ON RESEARCH

ONE VISION | ONE NETWORK | ONE JOURNAL

SPRING 2019

SUSTAINABILITY DISCLOSURE, AND THE LIMITS OF DIVERSITY

THE CRUCIAL HUMAN FACTOR IN INNOVATION

EMPLOYABILITY AND COMPETENCY-BASED EDUCATION IN THE RELATIONSHIP BETWEEN LEARNING AND WORK

eu | Business School

"The best way to find out if you can trust somebody is to trust them."

Ernest Hemingway

ON RESEARCH

Journal of EU Business School
Vol. 2. (May 2019)

ON RESEARCH is a peer-reviewed open access journal of EU Business School

ISSN: 2624-7844 (Online)

Frequency: 2 Issues per year (Spring/Fall)
Second Issue: May 2019
First Issue: September 2018

Visit Us
Website: onresearch.ch

Contact
Email: research@euruni.edu

FOREWORD

I would like to take this brief opportunity to first thank our contributors, readers, wellwishers, and everyone behind the scenes for making the launch issue of ON RESEARCH, in Fall 2018, a huge success. Indeed, we have been overwhelmed by your response, support and feedback. In our continuing venture to bolster real-world research and proliferate the most topical and cutting edge issues in business, it gives me great pride to launch our second volume. Remaining true to our core values, in this volume you will find a selection of essays and articles focusing on a broad array of multidisciplinary issues that help bridge the gap between theory and practice in business.

Through such efforts, we at EU Business School endeavour to take the lead and be a hub for innovative ideas and knowledge creation. Last year, we put the *Human* in the centre as the main driver for innovation, leadership and change. Drawing from its lessons, this year, we have chosen *Trust* as our main running theme for our research activities and events. Indeed, trust is probably the most valuable, albeit the cheapest asset that can be delpoyed in the running of businesses, organizations, and institutions. Infact, trust is the very fabric that holds human society together. It is clearly evidenced that societies and enterprizes that are based on trust tend to thrive and be more successful. Despite the above, we currently find ourselves in a dis-orderly world manifested by a lack of trust in our institutions, governments, leaders and businesses. Trust, or its lack thereof, affects our plans to cooperate and partner effectively with one another and harness those relationships which foster innovative ideas and solutions to some of our most pressing challenges. Hence, I find it opportune to invite you to our Research Forum in October 2019, our flagship research event, on *Trust in Institutional Interactions: Bridging the Gap: Partnerships, Resources and Innovation*. The event will position EU Business School as a platform for leaders in business, governments, institutions, and academia to discuss and provide a roadmap for our common challenges.

In the meantime, I hope you enjoy reading our second volume. We look forward to your continued interest and support in the success of ON RESEARCH.

Suddha Chakravartti
Editor-in-Chief

TABLE OF CONTENTS

ON RESEARCH Vol.2

EMPLOYABILITY AND COMPETENCY-BASED EDUCATION IN THE RELATIONSHIP BETWEEN LEARNING AND WORK

Sofia Bakirli

ABSTRACT: *The nature of employment has been drastically changed the last decades when at the same time the job arena has become more competitive. Education and training opportunities are found in the forefront, since learning and working are tightly connected. This paper looks at two themes in the relationship between learning and work: employability and competency-based education. Both are interlinked, with proponents of competency-based education favouring its increased focus on employability. The paper discusses arguments for and against an employment and competency focus in learning. It then suggests strategies for strengthening education and training policies. It argues that employability focus, and competency-based education can have a strong meaning to the market orientation, if it is taken into taken into consideration the employers´ input, the societal needs and the collaboration among industry-academy-workers. On a different occasion, there might come up inequalities within the human capital.*

KEYWORDS: **employability, learning, competency-based education, job arena.**

INTRODUCTION

The nature of employment has changed drastically over the last decades. Employment has become more volatile, with an increase in temporary working arrangements (Doogan, 2009). While previous generations often experienced static careers with few changes, young people can now anticipate holding many jobs and changing careers multiple times. Likewise, employers need to respond to constant, rapid change (Jackson, 2005). At the same time, the labor market has become more competitive. As education levels have risen in many parts of the world, so have expectations from labor market entrants (Skillbeck et al, 1994, p. 22). Yet research shows a mismatch between supply and demand for labor (Brown

& Tannock, 2009). Both learners and employers look to the educational institutions for a solution. In the relationship between learning and work, *´´employability and competency-based education´´*, both are interlinked, with proponents of competency-based education favoring its increased focus on employability.

Employability, the capability of getting and keeping satisfactory work, links to the idea of ´´practical relevance: applicable knowledge and skills´´ (Skillbeck et al., 1994, p.18). This includes skills related to productivity and income-earning prospects, lifelong learning, and personal attributes such as self-belief (Hager et al. 2002, p. 4).

One important function of the education system is to prepare learners for the world of work. Changes in technology, work location, roles and opportunities within modern economies have increased expectations of labor market entrants (Cappelli, 1997). The fluidity of work and environment have forged a closer relationship between business needs and education and training.

In many countries, there is concern about the gap between actual and expected technical skills of graduates from university and/or Technical and Vocational Education and Training (Asonitou, 2014; Vitouladiti, 2013), their generic skills and the overall relevance and quality of their learning. Employability-focused education, therefore, needs to address employer needs but also warrant sufficient coaching and guidance for students. This is challenging as the´ ´goal-posts of employability keep shifting as categories of employment rise and subside´´ (Hager et al, 2002, p. 4).

Arguments for and against employability-focused learning

Supporters of employability-focused learning argue that the supply side of education and training needs to match the demand side of the labor market. This will benefit employers, who receive the skills they require, and graduates, who find gainful (self-) employment, can directly apply their acquired skills and easily keep or change jobs (Bourner, Greener, & Rospigliosi, 2011). Generic skills also help balance different purposes of education – being ´´employable and capable of contributing to civil society´´ (Kemmis, as cited in Hager et al, 2002, p. 4).

Critics of the increased employability focus lament an over-incorporation of employer demands into a content design. They argue that workplace specialization and focus on short-term interests mean only a very selective number of skills is deemed useful (Jørgensen, 2015, p.166).

Critics also assert that skills in themselves have become so narrowly-defined that we partly witness a process of ´´deskilling´´ (Livingstone, 2012, p. 89). Overall, critics of the increased employability focus argue that the purpose of education needs to go beyond serving today's industry needs. Seen through the human capability's lens, education contributes to learners' well-being, empowerment, agency, and justice (UNDP, as cited in McGrath, 2012, p.627) and thus contributes to a more equal and just society.

COMPETENCY-BASED EDUCATION

Competencies, defined as skills or attributes, and knowledge, are seen by many policy-makers as "key" for developing knowledge-based communities, where individuals will be able to have specific or generic skills within the labor market (European Commission, 2010).

Arguments for and against competency-based education

Proponents of competency-based education systems argue that the model structure provides parameters for comparison in curricula and qualifications, particularly among different countries. In addition, a competency-based system can better ensure employability and competitiveness, providing recognizable characteristics within industry-education, including skills, attitudes, and knowledge (Agten, 2010). The provision for Recognition of Prior Learning also shows the promotion of an employability-enhancing strategy (Boahin et al, 2014, p. 841).

