University of Texas Rio Grande Valley

ScholarWorks @ UTRGV

Public Affairs and Security Studies Faculty Publications and Presentations

College of Liberal Arts

12-31-2022

Competitive Intelligence and Academic Entrepreneurship as Innovative Vectors of a Resilient, Business-Oriented Education

Daniel Gabriel Dinu

Andreea Stoian Karadeli The University of Texas Rio Grande Valley

Larisa Mihoreanu

Elena Iuliana Pașcu Gabără

Mihail Păduraru

Follow this and additional works at: https://scholarworks.utrgv.edu/pass_fac

Part of the Public Affairs, Public Policy and Public Administration Commons

Recommended Citation

Dinu, Daniel Gabriel, et al. "Competitive Intelligence and Academic Entrepreneurship as Innovative Vectors of a Resilient, Business-Oriented Education." Journal of Economic Development, Environment and People 11.4 (2022): 110-122. doi.org/10.26458/jedep.v11i4.789

This Article is brought to you for free and open access by the College of Liberal Arts at ScholarWorks @ UTRGV. It has been accepted for inclusion in Public Affairs and Security Studies Faculty Publications and Presentations by an authorized administrator of ScholarWorks @ UTRGV. For more information, please contact justin.white@utrgv.edu, william.flores01@utrgv.edu.



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

Competitive Intelligence and Academic Entrepreneurship as Innovative Vectors of a Resilient, Business-Oriented Education

Daniel Gabriel Dinu, PhD¹, Andreea Stoian Karadeli, PhD², Larisa Mihoreanu, PhD¹, Elena Iuliana

Pașcu Gabără, PhD (c)¹ and Mihail Păduraru, PhD (c)¹

¹ Bucharest University of Economic Studies, Bucharest, Romania ² University of Texas Rio Grande Valley, Edinburg, Texas, USA

Purpose – The present paper substantiates that the concepts of Competitive Intelligence and Academic Entrepreneurship are genuinely connected to the modern society and, through their perpetual and versatile evolution, have an important role in moving the development on the right way.

Design/methodology/approach – Their evolutive is completed by a comparative analysis as appropriate method to point out similarities and differences and identify the way their application may serve innovation as a tool for those activating in the related domains of education, within our highly dynamic world.

Findings – The development of the concepts is meant to link and accelerate the technological and operational innovation to a highly competitive academic environment, business-oriented, as a contribution to its wide potential for profit.

Originality/value – The correlation between the two concepts provides an innovative tool able to serve as a platform helping the Competitive Intelligence, as design and functions, for any Academic Entrepreneurship business-oriented.

Keywords: Academic Entrepreneurship, Competitive Intelligence, Education Business-Oriented, Education Resilience, Education Policy, Innovation, Intellectual Enterprise, Resilience

JEL Codes: I23, L26, M19, O32, O33

How to cite: Dinu, D.G., Stoian Karadeli, A., Mihoreanu, L., Paşcu Gabără, E.I. & Păduraru M. (2022). COMPETITIVE INTELLIGENCE AND ACADEMIC ENTREPRENEURSHIP AS INNOVATIVE VECTORS OF A RESILIENT, BUSINESS-ORIENTED EDUCATION. Journal of Economic Development, Environment and People, 11(4), doi : https://doi.org/10.26458/jedep.v11i4.789



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

1. Introduction

The concept of Competitive Intelligence (CI) has its origins in the Michael E. Porter's book *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (1980) that describes the creation of a competitor analysis system. As the concept is further assessed and applied, John J. McGonagle (2014) emphasized the relevant role played by the former members of intelligence community in the USA who were interested in applying their experience to the private business sector and made a first step by introducing the CI to corporations.

On the other hand, academic entrepreneurship represents the link between education and the marketplace, connecting highly ranked universities to innovation-oriented companies while developing a complex specific knowledge-oriented environment. Moreover, academic entrepreneurship is also related to the R&D and technology institutional processes developed within the university (known as knowledge transfer) that provide the framework for starting innovative businesses – spin-off university (Shane, 2004). Bearing in mind the pressing issues faced by the world nowadays, a bridge between the academic environment and the entrepreneurship domain can provide vital tools to adapt to the post-pandemic world by both innovation and resilience. Although the two concepts might be seen as opposite, they both serve as pillars for developing versatility and adaptability. According to Beckman and Cherwitz (2009), the academic entrepreneurship represents the intellectual enterprise promoting and operating collaboration between the university and business environment, to create profit and add value to the society. Thus, new ideas, products, and services are developed within the academic environment and commercialized later on. Hence, the academic entrepreneurship, as an academic firm, (Campbell and Guttel, 2005) brings knowledge closer to production.

