerging needs and renews the historical tradition favoring a new history of education is strongly needed. In order to comply with what has been proposed, it is necessary that every institution have clear and well defined purpose, mission, functions and objectives consistent with common practices (Menezes, 2011). A new concept of university implies new forms of management that assume more technocratic visions focused on effectiveness and efficiency as a way of organizing academic life (Comboni and Juárez, 2002). According to Francisco *et al.* (2013), the institutionalization of management practices in the context of higher education, such as college planning methodologies, competency management and consolidation of the institutional evaluation might become competitive advantages.

Tello (2008) briefly reviewed the development of educational management and pointed out that this discipline emerged in the United States of America (USA) in 1875 with the publication of a book written on the subject by William Harold Payne, at the time, School Superintendent in Michigan. Tello author also notes that as a disciplinary field, educational management developed during the 1960's in USA, in the 1970's expanded to UK, and in the 80's reached Latin America, taking different nuances in each of these regions. However, Solano (2005) mentions that since the 1950's, under the influence of the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the CEPAL, educational management acquired an important role in determining regional policies. From the Anglo-Saxon classical perspective, educational management of IES must have heavy technical load linked to results. Conversely, the

introduction of educational management in Latin America was associated with a liberal vision aiming to assess the educational phenomenon in terms of cost effectiveness.

To Casassus (2000), educational management is now a discipline in progress resulting from the interaction of theory, politics and pragmatics. Educational management is not only pragmatic - since the political dimension also is part of its practice-, school management is embedded within the educational policies deployed by the state as public policies. On the contrary, Tello (2008) believes that educational management refers to the action and thinking of educators in specific situations, of which it is also necessary to gain distance and represent the reality symbolically, in order to reconsider, analyze, express, and denounce it. Thus, educational management would be, by itself, a complex that includes the subjectivities of individuals, the institutional reality and the environment. In addition, Tello believes that education management became a field for applying plainly the general management principles, when in fact it was supposed that management and education should converge to address the problem. However, this not happened by chance or as part of an epistemological failure, but clearly influenced and driven by the neoliberal logic on education. In management theory, the processes leading to product's production are formalized in functions. These functions are basically planning, financial management, human resources management and linking with users.

Álvarez *et al.* (2011) emphasize the contemporary relevance of the transition process from the traditional school administration to strategic educational management. The concept of school management is going to be understood from a purely technical and administrative function, centered the individual person of the director, to a role focused on the organizational culture and the educational and social action occurring in schools. Usually, people performing managerial duties is teaching staff coming out of the academic community undertaken such a function as a result of some regulations or bylaws which usually does not consider whether such personnel comply with the management profile and has the knowledge or skills necessary to assume such responsibilities. This, coupled with the increasingly complexity of university functions

results in deficiencies in management and leadership, coordination failures in different activities, poor quality services and deficient performance in the processes of linking with the productive sector. Also common is the lack of a methodology to design, implement and evaluate management programs and to monitor and correct decision making at that level. The current organizations' world is going through a change phase change making a transition from an economy based on physical assets to an almost total dependence on intellectual assets economy. The future system must have the ability to identify, describe, monitor and promote feedback on the intangibles that drive organizational success (Lopez, 2002; Hopenhayn and Ottone, 2007).

II. Performance Measurement

A system of indicators and management control is a system that allows continuously monitoring variables that are critical success factors, as well as variables that require control in the quest to improve decision making about the present and future of an organization are taken (Barnetson and Cutright, 2000). Organizational monitoring and control through management indicators allows monitoring compliance with organizational policies, objectives, goals and mission, it also protect the resources of the organization, prevent errors and recidivism, establish deviations and take corrective action, monitor strategic, operational and support processes, identify the causes of deviations, and verify compliance with processes and procedures. Control can be of various types, external, physical, administrative or internal; the latter includes accounting, financial, operating and management functions (Kennerley and Neely, 2002).

Management control depends on the visions and the type of activities carried out in each area or at the main process function. Control can be directed to various aspects such as results, performance (efficiency, effectiveness, productivity, profitability), effectiveness and impact, costs (production, not quality, financial), compliance (standards, features, specifications), processes (variables, attributes), products (quality, quantity, service), and services (quality, service), among others (Neely, 1999).

Management indicators reflect the achievements and the fulfillment of the mission and objectives of a given process and serve as a tool to improve the quality of decisions made about the process. Management indicators are one of the key agents to any process of production (goods and services), and are carried out efficiently and effectively through a good information system for verifying the different stages of the organizational process.

The problems of educational management above described can be solved with the implementation of a BSC, comprising a group of indicators, which will provide critical information to the institution for timely decision making. The BSC translates the strategy and mission of an organization in a broad set of performance measures providing the necessary structure for the implementation of a management system and strategic measurement.

In the absence of measurement system strategic objectives, a HEI does not know for sure, the progress of its main tasks and activities. Control tasks and activities of teaching and administrative staff are essential to the institution, because all these tasks and activities are designed to meet the strategic objectives outlined in the Institutional Strategic Plan (IEP). This control is vital because activities and tasks are closely related to the achievement of objectives, and if the tasks and activities are not fulfilled as planned, the success of the objectives is compromised, so for the HEI it is vital to check whether the tasks and activities are being developed as stated in the IEP or not (Alonso and Haces de Villa, 2006).

