REVIEW

Entrepreneurship education development strategies to increase students' entrepreneurship intentions in Bali

Ni Nyoman Kerti Yasa*, **I Putu Gde Sukaatmadja, Anak Agung Vedanta Putra and Putu Laksmita Dewi Rahmayanti**

Faculty of Economic and Business, Udayana University, Bali, Indonesia

***Correspondence:**
Ni Nyoman Kerti Yasa,
kertiyasa@unud.ac.id

This study aimed to identify strengths, weaknesses, opportunities, and threats (SWOT) of entrepreneurship education programs at universities in Bali. The identified results are used as the basis for formulating strategies for developing entrepreneurship education in order to be able to create more and more young entrepreneurs. The approach used in this research is SWOT analysis and internal–external matrix. The results of the study indicate that entrepreneurship education at universities in Bali has been going well; however, there are still obstacles or threats faced and weaknesses from the entrepreneurship education programs that have been running, such as lack of high public appreciation, especially parent's respect toward the entrepreneurial profession, and the lack of awards obtained from universities. Based on the existing environmental conditions, in the future, the obstacles and weaknesses of existing entrepreneurship education need to be improved by frequently conducting literacy on entrepreneurship education to the community and giving higher awards to students who succeed in becoming entrepreneurs.

Keywords: SWOT analysis, strategic positioning, entrepreneurship education, development strategy

Introduction

The of entrepreneurship education programs carried out at universities can be seen from the number of students who are entrepreneurs. All universities have a goal to produce entrepreneurs from among students and graduates as much as possible. This is because one of the performance indicators of higher education institutions in the field of student affairs is the number of entrepreneurial students (1). To achieve this goal, universities should have a strategy for developing entrepreneurship education that is suitable for the situation and environmental conditions that exist both now and in the future.

To formulate a suitable strategy, it is necessary to analyze the situation and environmental conditions, both external and internal. This analysis is referred to as a SWOT (strengths, weaknesses, opportunities, and threats) analysis (2–4). SWOT analysis is also used to formulate strategies for developing entrepreneurship education at universities in Bali. SWOT analysis is a combination of external and internal environment analysis that produces opportunities, threats, strengths, and weaknesses faced and owned by the current entrepreneurship education programs (5, 6). Entrepreneurship education at universities in Bali is certainly a program derived from the existing entrepreneurship program from the Directorate of Higher Education (Dikti). Dikti is supporting this entrepreneurship program in order to boost the number of entrepreneurial students in Indonesia. Furthermore, the effectiveness of this entrepreneurial program is influenced by factors such as information technology (IT) advancement, the openness of the global market to encourage students that the product market would remain open, and the public's opinion of a career as a student. Furthermore, the internal environment factors that can affect the success of this program are learning methods for entrepreneurship courses, entrepreneurship course materials, course objectives, financial support

provided by higher education institutions, and awards for entrepreneurial students (1).

Previous scholars have conducted extensive study on strategy development based on SWOT analysis (7–10). According to Ajmera (11), SWOT analysis is based on reasons that may maximize strengths and opportunities while simultaneously minimizing weaknesses and threats and can be used to create development strategies. Based on the background of the existing problems, the purpose of this research is to identify opportunities, threats, strengths, and weaknesses that exist in entrepreneurship education in Bali as the basis for formulating a strategy for developing entrepreneurship education programs at universities in Bali in order to achieve the goal of creating an increasing number of entrepreneurs.

Theoretical review

SWOT analysis

Strengths, weaknesses, opportunities, and threats (SWOT) analysis discusses the strengths, weaknesses, opportunities, and threats that are most often used in planning corporate strategy or organizational strategy (12–17). SWOT analysis, according to strategic management researchers, offers the foundation for achieving the desired alignment of organizational problems (18).

The strategy formulation process is carried out through three stages of analysis, namely, the input stage, the analysis stage, and the decision-making stage. Hendriani (19) revealed that SWOT analysis is the matching of internal and external factors with specifics, thus creating a strategic matrix; internal factors are within the control of the organization, and external factors are beyond the control of the organization. The four combinations are called SO (Strength-Opportunity), WO (Weakness-Opportunity), WT (Weakness-Threat), and ST (Strength-Threat).