The academic entrepreneur's creativity and need for exploration defines the personal knowledge added within the scientific network materialized by know-how or patents. The dual function of business and education is relevant through its multidimensional view; the academic entrepreneur works simultaneously as an intellectual operator, an academic one and an entrepreneurial player inside the new company. The two concepts develop together, closely linked to the versatile sides of technological and operational innovations, within an environment defined by high academic competition and doubled by its profit-oriented side. Their high potential conceptual correlations represent the core of this paper developed through a comparative analysis to underline commonalities and differences that would further serve as a platform to design the CI function for academic entrepreneurship.

2. Competitive Intelligence and Academic Entrepreneurship

2.1. Competitive Intelligence at a Glace

Larry Kahaner (1996) considers CI as a systematic program for collecting and analysing information about competitors' activities and general business trends to promote their company's goals. Fleisher and Benoussan (2007) describe it the management of the entire competitive battlefield; each organization must know the competition rules and the individual space in which it operates using data in the decision-making process.

There are examples with many companies making great efforts to strengthen their position as leaders over competitors; today we name this sort of activity CI. The Society of Competitive Intelligence



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

Professionals – SCIP established since 1986 is a global non-profit association in which members run competitive research and analyses to help decision makers improve plans and strategies. According to the SCIP Code of Ethics and Law of, CI activity is carried out only by complying with domestic and international norms and legislation. CI clarifies also different ambiguities, about CI and espionage – in the sense that professionals in this field do not tolerate the illegal or unethical use of means of collecting information about the competitors and promote the maintenance of a standard of integrity above reproach.

CI teams use data, information, and resources to anticipate market changes and competitive activity to develop strategies for unforeseen situations, while the purpose of research market target mostly the identification of gaps in the market focusing on supporting a certain franchise. Therefore, the market research engaged in collecting information and data about markets and competitors are considered a CI subset with similarities and overlaps between the two areas.

Underwood (2013) defines the concept of CI as the process of legal and ethical collection, interpretation, and action based on information about an organization's competition or other forces that may affect its future success. CI detects opportunities and early warning signals so that companies take advantage of market opportunities and avoid organizational disasters. The purpose of the Competitive Intelligence's function is to make available the real situation of the business environment and trends to decision makers and company executive management to reduce risks and uncertainty and to discover new opportunities.

The post-pandemic competitive landscape shows the need for a renewed CI effort to tackle all the potential challenges associated to the post-crisis world and develop realistic strategic plans, adapt to the new context and initiatives, support the growth

The purpose of the Cl's function is to make available to decision makers and company management the real situation of the business environment and trends to reduce risks and uncertainty and to discover new opportunities.

2.2. Academic Entrepreneurship

Entrepreneurship reflects the strategic directions that a company implements in order to continuously record high performance. Two components are delimited as linked to contractor (McDougall and Oviatt, 2000):

a. The attitude towards the entrepreneur is perceived as an ingenious individual, a bridge of relations, between the economic agents under control over the resources and their aspirations to exploit new market opportunities in order to create value,

b. By their behavior the company and the entrepreneur look for understanding the opportunitygenerating imbalances and the resources needed to exploit them. Entrepreneurship emphasizes the individual endeavors of the entrepreneur in implementing the company's vision, respectively the activities of a strategic nature and lifelong learning. Hence the academic entrepreneurship gets closer to the academic firm (Campbell and Guttel, 2005) focusing on resilient knowledge production.