Opponents claim that competencies have failed to ensure who is responsible to deliver training (Arguelles & Gonczi, 2000) and that there are challenges relating to time and diversity (Oliveira & Guimarães, 2009). Time can be a considerable issue in cooperative settings, e.g. when universities (or TVET institutes) and employers try to carve out the time necessary for effective collaboration. Additionally, considerable time is required for one to acquire knowledge and become prepared for the work arena. The issue of diversity presents itself in tasks and methodologies. There is a notable concern that both employers and educators might overemphasize skills and give too little importance to attitudes and knowledge. The interpretation of knowledge might also be biased a competency is too narrowly-defined (Agten, 2010). This links back to the discussion of narrow skills negatively affecting long-term employability.

STRATEGIES FOR STRENGTHENING EDUCATION AND TRAINING POLICIES TO ADDRESS INEQUALITIES.

- Employers need to be involved in education and training design, and there is evidence that employers have stronger links to the education system, they are more positive about the outcomes (Skillbeck et al, 1994, p.21). Evidence from more coordinated market economies suggests that such an approach leads to more equitable outcomes (Allais, 2012, p. 638).

- There is strong evidence supporting alternating approaches which combine classroom and work-based learning. Whether dual system-style in TVET (Jørgensen, 2015) or co-op tertiary education (Grosjean, 2004), benefits include better transition into work and lower unemployment. Work placements, internships, teaching factories or cooperative vocational training are all examples that provide early exposure to the world of work. It is important to ensure that these initiatives are not exploitative for the learners, financially as well as health and safety-wise. Decent work contributes to our self-respect and can act as a motivator in ensuring that we are able to achieve our personal goals. (McGrath 2012).

- Education and training strategies need to ensure that courses are designed strategically, responding to demands of the working world and facilitating active learning in real-life settings, but in tandem with generic skills (Skillbeck et al, 1994, p. 20; Bowden, 1999). Both technical and generic skills can be developed better in a holistic, contextualized teaching and training approach (Hager et al, 2002, p. 7). Both together strike a balance between employability in the short-term and the capacity for lifelong learning (Hager et al, 2002) for long-term employability. Independent thinking, for example, is not limited to a specific location and can be applied both within and outside of the employment relationship. The ability to think critically is thus transferable/portable and journeys with the worker thought-out his employment life cycle.

• Efforts should be made to formally incorporate feedback from employers on generic skills, given the importance employers place on them. A positive example to adapt is the Australian Employability Skills Framework (Bowden et al, 2000).

• To address the trend toward polarisation of high-skill vs. low-skill jobs in some countries, structural adjustment of VET (Skillbeck et al, 1994) is required. Governments should fund university and polytechnic/VET institutions more equitably (Coates, 2013). Furthermore, collaborations between universities and polytechnics and the vocational education and training sector should be facilitated to close the gap between the two and create a more efficient model of post-secondary education that is less polarising (Coates, 2013).

• Secondary education requires regular review to ensure that curricula, assessment of performance and teachers' education are kept up-to-date (OECD, 1994) and tie in well with tertiary education and TVET. Incorporating generic skills, particularly, ´´learning how to learn´´, to enable lifelong learning will be of important value.

CONCLUSION

Both employability focus and competency-based education mean a strong market orientation but if unmediated, this focus may prove myopic and negatively affect workers' employability in the long run, thereby tolerating or furthering inequalities.

BIBLIOGRAPHY

1. Agten, J. (2010). Bologna as a frame for Competence-Based Learning and Supervision, in O.Chytil, G.J.Friesenhahn, F.W. Seibel and J.Windheuser(eds). (2010). *Social Professions for a social Europe,* EXPRESS, Universitas Ostraviensis. Bruno, Czech Republik: ALBERT. http://edepot.wur.nl/168767
2. Allais, S. (2012). Will skills save us? Rethinking the relationships between vocational education, skills development policies, and social policy in South Africa. *International Journal of Educational Development, 32*(5), 632-642. doi:10.1016/j.ijedudev.2012.01.001
3. Asonitou, S. (2014). Employability Skills in Higher Education and the Case of Greece. *International Conference on Strategic Innovative Marketing,* IC-SIM 2014, September 1-4, Madrid, Spain.

4. Arguelles, A., & Gonczi, A. (eds). (2000). *Competency-based education and training: A world perspective.* Balderas: Editorial Limusa S.A. de C.V. Grupo Noriego Editores.
5. Boahin, P., Eggink, J., & Hofman, A. (2014). Competency-based training in international perspective: comparing the implementation processes towards the achievement of employability. *Journal of Curriculum Studies, 46*(6), 839-858. doi:10.1080/00220272.2013.812680
6. Bourner, T., Greener, S., & Rospigliosi, A. (2011). Graduate employability and the propensity to learn in employment: a new vocationalism. *Higher Education Review, 43*(3), 5-30.
7. Bowden, J. (1999) *Foreword in RMIT Graduate Attributes*: Information Kit.
8. Bowden, J. et al. (2000). Generic Capabilities of ATN University Graduates Draft Report (January 2000). http://csusap.csu.edu.au/~tmckenzi/downloads/McKenzieA_herdsa02.pdf
9. Brown, P., & Tannock, S. (2009). Education, meritocracy and the global war for talent. *Journal of Education Policy, 24*(4), 377-392. doi:10.1080/02680930802669938
10. Cappelli, P. (1997). Change at work. *Oxford University Press on Demand.*
11. Coates, K. (2013). *This is Canada's polytechnic moment.* http://www.theglobeandmail.com/news/national/education/this-is-canadas polytechnic-moment/article12807397/
12. Doogan, K. (2009). Chapter 6: The flexible labor market and the contingent economy. *New capitalism: The transformation of work.* Cambridge: Polity, 143-168.
13. European Commission (2010). Draft Background Paper for the Belgian Presidency meeting for Directors- General for school education: *Assessment of key competences Brussels.*
14. Grosjean, G. (2004). Co-op education: Tensions and outcomes of experiential learning. In J. Gaskell & K. Rubenson (Eds.). *Educational outcomes for the Canadian workplace.* Toronto: University of Toronto Press, 205-219.
15. Hager, P., Holland, S., & Beckett, D. (2002). Enhancing the learning and employability of graduates: The role of generic skills. *Business/Higher Education Roundtable: B-HERT Position Paper no. 9.*
16. Jackson, N. (2005). Essential skills, essential confusion. *Literacies, 6,* 38-43. http://literacies.ca/literacies/6-2005/pdf/jackson.pdf
17. Jørgensen, C. H. (2015). Challenges for work-based learning in vocational education and training in the Nordic Countries. In S. Bohlinger et al. (Eds.), *Working and learning in times of uncertainty: challenges to adult, professional and vocational education*. Sense Publishers, 159-171.
18. Livingstone, D. W. (2012). Debunking the 'knowledge economy'. In *The Knowledge Economy and Lifelong Learning.* Sense Publishers, 85-116.
19. McGrath, S. (2012). Vocational education and training for development: A policy in need of a theory? *International Journal of Educational Development, 32*(5), 623-631. doi:10.1016/j.ijedudev.2011.12.001

20. OECD. (1994). *The OECD Jobs Study: Facts, Analysis, Strategies*. https://www.oecd.org/els/emp/1941679.pdf
21. Oliveira, E., & Guimarães, I. (2009, October). Employability through competencies and curricular innovation: A Portuguese account. *Conference on the quality of teaching in higher education. Turkey.* http://hdl.handle.net/10400.14/4674
22. Skillbeck, M., Connell, H., Lowe, N. & Tait, K. (1994). Chapter 1: Emergence of the new vocationalism (pp. 1-23). *The vocational quest: New directions in education and training.* London: Routledge.
23. Vitouladiti, O. (2013, May). The performance of the tourism service personnel as a determinant for the evaluation of the overall experience. In *Marketing, Management and Planning Implications. Proceedings of the 5th International Scientific Conference "Tourism Trends and Advances in the 21st Century," 30.*

Sofia Bakirli, MA, is a Student Mentor at the University of Roehampton, and Adjunct Lecturer in Human Resources Management at EU Business School, Munich.