Results of external and internal environmental analysis

According to Bolland (20), external factor analysis summary (EFAS) refers to social, technological, economic, environmental, and political aspects that can be recognized through brainstorming among strategy makers in businesses. External variables that are beneficial to the organization are known as opportunities, while those that are detrimental are known as threats. Internal factor analysis summary (IFAS) relates to the company's internal weaknesses or strengths that can be changed, controlled, or manipulated by the company. An IFAS matrix can be formed to determine which internal factors are considered

relatively important and which are less important, what are the strengths and weaknesses of the organization, and what factors should be prioritized in considering strategic decisions.

Research methods

This research was conducted at universities in Bali that offer entrepreneurship courses to undergraduate students. Respondents are lecturers who teach entrepreneurship courses, leaders of study programs, leaders of business incubators, and the industrial world. Data were collected using a questionnaire with an answer column containing a size of five levels of a Likert scale.

Internal environmental analysis uses a variable approach to learning methods, learning materials, course objectives, supporting facilities, lecturer competencies, and awards to students, while external environmental analysis is the role of the central government / higher education, public views on the entrepreneurial profession, IT development, market opening products, and economic growth. SWOT analysis was used to analyze the data, and the results are reported in the EFAS and IFAS tables. Respondents as entrepreneurship education strategists provide their perceptions of the weight (the magnitude of each factor's influence) and a rating to describe the type of influence, and the total weighted score is used as a basis for determining opportunities or threats based on the results of the EFAS and the strengths or weaknesses based on the results of the IFAS. The EFAS and IFAS scores are then entered into the internal–external (I-E) matrix to determine the position of the entrepreneurship education plan as the foundation for building strategies to create a large number of entrepreneurs.

Results and discussion

Based on the results of data collection and interviews with respondents, they obtained the results of their opinions about the magnitude of the influence and the type of influence of the variables determining the entrepreneurial education strategy both from the external and internal environment, which are summarized in EFAS and IFAS tables.

Summary of internal and external environmental analysis of entrepreneurship education at higher education in Bali in the future (2023–2027)

The opportunities, threats, strengths, and weaknesses faced by entrepreneurship education at universities in Bali are shown in **Tables 1**, **2**.

TABLE 1 | Weighting of future external strategic environment.

No.	External strategic factor	Percentage (%)
1	Role of government / higher education	25
2	People's view of an entrepreneur	10
3	IT development	20
4	Open market	25
5	Economic growth	20
Total		100

TABLE 2 | Future external strategic environmental rating.

No.	External strategic factor	Rating
1	The role of Government / Higher education	5
2	Public's opinion	4
3	IT development	5
4	The opening of global market	5
5	Economic growth	4

Analysis of the future external strategic environment

What is meant by the future is the years 2023–2027, which is a future condition and situation faced by entrepreneurship education at universities in Bali.

a. Weighing of future external strategic environment

To carry out a series of analyses of the external strategic environment, the indicators of the external strategic environment variables in the future are first weighed (**Table 1**)

b. Future external strategic environment rating.

The external strategic environment assessment is presented in **Table 2**. This table provides information on the types of influences faced by entrepreneurship education at universities in Bali in the future.

Most of the external environmental factors in the future will provide opportunities for entrepreneurship education at universities in Bali. This can be seen from the perception given by strategists toward the creation of many young entrepreneurs from students in the range 3–5, reflecting the value which implies that the external environment consists of the role of government / higher education, community views, IT development, opening

of global product markets, and economic growth, while there are no threats.

c. Determination of future external environment weighted value

The next analysis is to determine the weighted value of each indicator to obtain the total weighted value (**Table 3**).

From the results of the I-E matrix analysis, the total weight score was 4.70. From the total weighted score of 4.70 (greater than the cutoff value = 3), it can be said that in the future (2023–2027), entrepreneurship education at universities in Bali Province has many opportunities to develop with a total score of 4.70.

Description of external strategic factors in the future

Based on the summary results as presented in **Table 3**, it can be described several things related to external strategic factors of entrepreneurship education at universities in Bali in the future, as follows:

Opportunities

1. Role of government

The role of government in the future will be even greater. Moreover, the government really wants to create many young entrepreneurs and bring universities closer to the industrial world.

2. Public's opinion

Over time, the views of the community and parents can be opened by seeing many examples of success stories of

TABLE 3 | Future external factor analysis summary.