Hence the academic entrepreneurship gets closer to the academic firm (Campbell and Guttel, 2005) when focusing on resilient knowledge production. The academic entrepreneur defines an occupational profile that is scientifically active and combines scientific activities with entrepreneurial thinking to create revenue and profit. The academic entrepreneur trademarks the creativity, the need for exploration, the



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

wealth of ideas and a network within scientific disciplines, materialized through know-how, patents and he must work simultaneously both as an intellectual and as an entrepreneurial actor. The added value that an academic entrepreneur creates for clients belonging to different industries and sectors, refers primarily to the use of academic knowledge acquired or has access to, such as: ideas, patents, technologies, think tanks, reflection groups. In an increasingly globalized world, confronted with major societal dynamic changes, an increasingly digital world in which information becomes the main asset of business, the success of an academic entrepreneur comes from seeking and finding innovative solutions to increasingly complex challenges faced by today's society. The academic entrepreneur symbolizes the flexibility, versatility, transformation, and modernization of the establishment imposed by the market economy and the current needs of society. Currently, most academic entrepreneurs hold skills and expertise in engineering, media sciences and biosciences, business, and chemistry.

According to D'Este et al., (2005), there are four important factors that influence the entrepreneurial opportunity: \blacklozenge the collaborations between users in the process to create scientific networks; \blacklozenge the entrepreneurial lessons learned from previous experiences; \blacklozenge the vivid combination between different entities, in the field of knowledge; \blacklozenge the awards granted for excellency as the most difficult part for the for young graduates (D'Este et al., 2005).

For the academic entrepreneurship, CI represents that activity of managing the entire competitive battlefield as a general objective: know the competitors, the operational economic environment in the adequate information of the decision-making process (Fleisher and Bensoussan, 2007). It supports the academic entrepreneurs to test new hypotheses and identify the organization's level of competitiveness to see the truth (Rothberg and Erickson, 2005). To prove these hypotheses, an in-depth understanding of the two concepts and their eventual correlation is developed through the scientific methodology of comparative analysis.

3. A Comparative Analysis Between Competitive Intelligence and Academic Entrepreneurship

Emile Durkheim (1938) considers that sociological analyses are necessarily comparative, placing the process of comparison at the core of all social sciences such as anthropology and sociology. In both cases of qualitative and quantitative studies, comparative methods represent useful tools, especially for complex phenomena such as economic relations, language, or political organization. Recently, based on the Boolean logic, this process gained the title of qualitative comparative analysis (QCA), replacing the traditionally used correlation methods with causal conditions for results (Ragin and Fiss, 2008; Ragin, 1987; Ragin, 2000; Ragin, 2008; Vis, 2012; Woodside, 2016).

QCA is used, beyond its initial function in case studies and play an important role in generalizing the analysis of empirical data, considering eventual replication in follow-up studies, and providing logical arguments for the qualitative research of the subject-phenomenon (Ragin, 1987; Ragin, 2000; Woodside and Zhang, 2012).

Comparative analysis is used as an effective tool in the search for a comprehensive understanding of the cause-result process of an action, characteristic or relationship. To fulfill its aim, the method usually introduces or increases variation in the explanatory variable or variables.



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

As a research design, the power of comparative analysis comes from the capability to provide additional explanatory variables or to create variation in variables that have had a fixed value in the initial case of interest, showing that relations can be more general than it was assumed.

In the same way, the shortcoming of comparative analysis comes from the need for commensurability of concepts across cases, the unknown variation created by the introduction of new variables, and from the fact that, as non-experimental research, it needs to rely on 'naturally occurring variation', eliminating many combinations of values of interest to the researcher (Pickvance, 2005).

In the case of the current study, the research method of qualitative comparative analysis helps the identification of both the common elements and the differences between the two main fields, to correlate them and develop a productive relation. The main elements that provide the structure of comparative analysis are the processes involved in each of the two cases, the sources of data collection and the final product.

3.1. Competitive Intelligence Process vs. Academic Research Process

According to Kahaner (1996), the basic unit of a CI system is the intelligence cycle, the process by which raw information is transformed into intelligence. The intelligence cycle was taken over from government intelligence services and consists of five steps or interdependent phases. As in most systems, each phase has an equal importance, adding value to the final product. While in practice the process is multidirectional, multidimensional, and iterative, it is better understood when explained as a linear flow model. At the same time, according to Herring (1998), the CI process is a continuous cycle, which involves the following steps: planning and targeting, collection of date and information, analysis and processing, dissemination of content and feedback from decision makers or others.

