INTERNATIONALIZATION OF INDIAN HIGHER EDUCATION - A CASE STUDY

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ABSTRACT:
Internationalization in higher education is rapidly gain importance as educational institutions respond to globalization effects. Earlier, there are several models and frameworks indicated by researchers to analyze the internationalization process in any institution; this study uses the Dynamic Systems Theory (DST) framework to analyze the nature and development of the internationalization of Indian higher education and suggest that the internationalization process is dynamic. The framework of DST includes 5 primary levels, i.e., Global, National, Institutional, Program and Personal, each level includes further 5 components such as Purposes, Programs, Approaches, Projects and Outcomes, and every level has its environment, and a developmental range depends on the dynamic connection across the factors. There are three states, such as Initial, Attractor, and Control Parameters are other vital factors in examining the internationalization of higher education at individual levels. Internationalization of O.P. Jindal Global University will be discussed as a case study of implementing a dynamic systems approach to the internationalization of Indian higher education. This study aims to provide theoretical and practical implications for defining, developing, and strengthening the internationalization of Indian higher education through the DST framework.

Keywords: Dynamic Systems Theory; Higher Education; Internationalization

INTRODUCTION
Distinguished researchers in the field of internationalization of higher education Knight (2004) and de Wit (2002) have identified and discussed multiple definitions associated with internationalization and the need for a conceptual framework to be a part of a definition. The difference between the number of foreign/international students to local/domestic students, the number of international academic/non-academic members, the number of international/cross-border higher education agreement/collaborations, and the number of activities have done related to curriculum, students improvement, and academic programs (Delgado-Márquez et al., 2013; Knight, 2015) are few components that are a chunk of internationalization as a concept. Another comprehensive definition of internationalization proposed by Knight (2004) that highlighted the connection between the integration of international activities and their purpose and delivery. The dynamic systems theory (DST), which will be used during this study, integrate this comprehensive definition of internationalization and use as a theoretical framework guiding this research (Zhou, 2016).

PROBLEM STATEMENT
The current approach towards internationalization in higher education often raise two important questions
1. How individual educational institutions define and develop internationalization at the institutional level?
2. How to combine the different elements of internationalization at the institution level?

The study aims to bring a new approach, and the theory-based framework of internationalization focusing on the problems mentioned above would be an essential contribution to the development of the internationalization of Indian higher education.

BACKGROUND
Internationalization of Higher Education- A Definition
Internationalization is an essential aspect of higher education, mainly for knowledge generation, typically transcends juridical boundaries (Marginson & van der Wende, 2007). However, the importance of internationalization of higher education started getting pace in the mid-1980s (Knight, 2005). As the educational institutions around the world rapidly focused on increasing international activities, so it is crucial to understand the core definition that can highlight broader terms rather than focusing on specific activities alone. This study uses Knight's definition (1993, cited in Zha, 2003), where internationalization is described as "the process of integrating an international and intercultural dimension into the learning, research and service function of the educational institutions." Further to this, Knight has proposed another definition: "the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of postsecondary education" (2004, p. 11). This definition also distinguishes internationalization from globalization, which is defined as a set of processes that leads to the compression of space and time while increasing the interconnectedness between nations (Mittelman, 2001). While the two concepts are related to each other, the internationalization of higher education is seen as "one of the ways that a country responds to the impact of globalization yet, at the same time respects the individuality of the nation" (Knight, 1999, as cited in Harman, 2005, p. 124).

Dynamic System Theory- Concept & Principles
Dynamic system theory (DST) defines dynamic systems as a continuous process that changes over time (Thelen & Smith 2006, p. 258). It is continuously developing activity rather than fixed, and by frequently interacting with the environment, the system keeps reconstructing the whole system continually across time. DST has been actively and successfully used in different areas like awareness, perception, training, and language procuring (Bielecki et al. 2000; Fischer & Bidell 2006; Thelen & Smith 1994, 2006; de Bot et al. 2007; Spencer et al. 2012; van Geert & Steenbeek 2005).

Dynamic Systems Theory (DST) framework proposed a method to study the dynamics of intricate systems (Thelen & Smith 1994, 2006; de Bot et al. 2007; Spencer et al. 2012). DST consists of one dynamic system which is composed of multiple sub-systems that follow the same dynamic nature at each level. Further to that, these sub-systems include different variables which are interconnected with each other and continuously interacting all the time. Because of that, a small change in one variable or sub-system will have an immediate effect on the complete system. The dynamic system is a complex interaction between multiple variables, not on a simple cause-and-effect model. Numerous causes might lead to different outcomes in different conditions, and 'no single element – inner and outer – has the causal priority' (Thelen & Smith 2006, p. 281).