No.	External strategic factors	Weight (%)	Rating	Score
1	Role of Government / Higher education	25	5	1.25
2	Public's opinion	10	4	0.40
3	IT development	20	5	1.00
4	The opening of global market	25	5	1.25
5	Economic growth	20	4	0.80
Total		100		4.70

young entrepreneurs from among students. These success stories are able to change their views and appreciation of the entrepreneurial profession.

3. IT developments

Of course, rapidly growing IT provides opportunities for young entrepreneurs to carry out marketing communications to various marketing domains with the use of IT, such as using various social media platforms such as Facebook, Twitter, Instagram, and others. IT-based social media will significantly expand the network or market reach of young businesses. This circumstance resulted in improved sales performance.

4. The opening of a global product market

Access to global marketplaces will become more open in the future. This is aided by the rapid development of IT. Furthermore, with the assumption that SMEs' abilities are improving, the use of IT is becoming more intensive, which makes the opening of the global market a chance for young entrepreneurs who originate from among students in the province of Bali.

5. Economic growth

Better local, regional, national, and international economic growth all help young entrepreneurs expand because people's incomes are rising, their purchasing power is improving, and there are chances for young entrepreneurs to enhance their sales performance.

Analysis and diagnosis of the internal environment of entrepreneurship education at Universities in Bali Province

Analysis of the future internal strategic environment

The future is defined as the years 2023–2027, a circumstance and situation in the future that entrepreneurship education in higher education in Bali will encounter.

a. Internal strategic environment weighting in the future

The steps taken in analyzing the internal strategic environment in the future are the same as the steps in analyzing the current internal environment. From the prediction results, it appears that the weight of the variables for the future has changed because the assumptions underlying the development of entrepreneurship education at universities in Bali for the future have changed, which to achieve its goal is to produce many young entrepreneurs who are able to provide value to the community. The first step is to determine the future importance of each aspect. Table 4 shows the findings of the analysis, which demonstrate how the weights for each factor were determined.

Table 4 shows that the internal variable indicators have weights that are almost similar to the previous conditions. Only according to respondents' perceptions, rewards for students who have succeeded in becoming entrepreneurs are given more awards so that they are the same as the best graduates, and at the time of graduation the names of students who have succeeded in becoming entrepreneurs are also mentioned.

b. Assessment (rating) internal strategic environment in the future

The assessment of the internal strategic environment for the future is undergoing changes because it is assumed that in the future, entrepreneurship education at universities in Bali Province will be getting better. The results of the assessment of internal environmental variables can be seen in Table 5.

Table 5 shows that the variables that show strength for the development of entrepreneurship education at universities in Bali.

c. Determination of future internal environment weighted values

The next analysis is to determine the weighted value of each indicator to obtain the total weighted value (Table 6).

Table 6, column 5, shows the weighted value, which is the multiplication of the weight and the value, where the total

TABLE 4 | Internal strategic environment weighting in the future.

No.	Internal strategic factors	Percentage (%)
1	Methods of teaching entrepreneurship courses	20
2	Entrepreneurship course material	15
3	Entrepreneurship course objectives	15
4	Supporting facilities for entrepreneurship courses	20
5	Entrepreneurship lecturer / Lecturer	15
6	Rewards for students who succeed in becoming entrepreneurs	15
Total		100

score can be used to determine whether entrepreneurship education at institutions in Bali has general strengths or disadvantages. The total score result is 4.35, suggesting that entrepreneurship education at colleges in Bali will produce more entrepreneurs between 2023 and 2027.

Description of internal strategic factors at this time

Based on the summary results presented in **Table 6**, it can be described several things related to the internal strategic factors of entrepreneurship education at universities in Bali Province, as follows:

Strengths

1. Course material

Entrepreneurship course material given to students is great because it includes an explanation of the concept of entrepreneurship, the characteristics that an entrepreneur must possess, the goals of an entrepreneur, the benefits or contributions that an entrepreneur can make, and strategies

TABLE 5 | Future internal strategic environmental rating assessment.

No.	Internal strategic factors	Rating
1	Methods of teaching entrepreneurship courses	4
2	Entrepreneurship course material	4
3	Entrepreneurship course objectives	4
4	Supporting facilities for entrepreneurship courses	5
5	Entrepreneurship lecturer	5
6	Rewards for students who succeed in becoming entrepreneurs	4

TABLE 6 | Future internal factor analysis summary.