AD-HOC INTERNSHIPS AT SMES: THE ROLE OF HIGHER EDUCATION

Alistair Charles

ABSTRACT: *This article aims to highlight the need for small to medium-sized enterprises (SMEs) to have support from higher education (HE) establishments for internships on offer. This support will include monitoring to ensure that evidence is collected on the performance management of interns since concerns exist that internships often have few learning and developmental opportunities and poor employment outcomes. For this purpose, the author has gathered secondary data mainly via the ProQuest research platform with the use of journal articles as a principle source of information. The author argues that HE establishments in the business sector should nurture stronger links with SMEs through support, like mentoring, particularly for ad-hoc (i.e. not a part of formal studies) internships or through the development of internship programmes if one does not already exist. This is because evidence suggests there are distinct advantages to the key stakeholders if suitable partnership arrangements between employers, students and HE organisations are devised. The strength of this brief article lies in identifying some analytical frameworks for the basis of future research in an area which does not attract a great deal of attention. The evidence presented needs greater analysis and support from primary research and further consideration of the impact of social, mobile, analytics and the cloud (SMAC) on internships. (Ghandi, 2017) By increasing the understanding of the role of internships - Educationalists, SMEs and students will be in a better position to collectively design more successful internship programs. The article seeks to stimulates a reflection on intern performance management and focuses on improving the quality of educational internships.*

KEYWORDS: interns, internships, SMEs, human resources, training and development, learning, higher education

At a world-wide strategic level, internships contribute directly to at least two of the UN Sustainable Development Goals (SDGs) which spotlight quality education, decent work and economic growth (UNDESA, 2015). Similarly, in the Europe 2020 strategy, internships will have an impact on the Commission's flagship initiative "Youth on the move" which intends to facilitate the entry of young people to the labour market (European Commission, 2010, p. 5). These global and regional goals are well documented, but to what extent are HE institutions and SMEs considering the development of young people with these strategic objectives in mind? SMEs are of great significance in the internship debate since they represent more than ninety-nine percent of the businesses in the European Union (EU27) and consequently contribute immensely to the work experience of students across Europe. Since internships are the norm for many young Europeans to enter the world of work, The European Youth Forum suggests that internships ought to be monitored closely to ensure their quality (Dyrnes, 2011). This could indicate that with such a vast array of SMEs, key internship stakeholders should be much more engaged with internships to ensure a coherent and sustainable supply of quality work experience and future employees. This may not only raise the profile of internships for SMEs but also improve their competitivity and indirectly address other Europe 2020 initiatives (European Commission, 2010). The challenge for SMEs and HE institutions is how to manage internships in a 21st century business environment that has been characterised as being volatile, uncertain, complex and ambiguous (VUCA), the features often found at the scenes of a battlefield (Ghandi, 2017).

Uncertainty and ambiguity also reflect Perlin's view (2012, p.25) of internships in which various definitions range from simply gaining experience of work to the more substantial "…structured and deliberate reflection contained within learning agendas and objectives". Moreover, the work of Lain, et al., (2014) introduces another layer of internship complexity by identifying significant governance conditions and their impact on the design of successful internships and internship programs. These claims imply that internships may be presented with a variety of hurdles which may lead to potential failure should they not be addressed adequately. The Henry et al. 2001 study (cited in Kim, et al., 2012) illustrates that employer, student and faculty may have different expectations from an internship so that a signed learning contract is a vital tool to clarifying stakeholder expectations. Additionally, research has shown that the "…development of a symbiotic relationship between graduates and SMEs is a key requirement of a competitive economy" (Brindley, 2000, p. 517). Consequently, it could be concluded that HE institutions, primarily universities and business schools, need to have well-developed internship strategy in place, if they are to act as trustworthy intermediaries that facilitate committed partnerships between student learners and SMEs.

THE SME AND INTERN PERSPECTIVES

In their review of business excellence in a VUCA environment Saleh & Watson (2017), recognise training & development as one of sixteen critical success factors (CSF) which contributes to the business' emotional intelligence. Whilst internships are recognised as one means of helping an organisation identify and access talent and satisfy mutual needs, the findings of Maertz Jr, et al., (2014) do suggest that businesses and interns do not have a shared expectation of outcomes regarding the internship. Likewise, Cousins (2018) links uncertainty with simply a lack of knowledge which can be pre-empted through the acquisition of knowledge through training and internships. Despite the various benefits of internships there is a lack of alignment between stakeholders that limits an internship's potential usefulness for businesses to identify employees and reduce costs linked to recruitment and selection (Maertz Jr, et al., 2014). Similarly, the study of UK SMEs and undergraduates (Brindley, 2000), indicated that SMEs have little experience of employing graduates and, for this reason, their perceptions of value-added by interns are ill-informed. Furthermore, Dynes (2011) report on European internships stresses that the major, core concern to the intern is that of the quality of the internship. Moreover, in another study, undergraduates and graduates perceive SMEs as not offering the learning opportunities of larger organisations (Brindley, 2000), that of challenging and professional-levels of work (Verney, et al., 2009). All things considered, there appears to be an expectation gap between SMEs and interns that might be filled with strategic partnerships with HE institutions. It appears that work needs to be done to change SMEs attitude towards interns and the attitude of interns towards SMEs. If internships could be viewed from all perspectives as long-term human and social-capital investments (Starr-Glass, 2006) then stakeholder expectations might be re-aligned and yield greater satisfaction of internship programs from both intern and SME perspectives (Verney, et al., 2009).

In the European Survey of internship quality (Dyrnes, 2011, p. 26) interns were divided into three main categories; student interns carrying out internships as a part of their studies; “side-interns” internships carried out on an ad-hoc basis; and post-studies interns who have completed their education. Callanan & Benzing 2004 (cited in Kim, et al., 2012) stress the importance of mentoring in an internship to raise the value of the process to the student however, (Perlin, 2012) laments how training and mentoring are internship rarities and firms want interns who can finish their work with little supervision and often to perform the work of regular employees for low or no wages. Thus, young people from poorer backgrounds may well be at a disadvantage to their peers with access to resources. The conceptual paper on internship governance (Lain, et al., 2014) cites the work of the Low Pay Commission, 2011 which argues that this group of students cannot afford to wait for a job while doing low paid or unpaid internships. Despite these no or low pay risks associated with internships there are still many benefits to the student. Maertz Jr, et al., (2014) in their literature research categorise three areas of student benefits; job-related knowledge and skills, career development and networking / job-market opportunities. The results of these studies imply that those students undertaking ad-hoc internships are less well academically supported or have less experience and resources to navigate the internship environment. Furthermore, the increasing movement of talent across borders from less well-developed countries (Abella, 2015) might suggest an even greater need for support from HE institutions towards interns from overseas such as faculty dedicated to internship supervision (Kim, et al., 2012).