DST has initial and attractor as two states of dynamic systems. A dynamic system is built on its history, and the difference of the system at its first starting point makes it 'sensitive to specific
input at a specific time' (de Bot et al. 2007, p. 8). During the second state, a dynamic system is highly unpredictable due to open and continually self-organizing conditions. Still, during the constantly-changing process, the system sometimes may display a stable status. This short-term stability is an Attractor State, which represents that the components of the system are coordinating coherently. Thus the system has extended 'an affinity for that state' (Thelen & Smith 2006, p. 272).

After that, the complete system will develop pace, and because of the external forces, the system might change from its current Attractor State. However, if the influence of the system is not strong enough to permanently remove the annexing of the state, the system is inclined to return to the current Attractor State when the external force disappears. In case, if the external force is strong enough, the system keeps moving until it reaches to another Attractor State. Generally, the Attractor States of internationalization are interdependent and are always built on previous ones. Therefore, DST provides concepts and tools which help to examine the dynamic nature of a system through its complexity, richness, diversity, and development.

**Dynamic system approach to Internationalization of Higher Education**

In 2016, Zhou's have come up with the DST model, which was precise to internationalization in higher education, addresses the points of Knight's (2004) definition that the internationalization is a holistic and changing process. According to Zhou (2016), for applying the DST framework to the internationalization of higher education, five levels will occur Global, National, Institutional, Program, and Personal. The global level includes broad activities between and across countries, such as the essential skills required for all young human resource in the current or future.

1. The national level reflects the unique priorities and needs of internationalization in one specific country, like Country student mobility current trends and intercultural relationship and communication between countries.
2. The institutional level refers to the matter of most significant importance and concerns for the individual educational institutions' for internationalization like university missions of internationalization and different in campus international activities.
3. The program level involves the effort of a particular department in a university towards the internationalization process, such as the internationalization of curriculum in specific disciplines of study.
4. Personal level is the narrowest level focused on the activities and efforts made by an individual like faculty, students, and staff towards internationalization in institutions, e.g., faculty and staff members' professional development on internationalization areas.

Further to this, Zhou (2016) suggested that the DST framework includes an additional five components (purposes, programs, approaches, projects, outcomes) within these five levels. These five components help us to find the four essential questions on internationalization.

The five components are described as follows:

1. Purposes answer the question of "why" like Why institutions want to internationalize? It refers to the overall goals and objectives for internationalization of individual educational institutions;
2. Programs refer to "where" questions such as the areas where internationalization could happen effectively.
3. Approaches are ways to answer the third question "how" the institution can achieve internationalization;
4. Projects refer to the specific activities of internationalization at institution level;
5. Outcomes are the final component that answers the question of "What" do the institutions will get from internationalization? It helps to explain the broader effects of the internationalization process and its implementation.

The below-mentioned figure highlights every five levels and interconnected components in the framework. As the levels go upwards, the five elements become more prominent and more encompassing because complexities related to internationalization increase at the more significant levels. All levels are interconnected with each other even though each of the levels has its states, parameter, and context. It is essential to consider all the mentioned factors and their relationships between each other during the analysis of internationalization at each level or as an overall dynamic system.
Internationalization of Indian Higher Education

India has a long history of internationalization of higher education. Since ancient times Indian universities like Takshashila university, which are famous as the world's oldest university established in 2700 years ago and was also globally known for attracting international research scholars.

Internationalization in higher education is always an essential area of concern for policymakers in India. In the past, the government has taken multiple initiatives to promote Indian educational institutions as a dream destination for international students for quality education. In 2017, the government started an initiative by the name of 'Institutions of Eminence' (IoE) with the aim is to identify the most eminent 20 public and private universities (10 each) across India and offer them complete academic autonomy and permit them to hire foreign academicians from around the world to enhance the quality of teaching and research and bring Indian universities on top hundred institutions in the world over time (U.G.C. - Institutions of Eminence Deemed to be Universities, Regulations, 2017 ). Another initiative was taken by the Ministry of Higher Education, India (2018), by the name of "Study in India" with the aims to support and facilitate international students to choose the Indian universities and promote "India as a hub of affordable education for foreign students." (MHRD, 2018) The vision of this program is to encourage the maximum number of international students to choose India as a dream destination for their higher studies.