Based on both models underlined above, Lowenthal (1999) argues that the CI process can be achieved in two ways: linearly or circularly. The linear model applies when it is a single process, such as a negotiation or an example of technical innovation, while the circular model involves the constant collection of information, such as is the case of the competition in the European market between manufacturers from the French, Italian and German car industry.

Christopher Murphy (2005) clearly describes the role of the intelligence cycle in CI and claims that it offers an easy-to-understand and logical program for the CI production. Actionable intelligence is created through a process that uses the intelligence cycle from the military and political field: identifying information of interest and delivering it for analysis, strategy, and action.

Kahaner (1996) appreciates that CI works best when taken for a process, not considered a function. Michelle and Curtis Cook (2000) also illustrates in their book on Competitive Intelligence. Create an intelligent organization and compete to win the CI process as a circular model in comparison with the academic research (AR) process which tends to be rather linear.

The two processes are very similar in broad lines but differentiate themselves through some of the practical elements and the way they evolve: either linear or circular (Table 1).

AR PROCESS

CI PROCESS



URL: <u>http://jedep.spiruharet.ro</u> e-mail: office_jedep@spiruharet.ro

1. Needs Assessment

Defining the most important information needs, promoting the use of relevant information, reducing the accumulation of excess information, keeping critical information safe for those who do not need it to perform their tasks.

2. Defining the Working Hypothesis	
Formulate a question based on the discussions that took place in the first phase.	A working hypothesis is an assumption, or a provisional explanation of a problem studied on the basis of preliminary observations which is stated in the form of a sentence, i.e. 'If and then'.
3. Organizing the Process Organizing the process so that resources are used as efficiently as possible, as well as providing an outline of the process that presents all future aspects.	3. Preparation of Research Design A research project is a detailed plan of conducting research that would answer the questions what, when, where, how about the stated problem.
4. Data Collection	
Collect the information from different sources, evaluate the quality, authenticity and usefulness of the information.	Data and information collection begins according to the design of the research from different sources.
5. Organizing Data into Intelligence	5. Data Analysis
The researcher or research team after collecting the data, they are organized in information. Data and information are processed and analysed.	After collection, the data must be assembled, organized, classified, and analysed according to the research hypothesis in order to be tested.
6. Intelligence Evaluation	6. Drawing Conclusions in the form of
Evaluation of the information to determine its	Theoretical Formulations and Generalizations
quality, accuracy, reliability, and sufficiency. If	Discover the substratum of results while
at this stage the information is inadequate, the	formulating generalizations or scientific
research team returns to phase 4 and continues	theories. The initial hypothesis of the research
to collect data.	project is confirmed or rejected.
Table 1 – "Comparison between the process phases for CI vs. AR"	

parison between the process phases for CI vs.

Data Sources: Adaptation from Competitive Intelligence. Create an intelligent organization and compete to win (Cook& Cook, 2000)

While the AR purpose is to provide valuable findings and disseminate them through specific channels research publications, book/chapters, conference presentations, the CI process purpose is to get answers to the questions raised. Although considered as the specific case of CI, the final product can provide, in both cases, a platform for any new research as a new start.



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

The first step – the need for assessment phase – is common for both CI and AR processes; it identifies the gap that needs to be filled in, it defines the main focus elements that help throughout the selection if information, and also shapes the strategy to protect the findings obtained through the process developed before the final product is obtained While the working hypothesis takes various forms in the AR case (a main research question, an assumption or a provisional explanation of a problem studied on the basis of preliminary observations and stated in the form of a sentence), in the case of CI it is limited to the formulation of a question based on the elements identified in the first phase of the process. The third stage looks similar and includes, for both cases, the elaboration of an outline/plan for the next phases of the process. The fourth stage implies the gathering data from different sources and the evaluation of their quality, authenticity, and usefulness. In the case of academic research, the data gathering is conducted based on the methodological plan drafted in the previous phase. The fifth stage includes, in both cases, the analysis of data already collected based on the process purpose, either answering to a certain question or testing a certain hypothesis. When it comes to the last phase in the case of CI the results are evaluated to determine quality, accuracy, reliability, and sufficiency in relation to the main question. If at this stage the information is inadequate, the research team returns to fourth phase and keeps collecting data. For the academic research, this phase aims to discover the results substratum to formulate generalizations or scientific theories. At this stage the initial hypothesis of the research project is either confirmed or rejected. This claims the end of the process and limits any possibility of returning to a previous stage. However, the generalizations and scientific theories that result from the process can become the subject of a new and completely separate AR project. This is the main reason why the CI process is considered circular, while the AR process is perceived as completely linear.