THE CHALLENGE FOR HIGHER EDUCATION

Increasingly HE is being asked to be more specific about what students have learned by graduation and that universities and business schools find ways to assess students’ application of learning in the workplace (Verney, et al., 2009). Lain, et al., (2014) argue that three dimensions of governance are important for evaluating the impact of internships: contracts setting out the work to be done and opportunites available; internship duration; third party partnerships to support and monitor the internship. Typically, faculty will have little influence on governance issues but may be expected to provide support to students (Kim, et al., 2012) in developing the skills needed in key areas such as problem-solving. However, managing successful internships ought to involve dedicated faculty, building relationships with partner organisations and ensuring that allotted work matches the needs of the student with on-going evaluation of the student’s progress. This belief is echoed by Brindley (2000) who identified an academic mentor as key and playing a crucial role in terms of internship feedback. As Gault et al. 2000 (cited in Kim, et al., 2012) point out, a well-structured internship program integrated with formal evaluation methods will yield positive perceptions of the HE institution. The real challenge for universities and business schools is how best to exploit the current need for experiential and vocational learning (Maertz Jr, et al., 2014) through the successful deployment of internships. Studies on mentoring programs (Spence & Hyams-Ssekasi, 2015) and the recognition that the educational institution are best placed to define learning goals (Starr-Glass, 2006) suggests that HE establishments in the business sector should identify a faculty member to facilitate internships. This might ensure the constant learning and acclimatising, which is needed in a VUCA environment (Ghandi, 2017). If not, there is a danger that ad-hoc internships will continue to be viewed as a stand-alone, add-on that offers students an opportunity to garnish their CV with experience of working at an SME, but little opportunity to reflect on the skills learned and developed.

A key recommendation to improve internships promoted by Kim et al. (2012) is the need to engage businesses at the beginning of the internship process rather than simply evaluating the results of an internship at the end. Their study of AACSB (Association to Advance Collegiate Schools of Business) accredited schools showed that 98% of schools evaluated the internship at its' conclusion however, far fewer were involved at the outset of the internship program. Moreover, Spence & Hyams-Ssekasi (2015) call for a mentoring programme to create even more purposeful relationships with local businesses, while Starr-Glass' (2006) work on Central and Southern European internships suggested redesigning, sustaining and evaluating internships with a view to enhancing the overall experience. Some European and UK studies Mallik, 2011a (as cited in Lain et al., 2014) reveal that ad-hoc internships have much worse employment outcomes than educational internships and in one survey almost twenty percent of of firms simply saw interns as a source of cheap labour. That said, the literature research on internships by Lain, et al. (2014), indicate that research on non-educational i.e. ad-hoc internships are less extensive than those linked to specific internship programs. This suggests that it is critical for HE bodies to evaluate the assessment process of any internship, but particularly those organised outside a formal internship program. This may ensure the validity and reliability of the results of any student performance evaluation and ultimately improve ad-hoc internship satisfaction. In this way, SMEs might be encouraged to focus on important aspects such as clearly defining the skills and objectives of their internship offer and even show a willingness to provide student progress reports during the placement (Starr-Glass, 2006).

CONCLUSION

Ghandi (2017) writes of challenges for HR managers but in truth the majority of SMEs are likely to adopt the strategy of dividing classical HR tasks amongst various administrators and line-managers (Ghassemieh, et al., 2005). This emphasises the need for a more collaborative arrangement between businesses and HE institutions linked to training and development. Kim, et al., (2012) point out that internship researchers have studied perceived effectiveness of the internships rather than actual effectiveness. This accentuates the fact that effectiveness is dependent on the different stakeholder expectations consequently different dimensions of internship evaluation ought to be considered. There are at least eleven dimensions of internship which are routinely mentioned or implied in the research literature (Maertz Jr, et al., 2014) and when these are analysed in the VUCA environment described by Ghandi, (2017) it is evident that further local research into the value of internships is needed. In any case, researched or not, the aforementioned suggests it is critical that HE establishments do not lose sight of their obligation to monitor and regulate internships (Dyrnes, 2011). This will ensure higher quality business education not only within academia but also in the wide range of SMEs in their community, eager to raise their competitivity in an ethical manner. With this in mind, universities and business schools might make a small but significant local contribution that impacts on the UN global initiatives and several of the sustainable development goals.

BIBLIOGRAPHY

1. Abella, M. (2015). Global competition for brains and talent. *Journal of International Affairs , 68* (2), 179-194.
2. Brindley, C. R. (2000). Undergraduates and small and medium-sized enterprises: Opportunities for a symbiotic partnership? *Education & Training 2000, 8* (9), 509-517.
3. Cousins, B. (2018). Design thinking: Organisational learning in VUCA environments. *Academy of Strategic Management Journal , 17* (2), 1-18.
4. Dyrnes, I. (2011). *Interns Revealed: A survey on internship quality in Europe.* Brussels: Porcaro, G. et al.
5. European Commission. (2010). *Europe 2020: A European Strategy for smart, sustainable and inclusive growth.* Brussels: European Commission.
6. Eurostat. (2011). *Key figures on European business with a special feature on SMEs.* Luxembourg: Aleksandra Stawińska.
7. Ferrández-Berrueco, R. K. (2016). A framework for work-based learning: basic pillars and the interactions between them. *Higher Education, Skills and Work-Based Learning , 6* (1), 35-54.
8. Ghandi, L. (2017). Human Resource Challenges in VUCA and SMAC Business Environment. *ASBM Journal of Management, 10* (1), 1-5.
9. Ghassemieh, G., Thach, E., & Gilinsky, A. (2005). Does my business need a human resources function? A decision-making model for small and medium-sized firms. *New England Journal of Entrepreneurship, 8* (1), 25-36.
10. ILO. (2012). *Report V The youth employment crisis: Time for action.* Geneva: ILO Publications.
11. Kim, E., Kim, K., & Bzullak, M. (2012). A survey of internship programs for management undergraduates in AACSB-accredited institutions. *International Journal of Educational, 26* (7), 696-709.
12. Lain, D., Hadjivassiliou, K., Corral Alza, A. & O'Reilly, J. R. (2014). Evaluating internships

in terms of governance structures: Contract, duration and partnership. *European Journal of Training and Development, 38* (6), 588-603.