However, still, the educational institutions in India are not able to comply with the vision of MHRD because of their primary focus on sending students to foreign partner universities under different forms of student mobility, i.e., semester exchange, study abroad, dual degree, pathway programs and so forth. Most of the institutions used an activity-specific approach during the internationalization process at the institution level due to which they are failed to attract international students in their institutions and, at the same time struggling to hold local students in the home country. In the recent report of Reserve Bank of India (R.B.I.), Indian students studying overseas has risen by 44 percent from $1.9 billion in 2013-14 to $2.8 billion in 2017-18, and another report highlighted that thousands of Indian students that are currently studying abroad cost India as much as the U.S. $17 billion a year in lost revenue estimated (ICEF Monitor report, 2012).
Also, all the previously discussed initiatives of the government of India remains on the slow track, and limited countries students opt India as a destination for their higher education in which most of them are neighboring countries like Nepal, Afghanistan, Bhutan, Srilanka and some part of the African continent.

At present, the Ministry of higher education of India continuously trying to improve the current situation of educational institutions by giving them autonomy and more freedom so that they can improve quality at the campus level and also increase their efforts towards the internationalization process. The continuous efforts show that there is a high level of commitment from the government side in the area of improvement of quality and internationalization of Indian educational institutions. However, it yet to see how education institutions will able to achieve this target while they are struggling with some fundamental issues like limited funding from government, necessary infrastructure, student-faculty ratio, and quality standards.

Dynamic Systems Approach to Internationalization of O.P. Jindal Global University

O.P. Jindal Global University (J.G.U.) is one of the top private universities located at Sonipat, Haryana, India. It was established in 2009, and it is one of the few universities in the Asian continent that holds a 1:9 student: faculty ratio and recruits faculty members from around the world. At present, it has 5100 students in its eight schools with 15 undergraduate and 6 graduate programs and a Doctoral program (O.P. Jindal Global University: About, n.d.).

Stages of Internationalization of O.P. Jindal Global University- Initial & Attractor State

DST framework examines the dynamic nature during the developmental phase, so its essential to understand the history of the internationalization process at O.P. Jindal Global University (J.G.U.) as its crucial in envisage and evolving its internationalization (Spitzer & Zhou 2014).

O.P. Jindal Global University, established in 2009 as a vision of the world-class global university in India and so far, received numerous recognitions, accreditations, and awards from different entities in India and abroad. Even during the initial stage of establishment, J.G.U. has initiated university-wide strategic planning of internationalization. In 2009 only J.G.U. Included the globalization in its mission statement – Promote a global perspective through a global faculty,
global courses, global programs, global curriculum, global research, and global collaborations in an intensive research environment, ensuring academic freedom and functional autonomy' (O.P. Jindal Global University: Vision-Mission, n.d.). Within a year of establishment, J.G.U. has well recognized by top universities of the United States, United Kingdom, and Australia and also signed numerous different forms of agreements with all of them. At the national level, in 2016, J.G.U. was awarded the highest grade "A" by the National Assessment and Accreditation Council of India. Apart from it from time to time, J.G.U. was recognized and awarded by other national and international organizations. J.G.U. also active members of some well know organization around the world like Association of Indian Universities (A.I.U.), Association of Law Schools, International Development and Public Policy Alliance (IDPA), Association of American Colleges and Universities and member of the Law Schools Global League (O.P. Jindal Global University: recognitions, n.d.). In 2020,

J.G.U. becomes the youngest university in the world to have been ranked in the World University Rankings and ranks the global top 150 amongst all universities that are under 50 years of age.

O.P. Jindal Global University has established the Office of International Affairs and Global Initiatives (IAGI) with a focus on the linkages with international universities and organizations to institutionalizing the internationalization of the university around the world. From 2017, IAGI office team has created a strategic plan to work in the areas of students and staff exchange with partner Universities, joint teaching opportunities for faculty members, collaborative research activities with joint projects & publications, joint seminars, conferences & workshops. The IAGI office majorly developed and adopted specific approaches to internationalization. Initiate numerous projects related to various aspects of internationalization have been implemented and proposed on campus. J.G.U. is moving forward fast and steadily in developing internationalization. Thus, the internationalization of O.P. Jindal University has reached an Attractor State – a relatively stable development stage of internationalization.