3.2. The Competitive Intelligence and Academic Research Sources

The key competency of CI stays in the ability to identify the sources' that are likely to hold the data and information sought and extract it. West (2001) considered that, in its simplest form, the CI main function consists in monitoring the national and commercial press for competitors' news, monitoring their websites, and in its most complex form may involve direct inquiry of competitors' staff. in the CI sources are grouped into secondary sources (that contain public information) and primary sources (usually people). Both types can co-exist within the organization and outside of it (West, 2001). Similarly, Bernhardt (2003) argues that data and information sources fall into two categories: open secondary sources and primary ones (usually human). The last ones are those with a higher value.

The primary sources are mainly represented by people allowed to provide intelligence about companies by request. The direct observation of competitors' activity, on the ground, in the air or by satellite is also included here. In respect to the secondary sources, people holding intelligence about competitors can work as employees in companies seeking intelligence or develop other activities outside the organization.

The secondary sources are defined as open sources, publicly available. This does not mean that they are available on spot; they belong to the public domain and can be accessed by anyone who tries to do so. They are diverse, sometimes easy to be identified. Other times, their finding may require time and ingenuity. All competition analysts rely a lot on secondary sources, with some of them being the only sources they have access to. For their exploitation are used techniques and methodologies taken from opensource intelligence (OSINT). The secondary sources are store and published in databases. They include



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

all types of written and online publications, digital databases that provide reports or store information about companies and their industry. With some notable exceptions linked to published reports, secondary sources are generally inexpensive to access and consult, but highly time consuming.

As for AR sources, they are also divided into primary and secondary sources. The primary sources refer to documents completely new or research written or presented for the first time within different events. The primary sources account original research studies, official documents and legislation, first-hand accounts of events, books with original theories or ideas methodologies or philosophies, other creative works such as novels. The secondary sources could also be evaluations, analyzes recently developed that have not been involved in specific studies or directly created documents but subsequently analyzed. They can also be systematic reviews or meta-analyzes, literature reviews, literary criticism as emphasized in Table 2, both AR and CI have their sources divided into two main categories: primary and secondary. As particular for each of the two main subjects of comparison, the field of competitive intelligence draws a line between internal and external sources, while the AR does not differentiate between the two. Nevertheless, in some cases, the secondary sources used in the AR can be subdivided into tertiary sources.

CI SOURCES	AR SOURCES	
Primary Sources		
 Internal primary sources: staff from competitors, sales' staff, professional associations, and different other profile establishments. External primary sources: company staff, customers, suppliers, consultants, analysts, journalists, experienced customers. 	 Original research studies, first-hand accounts of events, books with original theories, ideas or philosophies, creative works like novels. Historical artifacts, diaries, records, newspapers, letters. 	
Secondary Sources		
 Internal secondary sources: market research reports. External secondary sources: by-laws and company authorizations, strategic documents, narrations, charts, reports, printed media, databases. 	 Systematic reviews or meta-analysis, literature reviews, literary criticism. Reviews, journal articles, essays. Reference books, Vade mecum, manuals, handbooks, indexes, encyclopaedias, chronologies, dictionaries, annotated bibliographies. 	

Table 2 – " CI Sources vs. AR Sources "

Data Sources: Adaptation after Advocacy for health equity: A synthesis review (Farrer et. al., 2015)

As emphasized in Table 2, both AR and CI have their sources divided into two main categories: primary and secondary. As particular for each of the two main subjects of comparison, the field of CI draws a line between internal and external sources, while the AR does not differentiate the two. Nevertheless, in some cases, the secondary sources used in the AR can be subdivided into tertiary sources.

Currently, there are two main categories of open sources of information, differentiated by the broadcast medium, the characteristics of the content and the way of dissemination: \bigstar traditional and online sources; \bigstar traditional open sources information and online open sources information.