13. Maertz Jr, C., Stoeberl, P., & Marks, J. (2014). Building successful internships: lessons from the research for interns, schools, and employers. *Career Development International , 19* (1), 123-142.
14. Muller, P. D. (2016). *Annual Report on European SMEs 2015/16.* Brussels: Hope, K.
15. Muller, P., Devnani, S., Julius, J., Gagliardi, D., & Marzocchi, C. (2015). *Annual Report on European SMEs 2015/16.* Brussels: Hope, K.
16. Perlin, R. (2012). *The Intern Nation: How to earn nothing and learn little in the brave new economy.* London: Verso.
17. Saleh, A., & Watson, R. (2017). Business excellence in a volatile, uncertain, complex and ambiguous environment (BEVUCA). *TQM Journal, 29* (5), 705-724.
18. Sharma, K. (2018, Dec. 2). Time to rely more on experiential learning. *Business Today; New Delhi*, 1-3.
19. Spence, S., & Hyams-Ssekasi, D. (2015). Developing business students' employability skills through working in partnership with a local business to deliver an undergraduate mentoring programme. *Higher Education, Skills and Work-Based Learning, 5* (3), 299-314.
20. Starr-Glass, D. (2006). Enhancing the transformative potential of business internships. *Managing Global Tranisitions, 4* (4), 285-297.
21. Taylor, S. (2010, Nov.). The lowdown on unpaid internship programs. *HRMagazine*, 46-48.
22. UNDESA: United Nations Department of Economic & Social Affairs. (2015). *Sustainable Development Knowledge Platform*. Retrieved Jan. 2, 2019 from United Nations Department of Economic & Social Affairs: https://sustainabledevelopment.un.org/
23. Uttley, H. (2013, Dec./Jan.). CIPD survey shows high zero-hours job satisfaction. *Workplace Savings & Benefits*, 10.
24. Verney, T., Holoviak, S., & Winter, A. (2009). Enhancing the Reliability of Internship Evaluations. *Journal of Applied Business and Economics, 9* (1), 22-33.

Alistair Charles, MBA, is professor of Human Resources Management at EU Business School, Barcelona campus

POSITIVE PSYCHOLOGY AND HIGHER EDUCATION: AN EXPERIMENT TO INCREASE FOUNDATION STUDENT WELLBEING

Lesley Lawson Botez

ABSTRACT: *The science of positive psychology concentrates on wellbeing, happiness, flow, personal strengths, creativity and imagination. It aims to make individuals flourish and to encourage this behaviour within groups and institutions. This paper intends to show how the application of positive psychology can enable students to adapt to new surroundings and thus improve their performance. Many international EU students leave their homes and families to study, often for the first time, in a new country where they have to express themselves in a language they do not yet master. This is particularly the case for Foundation Programme students, both pre-Bachelor and pre-Masters. The author, together with a researcher from the University of Grenoble, France, designed an exercise called "Small change high impact" to encourage these students to adjust by building on their strengths in an unusual way. The first cohort of seven students from Geneva and Montreux campuses gave their presentations in Spring 2016. Since then the exercise has been repeated with each new Foundation class. In Fall 2018 two second-year design students also submitted projects. Evaluation methods need to be developed, however it can already be seen that the quality of presentations has progressed significantly and grades have improved. In addition student self-evaluations confirm a gain in confidence. The present paper is descriptive and analytical in nature.*

KEYWORDS: **positive psychology; strength-building; wellbeing; Foundation programme.**

THE DEVELOPMENT OF POSITIVE PSYCHOLOGY

In 1999 Martin E P Seligman, Professor at the University of Pennsylvania, laid the foundations for positive psychology in his inaugural speech as President of the American Psychological Association (APA) at its 104th Convention. He announced his agenda to correct the trajectory of late 20th century 'pathologically focussed' psychology (Seligman

1999) which had focussed on three tasks:

1. Cure mental illness
2. Enhance the lives of the normal population
3. Study genius.

The devastating effects of two world wars meant that research funding concentrated on treating traumatised soldiers returning from the battlefields. Other populations were almost forgotten (Linley, 2009). While the funding resulted in curing or at least relieving some 14 disorders, it meant psychology concentrated on what were viewed as victims, subject to their external environment rather than pro-active, self-determined individuals (Seligman and Csikszentmihalyi, 2000). Psychology needed to rephrase the question: Why do these individuals fail? with What makes some individuals succeed?

Seligman's epiphany came when his then five-year old daughter tried to get his attention and he snapped at her. Exasperated, she asked her father if he remembered how she used to whine when she was smaller adding that if she could stop whining he could stop being bad tempered. Seligman realized that emphasis should be placed on what was right, not on what was not. (Seligman and Csikszentmihalyi, 2000).

POSITIVE PSYCHOLOGY IN EDUCATION

Positive psychology can be applied to all areas of learning. Its goals mirror those of higher education in efforts to enhance higher academic achievement, strengthen character, self-awareness and emotional control, self-efficacy, resilience, flexible yet critical thinking skills, positive relationships and learned optimism (Disharag, 2015).

Research methods are scientifically valid, quantitative and experimental (Shankland, 2016). Positive psychology looks at healthy and optional functioning, how wellbeing is established and the relationships and institutions that promote it (Shankland, 2016). Personal competence and resources are built upon, leading to greater resilience and promotion of good health (Shankland, 2016). Subjects are taken beyond than an absence of symptoms towards feeling good. When a negative event occurs, they are better equipped to deal with it.

Many school-based interventions are designed to increase resilience and promote optimism, adaptive coping skills and effective problem solving, using cognitive behavioural therapy. One of the oldest is the Penn Resilience Program (PRP). It has a solid base of evidence dating back to 2002 (Reivich and Shatté, 2002; Seligman, 2002, 2007, Reivich et al., 2007). It shows children how to identify their feelings; tolerance and ambiguity; the optimistic explanatory style; how to analyse causes of problems and try new things. It also educates adolescents to challenge a habitual pessimistic explanatory style by looking at the evidence and considering what is realistic and avoid unrealistic optimism (Hefferon and Bonniwell, 2011).

Programmes need to focus their efforts on encouraging positive emotions and flow if they are to increase a sense of wellbeing rather than just avoiding depressive symptoms (Hefferon and

Bonniwell, 2011).

Although student satisfaction is difficult to define, there is a consensus that a safe environment, a precise and shared vision of purpose, specific goals and rewards for achieving them are key (Peterson, 2006). Students tend to perform better when they feel secure and a part of the whole (Brand et al, 2003).

The approach appeals to students. At Harvard University, Positive Psychology 1504 led by Tal Ben-Shahar, attracted 1400 students per semester – some 20 percent of all undergraduates – making it the largest class in Harvard's history (Edmond J. Safra Center for Ethics, Harvard University, 2019).

THE EU POSITIVE PSYCHOLOGY EXPERIMENT

The author, a cognitive psychologist, had attended seminars on positive psychology. She contacted Dr Evelyn Rosset, researcher at the University of Grenoble, to develop a student experiment. Dr Rosset is co-founder of Maac Lab (www.maac-lab.com), a non-profit organisation designed to make helping others and feeling useful as accessible as possible, particularly to people who do not see themselves as 'change-makers'. The organization is based on research from multiple domains showing that feeling useful and helping others has a positive effect on the person carrying out the action (Rosset, 2019).

Several ideas emerged from their discussions beginning with introductions. Students are now asked to relate an incident of which they are particularly proud, an experience where they acted as leader. This introduces leadership qualities and demonstrates strengths.