No.	Internal strategic factors	Weight (%)	Rating	Score
1	Methods of teaching entrepreneurship courses	20	4	0.80
2	Entrepreneurship course material	15	4	0.60
3	Entrepreneurship course objectives	15	4	0.60
4	Supporting facilities for entrepreneurship courses	20	5	1.00
5	Entrepreneurship lecturer	15	5	0.75
6	Rewards for students who succeed in becoming entrepreneurs	15	4	0.60
Total		100		4.35

to become a superior entrepreneur, as well as the process of becoming self-employed as an entrepreneur.

2. Teaching staff

The teaching staffs who teach this course are qualified because of their level of education, with the majority of them having doctoral degrees in management, then adding to numerous entrepreneurial trainings, and having expertise in the field of entrepreneurship.

3. Supporting facilities

The supporting facilities provided for students are great, because the university has provided both attention and financial support for students who are interested in becoming entrepreneurs.

Weaknesses

1. Teaching method

What still needs to be improved is the teaching method which is often only filled in in the classroom. This is a bit far from the real world, so cases about an entrepreneur are only an explanation. This condition can be addressed further by directly inviting students to internships at several start-ups so that they can see the real conditions in the field to become entrepreneurs, and then the meetings in the class are balanced with 50% theory and 50% practice by doing internships in start-up companies.

2. Rewards

Likewise, the rewards given need to be increased in value so that it can motivate the students.

Entrepreneurship education position at Universities in Bali

Determination of business positioning based on internal and external strategic factors

The I-E matrix is used to conduct tests on the extent to which there are strengths and weaknesses, as well as opportunities and threats, that are an integral part of the internal and external strategic factors of entrepreneurship education at universities in Bali Province. The I-E matrix maps the strategic position of entrepreneurship education

at higher education in the Province of Bali by referring to the numerous variables that exist in each dimension, namely, external and internal dimensions. Internal dimensions that are used as references include teaching methods, teaching materials, course objectives, support facilities, lecturer competencies, and rewards to students; and the external dimension is on the variables such as the role of government support, the public's view of the entrepreneurial profession, the development of IT, the opening of the product market, and economic growth.

Based on the results of the analysis of internal strategic factors from entrepreneurship education at universities in Bali Province, it shows that the total score of internal strategic factors in the future will reach 4.35, which is categorized as a position classified as above average because it is less than 3.00 as a cutoff value. Analysis of internal strategic factors shows that entrepreneurship education at higher education in Bali Province is good, such as in the method of writing, learning materials, course objectives, support facilities, and competence of lecturers, as well as rewards for entrepreneurial students.

Analysis of external strategic factors from entrepreneurship education at universities in Bali Province shows that the total score of external strategic factors in the future will reach 4.70. When included in the external strategic factor matrix, it is in a position classified above the average because it is greater than the value of 3.00 as the cutoff value. These findings can be used as input for higher education leaders in the Province of Bali in making decisions to develop entrepreneurship education so that more excellent entrepreneurs can be produced. The strategic position of entrepreneurship education at universities in Bali Province in the present and future can be described in the I-E matrix(**Figure 1**).

Strategic formulation of entrepreneurship education development at Universities in Bali

According to the SWOT analysis and an I-E matrix approach built from the General Electric model, the strategic position
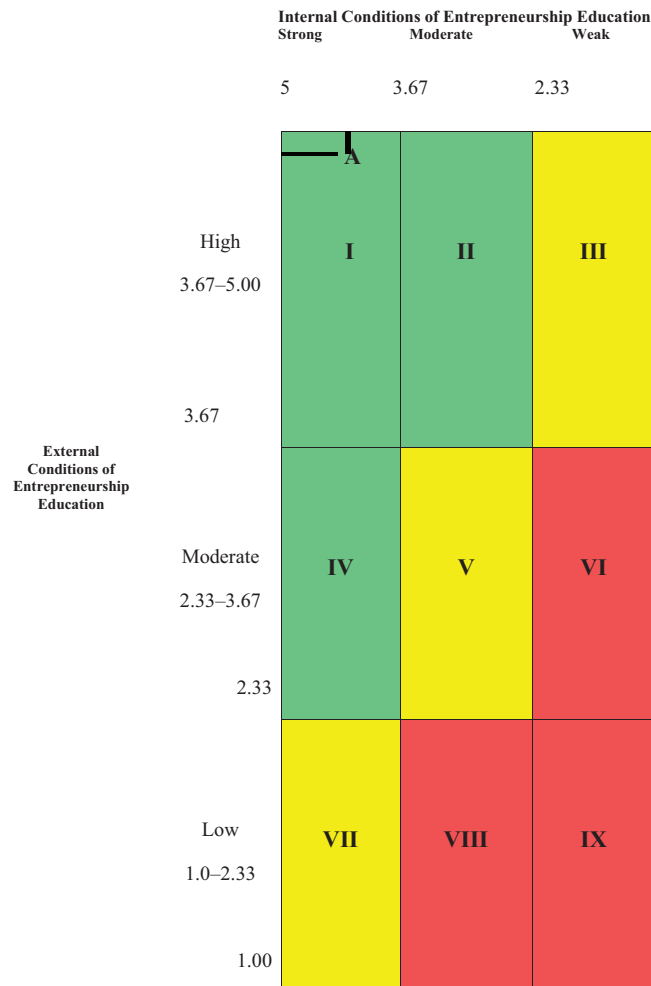