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

The traditional open sources of information can be: \blacklozenge periodicals (newspapers, magazines, books, yearbooks, documentary materials, brochures, maps, photos), \blacklozenge radio/TV air transmissions and official data (public documents and reports, budgets, statistics, hearings, legislative debates, speeches, press conferences, professional and academic deliverable from symposia, conferences, professional associations' reports, , \blacklozenge geospatial data (satellite images, maps, atlases, geodetic, topographic data, environmental information) or grey literature (administrative , academic, business and industrial information, hardcopies and electronic format of which distribution is out of commercial publishers' control). beyond this, the online open sources of information can be: \blacklozenge generically called new media – means any digital media product that is interactive and widely distributed via computer networks, \blacklozenge other texts, sounds, images and graphics processed on a computer and gathered in databases (encyclopedias, blogs, libraries, forums, social networks, online editions of classic media, information portals, file sharing portals) and \bigstar social media currently one of the most important segments of online sources.

3.3. The Sources Evaluation in Competitive Intelligence and Academic Research

There is a wide variety of information so easily found over the internet. To access it is easy but the quality of its accuracy, reliability, and value are critical. Unlike in the case of most traditional information sources (books, magazines), nobody is responsible or evaluator of the most content found online prior to become public. As technology has evolved, the access to information changed and we are now able to access more and more but this doesn't mean that that content is reliable, accurate and valuable enough to use it for either CI or AR In this regard, evaluation represents the capability to obtain a knowledgeable judgment about the value of a source to a specific research topic.

The critical evaluation of information regarding a given purpose to determine its suitability for an intended use represents the process itself of source evaluation.

• In the field of CI, the sources evaluation is achieved by using a scalar of trust varying the confidence from high to low. Also, there is a must that open sources data meet, by content and/or nature, the following criteria: value over time to prove the usefulness in order to meet, as an entity, the knowledge requirements, achieve security and substantiate decisions;

• analysis within the context;

• integrity, precision in relating between people; correct assignment of citations; faithfulness and careful selection of the contextual data;

• eliminate ambiguities, redundant aspects and irrelevant elements that do not answer any mentioned questions and do not convey appropriate attitude; respect priorities, prove clarity and accuracy in order to render, grammatically and accurately, the sampled text correctly, as well as the name, calendar data, figures, units of measurement and specialized terms;

• capture the author/commentator's adequate attitude towards any general problem or topic that is approached;

• data from open sources are called to provide answers to questions like *who?*, *what?*, *when?*, *where?*, *why?*, *how?* in close relation to the research topic and contain the necessary elements of identification of the open source used.



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

In the case of the academic research, a checklist named CARS (Credibility, Accuracy, Reasonableness, Support) checklist is designed to assist researchers in evaluating the information sources, especially in the case of online content case but valid for all types of information, critical scrutiny is vital for the research study. CRAAP test is another tool used to evaluate and determine the credibility and reliability of any source: currency (timeline of the source, such as publication date or revision history), relevancy (the information should be appropriate to the needs of the research and the audience), authority (credentials of the author, publisher and/or sponsor), accuracy (the reliability of the information) and purpose (the reason of the information such as teaching, selling or entertaining).

In either of the cases, CI or AR few sources will meet every single criterion mentioned. However, learning their use and application remains a crucial element in order to know how separating the highquality information from the poor-quality one (Harris, 2018).

3.4. Dissemination of Competitive Intelligence and Academic Research

Dissemination describes a planned process that involves consideration of target audiences and the settings in which research findings are to be received and, where appropriate, communicating and interacting with wider policy and... service audiences in ways that will facilitate research uptake in decision-making processes and practice (Wilson et al., 2010, p. 2). The purpose of a research study is reached only when the findings are disseminated via presentations in professional forums and published in peer-reviewed journals. Based on each case, specific recommendations that are found in the research study can be translated into practice, as a result of proper dissemination through the right channel and to the appropriate audience.