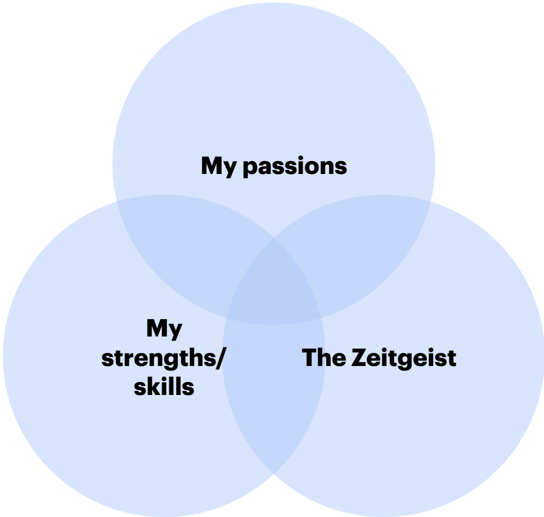
SMALL CHANGE BIG IMPACT

The experiment became the English for Business Studies semester presentation on a business topic. Called "Small change big impact", it requires students to present a product or service that adds to the public benefit in either their own country or Switzerland. Funding and time are no object however sources of income need explanation. Students produce mission and vision statements, objectives and reasons for their choice, thus taking ownership of their programme. Words are abstract, but committing to putting the plan into action with a timeline is what works the magic.

The formula for change is D x V x F >R, in which D = Dissatisfaction, V = Vision, F = First concrete steps towards the vision and R = Resistance.

If the product of the first three factors is greater than R = Resistance, then change is possible. Because D, V, F are multiplied, if any one of them is absent or too low, the result will be low and not capable of overcoming the resistance (Hieatt, 2014).

To design their project, students identify long-term passions, strengths and skills (Hieatt, 2014).



First steps are taken before the end of the semester to encourage students to be in the flow.

The author checks how students are feeling on a scale of 1 to 10 with 10 being the highest. Irrespective of where they are on the scale, this exercise aims to get them to 10.

Some 35 students from Geneva and Montreux campuses have now participated. Some projects are listed overleaf.

Country	**Project**
Burundi	Installation and collection of rubbish bins to decrease disease in Bujumbura
Peru	Dog's home to vaccinate, sterilize and rehome dogs. Some 6 million dogs live on the streets of Lima
Rural China	Programme to improve sight of rural children in China through operations/ training/education of children aged 0-3 months, 3 months to 3 years and 3 years to 12 years
Kazakhstan	Importation of electric cars into Almaty, Kazakhstan to decrease pollution
Kazakhstan	Nutrition and health centre in Kazakhstan for brides to help them to lose weight in six months and fit into their dresses
Saudi Arabia	Soup kitchens in halls of mosques in Jeddah for immigrant workers
Ukraine	School for long-term hospitalized children so they don't miss too much term
Thailand	Vocational training for long-term patients in Thai hospitals to enable them to earn money
China	Home plus, a housing rental platform for young workers and the elderly retired

EVALUATION

More assessment tools are needed to measure the effectiveness of this experiment. Until now, assessment has been student self-evaluation and grading. Self-evaluation is relevant in that the objective is to increase student wellbeing.

Milly Muhoza from Burundi:

Before this exercise I was a little bit stressed because I was not 100% sure about how the presentation will go. But during my presentation my confidence grew up and up and I really felt good after and I was kind of proud of myself also the feedback that I got made me feel happy.

Before the presentation I was at 7/10 and after the presentation 10/10. The exercise helped me to have an idea of what I should invest in in the future in my country but it also helped me to have an idea on what I should base my thesis

Xingyi Huang from China:

It was with great pleasure to have the chance to design a small project that could make a positive change to the world. Different ideas floated in my mind, I finally chose the one which is the closest to my personal experience. I would say I am the one who benefits from such western host family model. What good fortune to feel "home " in a foreign country. I decided to share this happiness with more people in my own country and solve social problems at the same time.

Yana Gudkova from Russia:

I felt more confident. It was the feeling that the brain began to work on the side that used to sleep before. In the head started to come new ideas. My feeling was that you have found the key to success and now I know what to do to achieve it. Performing step by step.

Pichittra P. Lamloetla from Thailand:

Changing the world is something new to me because I never thought of it before. It challenged me a lot. Until the week before I had to send, I had the greatest fear. I think the problems that I often encounter in my home country are hospital problems, patient poverty problems and income and expenses of patients and families that are in trouble. I am very proud when I received praise from teacher and became part of her research.

The author grades the presentations for originality and relevance, organisation, visual impact, expertise and understanding of material, creativity and innovative ideas. A peer review in class and a written summary are also graded.

There was a significant improvement, some students increasing their grades from 70 at mid-term to 90 for the presentation. Watching others' enthusiasm also stimulated empathy. Students complimented their peers spontaneously on improvement in presentation skills.

CONCLUSIONS

Positive psychology can be seen to identify and marshal the academic and psychological resources of each student (Disharag, 2015).

By building on educational principles, strengths-based education could transform universities. It could lead to an educational system that develops individual strengths, realizes personal potential and enables the creation of a thriving community of civically responsible and productive members (Disharag, 2014).

The transition of international students adapting to a new culture can be facilitated by strength-building. From the improved quality of student presentation skills, their enthusiasm and positive attitude, confirmed by higher grades, the experiment can be seen as a positive first step. More experiments are being planned as well as other ways of evaluating outcomes.

BIBLIOGRAPHY

1. Brand, S., Felner, R., Shim, M., Seitsinger, A. & Dumas, T. (2003). Middle school improvement and reform: development and validation of a school-level assessment of climate, cultural pluralism and school safety. *Journal of Educational Psychology*, 95, 570-88.
2. Disharag. (2015). Impact of Positive Psychology on Higher Education. Fourth International Conference on Higher Education: Special Emphasis on Management Education.
3. Edmond J Saffra Center for Ethics, Harvard University (2019). https://ethics.harvard.edu/people/tal-ben-shahar
4. Hefferon, K., & Bonniwell, I., (2011) *Positive psychology theory, research and applications*. Open University Press, 195-220.
5. Hieatt, D., (2014). *Why brands with a purpose do better and matter more*. The Do Book Company, UK, 12-13, 72-73, 82.
6. Linley, A. (2009). Positive psychology (history) In S. Lopez (ed.) *The Encyclopedia of Positive Psychology*. Chichester: Blackwell Publishing Ltd, 742-746.
7. Maac Lab, 1 quai Maréchal Joffre, 69002 Lyon, France. (www.maac-lab.com) (2019)
8. Peterson, C. (2006). *A Primer in Positive Psychology*. New York: Oxford University Press.
9. Reivich, K., & Shatté, A. (2002). *The Resilience Factor: Seven Keys to Finding your Inner Strength and Overcoming Life's Hurdles*. New York: Broadway Books.
10. Reivich, K., Gilham, K., Shatté, A., & Seligman, M. (2007). Penn Resiliency Project, A Resilience Initiative and Depression Prevention Program for Youth and their Parents. Executive Summary, Philadelphia, PA: University of Philadelphia. In Hefferon, K., and Bonniwell, I., (2011) *Positive psychology theory, research and applications*, Open

University Press.