FIGURE 1 | Internal-external matrix.

of entrepreneurship education in higher education in Bali Province is above the cutoff value. This condition indicates that entrepreneurship education in higher education in the Province of Bali is in rapid growth, which is located in cell I in the upper left corner so that it is very prospective for future development in producing superior entrepreneurs. Thus, the relevant strategy applied by universities in Bali is the Build and Growth strategy. The Growth and Build strategy is to develop all organizational strengths including intangible resources and to take advantage of opportunities that exist from the external environment. This is in accordance with the results of previous research studies (15, 21, 22, 23). The growth and development strategies that can be carried out by universities in Bali in the field of entrepreneurship education are to improve teaching methods by balancing the delivery of lecture materials 50% in class and 50% in the field (internships in companies); improve teaching materials: more practice or create a business project; improve goals courses: creating entrepreneurship, increasing support for facilities: creating more business networks and greater financial support; improving the competence of entrepreneurship lecturers: participating in certification in the field of entrepreneurship; and increasing appreciation for students: by giving gifts in the form of materials and also mentioning their names at the time of the graduation of the faculty and graduation at the university.

Conclusion and suggestions

Based on an analysis of the entrepreneurship education environment at universities in Bali, both internal and external, the following conclusions are obtained:

1) Based on the results of the analysis presented in the IFAS matrix, a total internal score of 4.35 is obtained and because the total score is above the average, which is above 3.0, this shows that in general, entrepreneurship education at universities in Bali has the power to create more and more entrepreneurial students.

2) Based on the results of the analysis of the external environment presented in the EFAS matrix, the total external score was 4.70; and because the total score is above average, which is above 3.0, it shows that entrepreneurship education at universities in Bali faces good opportunities, such as the role of government, community views, IT development, global market opening, and economic growth.

3) Based on the mapping in I-E matrix, the strategic position of entrepreneurship education at universities in Bali is internally and externally located in cell I, namely, Build and Growth strategy. Based on the results of the SWOT analysis, IFAS matrix, EFAS

matrix, and I-E matrix, it is suggested that the strategy for developing entrepreneurship education at universities in Bali is to continue to grow, improve teaching methods and materials, achieve higher goals, and increase student rewards.

References

1. Yasa NNK, Sukaatmadja I, Putra A, Rahmayanti P. The determinants of student entrepreneurial intentions in bali: descriptive analysis. *SSRG Int J Econ Manage Stud.* (2022) 9:1–7. doi: 10.14445/23939125/IJEMS-V9I6P101

2. Arimbawa A, Sumantra I, Adnyani N, Yasa NNK. Business strategy in the restaurant "Pada Wareg Eco Park" based on internal-external matrix. *Int J Recent Res Interdicip Sci.* (2022) 9:1–9.

3. Pratama P, Yuniar E, Yasa NNK. Hotel strategy facing the Covid-19 pandemic (case study: the lovina bali resort). *Int J Manage Commerce Innovat.* (2022) 10:300–4.

4. Widani M, Perkasa I, Widiasih N, Yasa N. Business development strategy in PT. Revolver love coffee, badung regency, bali: based on SWOT analysis. *Int J Recent Res Interdicip Sci.* (2022) 9:87–96.