III. The Balanced Scorecard

The Balanced Scorecard (BCS) emerged from a study done by David Norton and Robert Kaplan derived from the strong criticism that in the early 1990s was addressed to the USA management systems, which showed a strong financial orientation. They met regularly with executives of several companies to develop a new measurement model that took shape in what is now known as "Balanced Scorecard". The balanced scorecard is a methodology that allows transforming the objective and strategy of a

business unit into objectives and tangible indicators. The principle of BCS indicates that the objectives, indicators and strategic actions should be assigned to a particular category, that is, a Perspective (Kaplan and Norton, 1996).

The BSC is then a business management methodology that measures the operating performance, besides using the usual financial indicators, it monitors indicators of customer satisfaction, effectiveness of internal operational processes and innovation capacity of the institution, comparing them to the goals established in the strategic plan. The results obtained in these additional areas can ensure continuity of financial results and help drive the organization toward its strategic goals (Kaplan and Norton, 2001).

In summary, the BSC translates the strategy and mission of an organization in a broad set of performance measures/performance, providing the necessary structure for the implementation of a management system and strategic measurement. Traditional management information systems find it hard to respond to current challenges, due to their inherent weaknesses and insufficiencies. In these circumstances, the BSC methodology, given its characteristics, may be viewed as an indispensable strategic management instrument.

IV. Use and application on BSC in Latin America

Most of the information on BSC emerging from Latin America has been generated as a result of theses, dissertations and conference contributions. Brazil is by far the country with the highest number of reports on the use of BSC.

The first reports on the use of BSC applied to HEIs in Latin America showed a lag of almost 10 years in relation to the seminal work of Kaplan and Norton (1992). These pioneering studies described above all an overview of the methodology and its possible application in education, although some ventured to apply the tool in specific educational institutions. Pessoa (2000) developed a management model for the Brazilian Federal Universities, based on the BSC and focused on the integrated monitoring of several organization initiatives. To verify model functionality, a pilot application was done at the Federal University of Ceará concluding that its application is possible and feasible. In

turn, Castellanos, (2000) also developed a BSC for the Experimental Institute of Technology "Andrés Eloy Blanco" in Barquisimeto, Colombia. Also, Rocha (2000) applied the BSC model to a business unit in a Brazilian University.

Walter *et al.* (2001) emphasized the preparatory process of building a Balanced Scorecard system. The relevance of defining the vision, the mission statement and the strategy of the organization is stressed as a pre-requisite to acquire strategic consensus and focus and proceed to the BCS. Concurrently, the possibilities of applying the BSC in the University of Contestado, Santa Catarina, Brazil were also explored (Scharmach, 2010; Scharmach *et al.*, 2012).

Silva and Menezes (2004) discussed the problems of educational quality and suggested strategic solutions based on the BSC. They emphasized the need of strategic planning on Brazilian education and described the methodology for implementing BSC on graduate schools. By the same token, Kraemer (2004) provides a description of the BSC process and suggest its potential use for guiding the strategic processes of HEIs. Delgado Filho and Bacic (2004) also agreed in the potential role of BSC as a tool to structure a system of measuring overall performance in HEIs, highlighting the vision of the National Quality Award Foundation. In turn, Lima and Serra (2004) adapted the original BSC to the Catarinenses universities particular conditions and proved that BSC is a helpful tool in seeking a more competitive and continuing vision. Finally, Lima *et al.* (2004) used the BSC as a spearhead to create a recognition and profit program that may help to equalize the interests of employees with the interests of the academic institutions belonging to the Santa Catarina Association of Educational Foundation.

Schäfer Oyanedel (2005) developed a BSC for a school in Chile, but he emphasized software applications. Specifically, Delphos, Strategy2Act, Dialog Strategy, BusinessObjects and StrategyLink were tested and compared on the basis of their performance for diverse criteria related to BSC indicators. It was concluded that StrategyLink has the best performance related to BSC management.

As various authors began to gain experience in the use of BSC, the reports in literature go beyond being merely descriptive to provide more specific recommendations on particular aspects and applications of the model. Thus, for example, Cislighi and Luz Filho (2006) noted that in Latin America there were no reports on the adoption of BSC by government institutions for medium and long term periods. They also warned that even though BSC is a model fully adjustable to the characteristics of each organization, the BSC does not guarantee success in addressing the responsibilities of managers and satisfying expectations of stakeholders. In a study done in a Brazilian institution, Aleixo et al (2006) found that the strategic map drive improvements in the performance of organizational internal processes and maximize the influence exerted to provide value to stakeholders. The tool also allowed them to detect that the SEBRAE Caruaru-PE is quite a bureaucratic organization, where employees' talents and skills are wasted, and computer systems are obsolete. Also, Lima Junior (2008) found that directors and coordinators of a private HEI have a different perception on the importance given to the BSC perspectives, preferring Learning and Growth and Internal Processes rather than the Customer and Financial Perspectives. Lima Junior concludes that there may be an inconsistency on the strategy deployment in the target institution resulting from differences in perception of the diverse managerial levels involved.