11. Rosset, E., Fouché, M., Peytour, M., & Revil-Signorat, K. (2019). Agir pour autrui comme levier de bien-être individuel : l'exemple du programme Maac. In S. Lantheaume & R. Shankland (dir.), *Psychologie positive: 12 interventions*. Paris: In Press.
12. Seligman, Martin E. P., President 1999, 104th Annual Convention of the APA, *American Psychologist*, 1999, Vol. 54, # 8, 605-671
13. Seligman, Martin E. P., and Csikszentmihalyi, M, (2000) *Positive psychology – an introduction*. American Psychologist 55 (1), 5-14
14. Seligman, Martin E. P. (2002). *Authentic Happiness: Using the New Positive Psychology to Realize your Potential for Lasting Fulfilment*. New York: Free Press.
15. Seligman, Martin E. P. (2007). *The Optimistic Child*. New York: Houghton Mifflin.
16. Shankland, R. (2016). Psychologist, University of Grénoble Alpes, *Presentation to Association of Swiss Cognitive Psychologists,* Belle Idée Hospital, Geneva.
17. Shankland, R., Rosset, E., & Fouché, M. (2018). Développer le bien-être chez les adolescents via les objectifs altruistes : une étude de faisabilité. *Sciences & Bonheur,*3, 49-71.
18. Shankland, R., & Rosset, E. (2016). Review of brief school-based positive psychological interventions: A taster for teachers and educators. *Educational Psychology Review, 27.*

Lesley Lawson Botez, MSc, PGCert, is a professor of Communications and Design
at EU Business School Swiss campuses

PUBLIC PRIVATE PARTNERSHIP IN SWITZERLAND IN SUSTAINABILITY PROJECTS

Nadine Reichenthal

ABSTRACT: *: There is no one widely accepted definition of public-private partnerships (PPP). The World Bank define a PPP as "a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance". An increasing number of countries are enshrining a definition of PPP's in their laws, each tailoring the definition to their institutional and legal particularities*

As Public Private Partnership project are growing worldwide in emerging and developed countries, Switzerland experienced very few projects and exhibits one of the lowest numbers of PPPs within European countries. What could explain this low number of PPPs in Switzerland? We will define, develop a comparison between different type of PPPs and review the best choices for public services and try to understand what is so specific for Switzerland in terms of cultural and institutional differences.

KEYWORDS: sustainability, Public Private Partnership (PPP), innovation, Small and Medium Enterprises (SMEs) in Sustainability

DEFINITION OF PPP

A **public–private partnership** is a cooperative arrangement between two or more public and private sectors, typically of a long-term nature.

PPPs are mostly seen as a special kind of contract involved in infrastructure provision, such as the building and equipping of schools, hospitals, transport systems, water and sewerage systems.

PPP can cover different types of long-term contracts with a wide range of risk allocations, funding arrangements and transparency requirements. The concept is also related to concepts such as privatization and contracting out of government services. The PPP concept comprises different types of potential arrangements, one of which is the long-term infrastructure contract. PPPs common schemes are sharing of risk, development of innovative solutions and a way of financing over a long-term for the public and private sectors. These types of projects often involve a private entity financing, constructing, or managing a project in return for a *promised stream of payments directly from government or indirectly from users* over the projected life of the project or some other specified period of time.

A very easy example can be a hospital building financed and constructed by a private developer and then leased to the Hospital Authority. The private developer then acts as the owner, providing housekeeping and other non-medical services while the hospital itself provides medical services.

COMPARISON BETWEEN THE DIFFERENT TYPES OF PPP'S

Switzerland developed a Public-Private Partnerships for Development (PPPD) ensuring a strategic dialogue with private sector actors on sustainable development, engaging operational partnerships with Swiss or Local companies in the Country to achieve a greater impact. Private investments have a decisive impact and private companies are aware that stable a environment and sustainable development ensure long-term profitability.

Some reasons why PPPs are a good solution include but are not limited to the following;

- Access to new knowledge, from Universities or R&D generating Innovation
- Involving both service providers to the newly created entity and shareholders of that entity.
- Mobilize additional Resources by enlarging range of partners such as SME's, local and multinationals companies, Foundations and Financial Institutions.
- Private effectiveness

Table 1: Overview of the possible modes of provision of public services

Type of Mode of Provision	Design	Build	Finance	Operate	Ownership of Assets
Traditional Procurement	Public	Private	Public	Public	Public
Private Financing	Public (Possibly with Private)	Private	Private (Possibly with Public)	Public	Public
Service Contract (Lease/Management Contracts)	Public	Private	Public	Private (≠ Build)	Public
PPP (The same private provider is involved in all stages)	Private (Possibly with Public)	Private	Private (Possibly with Public)	Private	Public
Regulated Market	Private	Private	Private	Private	Private

These modes can be combined as 10 different possibilities with different chances of success and failure. Each of them, being carefully overlooked for each call for tender by the Public Authority at the 3 levels of decision: municipal, cantonal or federal.

1. Build – Operate – Transfer
2. Build – Own – Operate
3. Build – Own – Operate – Transfer
4. Design – Build
5. Design – Build – Finance
6. Design – Build – Finance – Operate
7. Design – Build – Finance – Maintain
8. Design – Build – Finance – Maintain – Operate
9. Design – Construct – Maintain – Finance
10. Operations & Maintenance

WHY IS SWITZERLAND DIFFERENT WITH PPPS?

Only two Sustainability PPPs projects have been realized in Switzerland. One is a contractual PPP in Switzerland in Burgdorf (BE), and the other one is an institutionalized PPP that is the distance heating network Cadiom, in the Canton of Geneva.

Neumatt is the first and only example of a contractual PPP in Switzerland in the administrative complex of the city of Burgdorf (BE). The availability contract has been signed in 2009 between the Canton of Bern and the project company Zeughaus PPP AG, formed by the construction groups Marti AG and Royal BAM AG, as well as Hälg Facility Management AG. This contract covers a period of 25 years starting in 2012, and includes the design, building, financing, and operating of a new complex, which encompasses a regional prison for 110 inmates, four administrative buildings, a workshop for the Cantonal Road and Civil Engineering Services, as well as an underground car park. The operator of the complex is in charge of all tasks except those related to the custody and care of inmates. The services provided by the private partner encompass, among others, the facility management of the buildings, the management of the car parks, the refuse management, the internal mail service, the staff restaurant, the signage, the management of the keys, and the management of the office supplies. The private company is also in charge of the security and the surveillance of the complex, with the exception of the prison that remains in the hands of the Public Authority. The project company has been chosen among five companies, after three rounds of competitive tendering and the total value of the project is 150 millions of Swiss Francs

Cadiom is an institutionalized PPP created in 1999 between the Services Industriels de Genève (SIG, an autonomous State company) and the consortium Vulcain, composed by CGC Energie, two engineering companies, and the construction group Zschokke (now Implenia). The Public Authority holds a majority (51%) of the project company Cadiom SA. The goal of this company is to design, build and operate a distance heating network in order to use the surplus of heat coming from the incineration plant of Les Cheneviers, in Aire-laVille. This network provides heating to more than 10'000 homes in five municipalities of Canton Geneva. The company Cadiom is paid directly by the clients (homeowners), hence corresponding to a concession scheme. The Canton grants Cadiom the right to use the public domain and monitors the price and the quality of the service.
The private partner has been chosen after a competitive tendering process.