	DISSEMINATION OF CI	DISSEMINATION OF AR
Dissemination Tools		
•	Competitor intelligence	Papers
•	Counterintelligence	Peer review reports
•	Crisis intelligence	Policy briefs
•	Early warning	Posters
•	Estimated intelligence	Presentations
•	External intelligence	Press release
•	Market intelligence	Research reports
Broadcast Media		
Internal:		Academic journals
•	Board meetings	Book chapters
•	Intranet or internal secure	Special interest newsletters
char	nnels	Regular newspapers
External:		Interest group listservs
•	Book chapters	Radio or tv interviews
•	Conferences and Presentations	Trade magazines
•	Special interest newsletters	Technical reports
•	Web sites	Web sites
Table 3 $-$ "CL Discomination vs. AP. Discomination"		

Table 3 – "CI Dissemination vs. AR Dissemination



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

Data Sources: Own

The purpose of the CI activity is to inform the decision makers about the external situation, classified as a trade secret. However, there are situations when the information is presented publicly in conferences, academic journals, or books. In the case of academic research, dissemination has a different and more vital function, also representing a way to evaluate the result and also to obtain feedback. The dissemination of AR is also a quality validation factor for the researcher, and it is highly treasured in any academic projects, funding application or scholarship.

4. Conclusions

There are many similarities between Competitive Intelligence and Academic Entrepreneurship, in terms of final purpose, activity developed and conditions for carrying out any effort in an increasingly competitive environment. Also, the processes that the two fields go through – from the idea to generation of knowledge as an entity to be disseminated or sold, are quite similar if not complementary; both kinds of professionals can perform the tasks simultaneously.

Academic Entrepreneurship can be presented as the link between business, the companies' heaven innovation-oriented, and the academic environment that is knowledge-oriented. In this regard, the CI function assists the academic entrepreneur to design and control innovation as both a resilient strategy and a process itself. The innovation strategy establishes the role and the direction that the innovation process has to follow, depending on the evolution of the trends and the possible scenarios of the market. Also, within the innovation process, the CI function assists the academic entrepreneurs to substantiate decisions, based on information and intelligence related to scientific articles, doctoral theses, and patents based competitive products for the intellectual property management and technology transfer administration.

In conclusion, the summary of the similarities and differences between the CI function and the A.E. proves that the two fields are perfectly compatible. They might converge to outline and use more the profit-orientation side as value and profit are essential part of any business and represents the core of any successful story, no matter the field of activity Moreover, the few differences identified through the comparative analysis, have shown their potential to facilitate and ensure the compatibility development, to use of the CI function as a knowledge entity, complementarily with the field of academic entrepreneurship field, able to generate added value and predictability to the academic entrepreneur.

Thus, the research points out facilitators and their correlation as new tools to serve competitive intelligence application to innovative education business or profit-oriented, as an academic endeavor to develop adaptability through innovation and resilience in the context of a fast-changing world. Bearing in mind the pressing issues faced by our societies in current times, a bridge between the academic and entrepreneurship domains can provide the vital tools to adapt to the post-pandemic world through both innovation and resilience. Although the two concepts might be seen as opposite, both innovation and resilience serve as main pillars for developing our much-needed adaptability. Considering that the post-pandemic competitive landscape will necessitate renewed competitive intelligence effort for the development of strategic plan adapted to the new context, initiatives like the one developed throughout this paper have the capacity to tackle all the potential challenges associated to the post-crisis world.

Thus, the research points out the correlation between new facilitators as tools to serve competitive intelligence application to business education profit-oriented, as an academic endeavor to develop



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

adaptability through innovation and resilience in the fast-changing world facing the tomorrow. Bearing in mind the pressing issues of market and society, a bridge between the academic and entrepreneurship domains remains the vital innovative and resilient tool to adapt to the post-pandemic time. Although the two concepts might be seen as opposite, they serve as main pillars of developing the much-needed adaptability. The post-pandemic competitive landscape will necessitate renewed competitive intelligence effort for the development of strategic plans adapted to the new context and initiatives like the one developed in this paper will certainly have the capacity to tackle all the potential challenges associated to the post-pandemic world.

5. Acknowledgments

This paper was financed from the Human Capital Operational Program 2014-2020, project number POCU/380/6/13/125245 no. 36482/23.05.2019 "Excellence in interdisciplinary PhD and post-PhD research, career alternatives through entrepreneurial initiative (EXCIA)", coordinator The Bucharest University of Economic Studies.

6. References

1. Beckman, G.D. and Cherwitz, R.A. (2009). Intellectual entrepreneurship: an authentic foundation for higher education reform. *Plan High Educ*, 4.