**Internationalization process in O.P. Jindal University- Current status**

The internationalization of higher education is continuously changing over a period, which makes it dynamic. Therefore, what we are examining and measuring at a particular time can be the status of that particular moment of an internationalization process. It might be simple, complicated,
or even disorder (Thelen & Smith 2006). At a specific moment, it can be temporary or flexible and display 'the power of the interest between elements' (de Bot et al. 2007, p.8) at a specific time and within a particular context. Figure 2 reflects the current status of the internationalization process of J.G.U. in Jan 2020.
Internationalization of O.P. Jindal Global University- Purposes

Since its establishment, J.G.U. has considered global perspectives as one of the central parts of its mission plan. It is stated by promoting a global perspective through a global faculty, global curriculum, global research, and international collaborations in an intensive research environment, ensuring academic freedom and functional autonomy. The founding vice-chancellor of J.G.U. Professor C. Raj Kumar has a conceived the idea of establishing India's first 'Global University' with focused into multidisciplinary and research-oriented university and gain a reputation in India and abroad for its efforts to promote excellence in teaching, research, capacity building and community service (O.P. Jindal Global University: founding vice-chancellor). This visionary idea emphasizes the efforts of continually developing a global perspective in every aspect of the activity, which is not only students’ specific but faculty and staff members’ experience as well, and strong participation of students, faculty, and staff members in J.G.U.’s internationalization process. More importantly, this statement points out that J.G.U. recognized that the internationalization process is dynamic, an on-going and continuous process.

Internationalization of O.P. Jindal Global University- Programs

Working with the prominent world top universities and organization, J.G.U. has explicitly identified five areas of programs which will be highly involved in internationalization – Internationalization of Curriculum, Internationalization of Faculty through faculty exchange, joint teaching, collaborative research, joint projects & publications and internationalization of students through Summer School, Semester exchange, Study Abroad Program, Capstone project, International internship and International Linkages (O.P. Jindal Global University: international office). All the inbound and outbound activities happened in above mentioned five programs serve as an impetus for the progress of internationalization at J.G.U.

Internationalization of O.P. Jindal Global University- Approaches and Projects

J.G.U. has followed the four approaches to develop and implement internationalization. The first approach is infusing international, intercultural, and interdisciplinary dimensions into the life of all students through internationalization of the curriculum, semester abroad, foreign language, immersion program and series of international events, which is essential for a student to develop a global perspective to compete in a global world critically and effectively. Internationalising the curriculum is eventually the foremost activity in the internationalization of higher education; therefore, the outcomes of internationalization are always achieved through the successful internationalization of curriculum (Olson et al. 2006; Leask 2009, 2012, 2013a, 2013b, 2014; Huang 2006). Other related projects include curricular and ex-curricular activities such as International Seminars, Students committee, International conferences and workshops and International day, and so on.

The second approach is preparing academic and non-academic staff members for facilitating global learning at J.G.U. Both of them need to understand the requirements of students' diversification in terms of cultural backgrounds and experiences and accordingly plan the policies and strategies to includes them into various curricular, co-curricular, and extra-curricular activities (Dewey & Duff 2009; Schuerholz-Lehr et al. 2007). By this approach, the internationalization process of J.G.U. becomes dynamic in nature, focusing on creating a global workforce and community of global learning, in which academic and non-academic staff members are fully
engaged. Some of the Projects related to this are like Faculty fellowship, Comprehensive assessment, workshop, and International Teaching Circle, and so on.

The third approach is to encourage different international education institutions from various disciplines to revive the idea and emphasize more on global learning. "New insights from many different areas are meet to develop a new science of learning that may change educational practices" (Meltzoff et al. 2009); thus, partnerships across the border has one of the vital skills to achieve in the current globalized world. J.G.U. has initiated and developed numerous projects of sharing academic staff teaching, research, and service interests to facilitate potential collaborations, including international meet, e-meet of partners, international expert panel, seminars on internationalization activities, interdisciplinary presentation panels, and dialogues with international educational institutions, and so on.