Still, some authors continued creating specific BSC frames for different HEIS. Duarte and Freitas Júnior (2008) developed a BSC for a private institution of higher education in the State of Mato Grosso, Brazil. One of their conclusions was that researchers had a partial knowledge about the BSC methodology, since not all aspects that make up their conceptual network were put into practice, although this knowledge is regarded as important. Also, Quintero (2008) crafted a BSC for a technological institute in Venezuela and Jurado (2010) did the same for a school in Ecuador, and Vidal *et al.* (2006) for a HEI in Pernambuco, Brazil. Cifuentes and Muñoz (2010) run an organizational diagnosis for the Graduate School of the Faculty of Dentistry, University of Chile, and suggested a BSC for monitoring performance. Rizzatti Júnior and Dutra

(2010) proposed a BSC to evaluate the management of education distance from a HEI in Florianópolis, Brazil.

Some complexity was added to performance measurement in HEIs when some researchers combined BSC with other methodologies. Luza *et al.* (2008) propose a model for universities in Peru where the BSC is reinforced adding computing architecture to achieve the technological implementation of the BSC. Ticse y Barreda (2009) concocted an integrated method for improving HEIs competitiveness based on the simultaneous application of BSC and the European Quality Model (EFQM). The proposed integrated approach was applied in the Catholic University of Santa Maria, Arequipa, Peru.

A later trend for reflecting on BSC, its results and use perspectives, has been observed in the last five years. Vásquez and Carrillo (2010) explored the use and importance of performance indicators in HEI in Colombia and promoted the extensive adoption of the BSC methodology. Lima *et al* (2011) determined the perspectives of the Balanced Scorecard (BSC) used in HEIs analyzing 25 IES located in the United States, Turkey and Thailand, and another 17 IES in Brazil. They found that three perspectives were recurrent in institutions abroad, namely: internal, financial and customer processes. On the contrary, in Brazilian institutions, the classic four perspectives were favored in more than half of the analyzed institutions. Also, other perspectives different to the original four were utilized. In foreign institutions those included: innovation, people; stakeholders, academic management; resources, community of learning students, image and recognition, diversity; international affairs, organizational development, organizational climate, and voters. In Brazilian institutions, some perspectives were incorporated or adapted from the original model, such as society, market, legal; innovation, and shareholders.

Ramos Filho (2011) proposed to use the BSC as a tool to evaluate the impact of strategic plans on HEIs performance indicators from the points of view of the teaching staff, the student body and the administrative employees. A remarkable finding was that the strategic plan was unknown to practically all the member of the studied institution.

There was also a complete lack of strategic culture and guidelines are not clear enough, according to employees. Mizrahi and Canen (2011) presented the basis of a multicultural approach for the construction of a strategic planning policy proposal for Basic Education schools based on BSC principles.

Thayanne *et al.* (2012) and Giollo (2012) developed BSC for HEIs in Brazil following the original model structure described by Kaplan and Norton. Heinzein and Streich (2013) proposed a BSC for the Federal Institute of Santa Catarina in Brazil and recommended that the weaknesses in strategic culture detected in the Campus, support the view of strengthen first the strategic culture in order to achieve a successful BSC implementation.

Ulyssea *et al.* (2013) noted that there are some peculiarities inherent to the legal nature of HEIs that pose major difficulties for a successful implementation of the BSC. The most important of these is the transience of the mandates of its senior management, or the alternation of power, which in essence, is a democratic principle. Changes in command of public HEIs, possibly power alternance between different groups, usually imply changes in management concepts, style and priorities of various levels of managements of these institutions. As the BSC depend on the success of support given by conviction and leadership of top management, the alternations can lead to its discontinuity or, at least, the uncertainty of BSC permanence.

Fossatti and Souza (2013) proposed the use of BSC as a tool for the governance of a community HEI in southern Brazil and after evaluation, concluded that the qualification of management processes had a positive note in most of the envisioned targets. Similarly, Fernandes (2013) developed an application of the BSC for the Department of Administration and Economics of the Federal University of Lavras and concluded that BSC is a helpful tool for organizing the activities of the Department and for evaluating its performance. Rosa *et al.* (2014) tested the BSC as a strategic management tool in an extension project promoted by a Federal Institution of Public Education.

Conclusions

The application of BSC in Latin America HEIs had a slightly late start when compared to other countries. Most of the information has been generated in Brazil with a smaller part of the research conducted in Spanish-speaking countries. A great deal of studies done is focused on designing BSC for specific HEIs, but longitudinal studies are practically nonexistent. Advantages of using BSC include improved management, learning and strategic alignment, transparency, better performance evaluation and measurement of results. The main drawback is related to the lack of training of employees. Some factors to be considered for the implementation of BSC are a clear definition and promotion of the strategic foundations, the uses of other perspectives different to those described in the original BSC model, and the need of promoting a positive organizational culture to the BSC at all levels and get voluntary participation of representatives of key stakeholders.

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