5. Helms MM, Rodríguez MA, de los Ríos L, Hargrave W. Entrepreneurial potential in Argentina: a SWOT analysis. *Competitiveness Rev.* (2011) 21:269–87. doi: 10.1108/10595421111134859

6. Nasreen K, Afzal MT. Strengths, weaknesses, opportunities and threats in higher education: a SWOT analysis of Allama Iqbal Open University Islamabad (Pakistan). *Asian Associat Open Univ J.* (2020) 15:321–33. doi: 10.1108/AAOUJ-11-2019-0052

7. Helms MM, Nixon J. Exploring SWOT analysis – where are we now? A review of academic research from the last decade. *J Strategy Manage.* (2010) 3:215–51. doi: 10.1108/17554251011064837

8. Pandya S. Improving the learning and developmental potential of SWOT analysis: introducing the LISA framework. *Strategic Direct.* (2017) 33:12–4. doi: 10.1108/SD-09-2016-0132

9. Büyüközkan G, Ilıcak Ö. Integrated SWOT analysis with multiple preference relations: selection of strategic factors for social media. *Kybernetes.* (2019) 48:451–70. doi: 10.1108/K-12-2017-0512

10. Ashutosh A, Sharma A, Beg MA. Strategic analysis using SWOT-AHP: a fibre cement sheet company application. *J Manage Dev.* (2020) 39:543–57. doi: 10.1108/JMD-05-2019-0157

11. Ajmera P. Ranking the strategies for Indian medical tourism sector through the integration of SWOT analysis and TOPSIS method. *Int J Health Care Qual Assurance.* (2017) 30:668–79. doi: 10.1108/IJHCQA-05-2016-0073

12. Koo H, Chau K, Koo L, Liu S, Tsui S. A structured SWOT approach to develop strategies for the government of Macau, SAR. *J Strategy Manage.* (2011) 4:62–81. doi: 10.1108/17554251111110122

13. Gupta G, Mishra RP. A SWOT analysis of reliability centered maintenance framework. *J Qual Maintenan Eng.* (2016) 22:130–45. doi: 10.1108/JQME-01-2015-0002

14. Basset MA, Mohamed M, Sangaiah AK, Jain V. An integrated neutrosophic AHP and SWOT method for strategic planning methodology selection. *Benchmark An Int J.* (2018) 25:2546–64. doi: 10.1108/BIJ-08-2017-0232

15. Giantari IGAK, Surya IBK, Yasa NNK, Yasa IBA. Development and revitalization strategies for traditional markets in Bali. *Int J Soc Econo.* (2018) 45:1058–70. doi: 10.1108/IJSE-09-2017-0414

16. Vlados C. On a correlative and evolutionary SWOT analysis. *J Strategy Manage.* (2019) 12:347–63. doi: 10.1108/JSMA-02-2019-0026

17. Kumar A, Srivastava A, Kumar RPJ, Tiwari RK. Analyzing Indian research and development organizations: a SWOT analysis. *Int J Innovat Sci.* (2019) 10:298–315. doi: 10.1108/IJIS-04-2017-0029

18. Zakeri S, Yang Y, Hashemi M. Grey strategies interaction model. *J Strategy Manage.* (2019) 12:30–60. doi: 10.1108/JSMA-06-2018-0055

19. Hendriani S. The role of cooperative development strategy to improving the success of village cooperative (KUD) in Riau Indonesia. *Int J Law Manage.* (2018) 60:87–101. doi: 10.1108/IJLMA-11-2016-0132

20. Bolland EJ. *Internal and External Analysis, Comprehensive Strategic Management.* Bingley: Emerald Publishing Limited (2017). p. 87–126. doi: 10.1108/978-1-78714-225-120171004

21. Betz F. *Strategic Business Model, Strategic Thinking.* Bingley: Emerald Group Publishing Limited (2016). p. 137–76. doi: 10.1108/978-1-78560-467-620151006

22. Alaaraj S, Mohamed ZA, Ahmad Bustamam US. External growth strategies and organizational performance in emerging markets: the mediating role of inter-organizational trust. *Rev. Int. Bus. Strategy.* (2018) 28:206–22. doi: 10.1108/RIBS-09-2017-0079

23. El Ebrashi R. Typology of growth strategies and the role of social venture's intangible resources. *J Small Bus Enterprise Dev.* (2018) 25:818–48. doi: 10.1108/JSBED-03-2017-0104