The fourth approach is using technology to enhance J.G.U.’s capacity to foster global learning, participation, and collaborations. In the modern era, technology is crucial and plays a critical part in the internationalization process (Blue Ribbon Panel on Global Engagement 2011; Roberts & Monroe-Baillargeon 2012; Leask 2014). It increases communications at local, national, and international levels, and it can, and should, be used extensively in J.G.U.’s internationalization. Website, Zoom meeting, Microsoft Team, Social media, and other technology tools are used in various projects, such as online collaborations, collaborative online student learning, online classes and online communications with international partners, and so on.

**Internationalization of O.P. Jindal Global University- Outcomes**

Internationalization constitutes a cornerstone of J.G.U.’s core vision since its establishment. Global opportunity and awareness for its students and faculty members in terms of students and staff exchange with partner Universities are primary outcomes of global learning (O.P. Jindal Global University: International Office). As a global university, J.G.U. is continuously producing global workforce who are Aware, Competent, and Skilled and ready to work in the areas of challenges that are affecting the globe and shaping its future. The workforce continuously proving themselves through their skills and competencies by engaging and solving the current issues related to the global world (O.P. Jindal Global University: Inside-JGU)

**Internationalization of O.P. Jindal Global University- Control Parameter**

During an in-depth analysis of the present status of internationalization in O.P. Jindal Global University, discover the visibility of its Control Parameter of internationalization. The value of visibility of internationalization of J.G.U. can be measured in 3 parts – What internationalization activities are available at J.G.U.? How many types of activities of internationalization are available at J.G.U.? and How are these activities of internationalization available at J.G.U.? The answers to these 3 questions reflect the overall approach and development of the internationalization of J.G.U. Being the Control Parameter of the internationalization of J.G.U., Visibility is vital to its developmental range of internationalization since it measures the internationalization of J.G.U. (Fischer & Bidell 2006; Thelen & Smith 2006). Currently, J.G.U. has a high value of visibility of internationalization in a selected part of the world, mostly in the U.S., U.K., Australia, and China. Therefore, J.G.U. should focus on increasing the value of visibility in the African, Middle East, Asian and South Asian countries by doing more engagements such as more strategic collaboration, recruiting more international students, hired international faculty from these countries, Languages and Cultures Studies, joint projects, more study abroad projects, promoting joint talks, and so on. By doing this, J.G.U. will be more
strengthen and develop a connection between the components, and eventually will be able to move forward to the next Attractor State effectively and efficiently.

**Circle of Internationalization of O.P. Jindal Global University**

The dynamic nature of the internationalization of J.G.U. reflects that all the activity and approaches are shows that all approaches and are entwined each other and works for one or more programs which make all five programs interconnected to each other; also, each program contributes to the general purposes and outcomes of Internationalization of J.G.U. This relationship improves the sustainability of the internationalization of J.G.U. The appeal between these programs, approaches, and projects are dynamic, not fixed. The connection is constructed separately, depending on where a person locates itself in the circle of the internationalization of J.G.U.

Further to this, all internationalization components can be seen as four concentric circles, with Global opportunity and Global perspectives as a middle circle, 5 programs as the second circle, the third circle includes 4 approaches, and the fourth consists of various projects (see Figure 2). Each stakeholder in university can be in the circle and then spin these four circles and add its unique combinations of Programs, Approaches, and Projects; thus, these individuals help to develop a holistic as well as individual perspective towards the internationalization of J.G.U. Overall, the internationalization of J.G.U. is dynamic in nature implant the global perspective into all students' academic experience. Based on J.G.U.'s history and current condition of internationalization, J.G.U. can define, develop, and combines its internationalization by continually interacting with different elements and factors and increase the visibility of internationalization and develop a holistic approach of internationalization.

**Conclusion**

Internationalization has drastically transformed the view of higher education, and in the coming years, "the internationalization process has progressed from a small minimal level to a global scale and will become the essential and commanding trend in higher education" (Knight & De Wit, 2018). Therefore, it is essential to understand and develop the actual meaning of internationalization and its need at the institutional level. In addition to this, there is also a need to review the present approach and expansion of internationalization from a dynamic systems perspective. There is also scoped to further examine the different levels of internationalization and comparing it at the same level but in different conditions such as national, institutional, programs, and individual levels. Further in-depth research is needed to identify more relevant components and control parameters that would be beneficial in understanding and developing internationalization of higher education. Scholars and researchers can further define, develop, and combine internationalization effectively and efficiently at an institutional level by generating more understanding of the dynamic nature of internationalization of higher education.

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