2. Bernhardt, D. (2003). *Competitive Intelligence: How to Acquire & Use Strategic Intelligence & Counterintelligence (Management Briefings Executive Series)*. Prentice Hall, New Jersey, NJ.

3. Campbell, D.F.J. and Guttel, W.H. (2005). Knowledge Production of Firms: Research Networks and the "Scientification" of Business R&D. *International Journal of Technology Management*, 31(1).

4. Cook, M. and Cook, C.W. (2000). *Competitive intelligence: create an intelligent organization and compete to win*. Kogan Page, London, UK.

5. D'Este, P., Mahdi, S. and Neely, A. (2005). Academic entrepreneurship: what are the factors shaping the capacity of academic researchers to identify and exploit entrepreneurial opportunities? *DRUID working paper* no. 10-05.

6. Durkheim, E. (1938). The rules of sociological method. New York: Free Press

7. Farrer, L., Marinetti, C., Cavaco, Y. K., & Costongs, C. (2015). Advocacy for health equity: A synthesis review. *Milbank Quarterly*, 93(2).

8. Fleisher, C.S. and Bensoussan, B.E. (2007). *Business and Competitive Analysis: Effective Application of New and Classic Methods*. FT Press, New Jersey, NJ.

9. Harris, R. (2018). *Evaluating Internet Research Sources* [Online]. Available at: https://www.virtualsalt.com/evalu8it.htm (Accessed: 24.07.2021).

10. Kahaner, L. (1996). *Competitive Intelligence: How to Gather Analyze and Use Information to Move Your Business to the Top*. Simon & Schuster, New York, NY.

11. Lowenthal, M. (1999). Intelligence: From Secrets to Policy. CQ Press, Washington, D.C.



> URL: <u>http://jedep.spiruharet.ro</u> e-mail: <u>office_jedep@spiruharet.ro</u>

12. McDougall, P.P. and Oviatt, B.M. (2000). *International entrepreneurship literature in the 1990s and directions for future research*. In: Sexton DL, Smilor RW, editors. Entrepreneurship, Chicago, IL.

13. Murphy, C. (2005). *Competitive Intelligence: Gathering, Analysing and Putting it to Work*. Gower Publishing, Aldershot, UK.

14. Pickvance, C. (2005). The four varieties of comparative analysis: the case of environmental regulation. Paper for Conference on Small and large-N comparative solutions. University of Sussex, 22-23 September 2005.

15. Porter, M.E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitor*. Free Press, New York, NY.

16. Ragin, C. (1987). The comparative method. University of California Press, Berkeley, CA.

17. Ragin, C. (2000). Fuzzy-set social science. University of Chicago Press, Chicago, IL.

18. Ragin, C.C. and Fiss P.C. (2008). *Net effects analysis versus configurational analysis: An empirical demonstration in Redesigning social inquiry: Fuzzy sets and beyond*. University of Chicago Press, Chicago, IL.

19. Ragin., C.C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. University of Chicago Press, Chicago, IL.

20. Rothberg, H.N. and Erickson, G.S. (2005). *From knowledge to intelligence: Creating competitive advantage in the next economy*. Elsevier Butterworth-Heinemann, Woburn, MA.

21. Shane, S. (2004). Academic entrepreneurship: university spin offs and wealth creation. New horizons in academic entrepreneurship. Northampton: Edward Elgar.

22. Underwood, J.D. (2013). Competitive Intelligence for Dummies, John Wiley & Sons, New Jersey, NJ.

23. Vis, B. (2012). The comparative advantages of fsQCA and regression analysis for moderately large-N analyses. *Sociological Methods & Research*, 41 (1).

24. West, C. (2001). Competitive Intelligence, New York: PALGRAVE.

25. Wilson, P.M., Petticrew, M., Calnan, M.W., and Natareth, I. (2010). Disseminating research findings: What should researchers do? A systematic scoping review of conceptual frameworks. *Implementation Science*, 5, 91.

26. Woodside, A.G. and Zhang, M. (2012). Identifying x-consumers using causal recipes: "Whales" and "jumbo shrimps" casino gamblers. *Journal of Gambling Studies*, 28 (1).

27. Woodside., A.G. (2016). The good practices manifesto: Overcoming bad practices pervasive in current research in business. *Journal of Business Research*, 69 (2).