Source :1

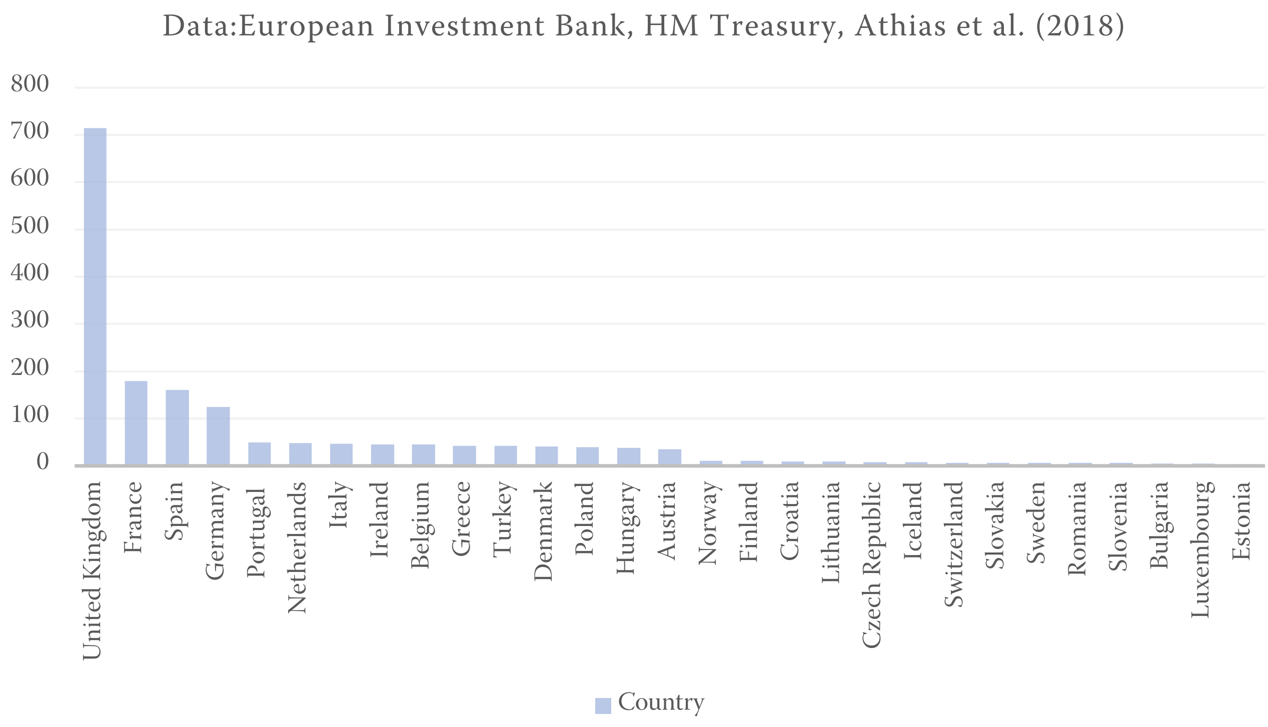


Figure 1: Number of PPPs in European Countries (1994-2016)

Private financing is mostly used in Switzerland as a substitute PPPs to by-pass debt constraints. The Private provider finances the construction of the infrastructure associated with the public service then, no debt appears for the Public Authority.

Private financing projects are also used by Swiss public authorities to avoid having to face a referendum. This instrument allows a given number of citizens to force public authorities to organize a vote on a decision of the federal, cantonal, or municipal parliament.
PPPs are also often used in order to circumvent perceived weaknesses of traditional procurement processes. In particular, the Authority might use a PPP to force itself to evaluate properly the overall costs of a project, by locking itself into a contractual or institutionalized relationship.

PPPs in Switzerland are based on the general rules of contract and procurement laws. Some countries have specific institutions to support the implementation of PPPs this is not the case in Switzerland. Recent PPPs in Switzerland include Hotel des Patients, Lausanne; Parking Souterrain de la place d'Armes, Yverdon-les-Bains; Batiment Skylab – Centre Multifonctionnel, Plan-les-Outes; Centre Sportif Regional de la Gruyere; and Le Ticle – Theatre du Jura, Delemont.

CONCLUSIONS

Most of the PPP projects actually seen in Switzerland are infrastructure projects and can't be considered as real "sustainability" projects.

Even if it is obvious that Public-Private Partnership are the future of sustainable Infrastructure. Cities worldwide are turning to private sectors partners for the long-term investment and operational expertise these new solutions demand in "Green Projects". For the moment, these projects are not developing as much as expected in Switzerland, mainly because no specific regulations had been put in place. The Federal, Cantonal and Municipal independence as well as the Liberal economy approach can explain mainly this situation.
The use of a PPPs is seen mostly, by the Authorities, as a way to build infrastructure that couldn't be viewed as "Public Investment "by the population and avoiding the Referendum Procedure.

TABLES AND FIGURES

1. Table 1 & Figure 1: Athias, L., Macina, M. and Wicht,P. (2017), Public Private Partnerships: The Swiss Specificity University of Lausanne, University of Lausanne, University of Lausanne available at https://mpra.ub.uni-muenchen.de/84735/

BIBLIOGRAPHY

1. Athias, L., Macina, M. & Wicht, P. (2017). *Public Private Partnerships: The Swiss Specificity.* University of Lausanne. https://mpra.ub.uni-muenchen.de/84735/
2. Association PPP Suisse: http://www.ppp-schweiz.ch/fr/

Nadine Reichenthal is a lecturer at HEC Lausanne – School of Business (UNIL), and UNECE Expert on PPP

SUSTAINABLE DEVELOPMENT OF THE TOURISM INDUSTRY IN IRAN:

COMPARISON OF TOURISM SITUATION IN THE PERSIAN-GULF STATES AND ECO COUNTRIES AN ANALYTIC HIERARCHY PROCESS (AHP) APPROACH

Ataallah Zojaji

ABSTRACT: *Tourism is a leading industry in the service sector at the global level as well as a major provider of jobs and a significant generator of foreign exchange at the national level. Tourism has become one of the largest and fastest growing industries in the global economy. The tourism industry is now the third industry in the world after oil and automobiles, and has an important role in creating employment and income for all the countries.*
Iran is among countries with oil-based economy, and investment on the tourism industry would have huge effects on the Gross Domestic Product (GDP) according to the high potential and attractiveness on the tourism industry.

In this study we compared some tourism items including Health, Arrivals, Tourism expenditure in the country, Tourism expenditure in other countries, Safety and Security and Personal freedom between Iran and a group of countries in the Persian Gulf and Economic Cooperation Organization (ECO) countries. The outcomes were not satisfying and proved that there must be a long term program and model to be followed by the Iranian officials to get rid of the current situation.

KEYWORDS: Sustainable; Development; Tourism Industry; AHP

INTRODUCTION

Tourism is one of the most dynamic and fastest growing global industries. It has been recognized as an important economic development tools generating revenue and employments for nations' economies (Goeldner and Ritchie, 2006). Tourism is a leading industry in the service sector at the global level as well as a major provider of jobs and a significant generator of foreign exchange at the national level. Tourism has become one of the largest and fastest growing industries in the global economy.

World Tourism Organization prediction suggests that the expenditure of nearly a trillion dollars in 2010 would rise to about two thousand billion dollars in 2020, where the arrival of every 6 tourists would create one job for every country (World Tourism Organization Statistics 2004).

Tourism industry can be a useful contributor to the alleviation of the poverty, that`s one of the major goals of the UN to reduce poverty across the world. Poverty is a multi-faceted concept which embraces not only insufficient levels of income but a lack of access to essential services such as education, health care and housing, water and sanitation. Development of the industry has a great potential to make jobs and develop infrastructure by huge amount of investment in this regard globally. At the same time, the World Tourism Organization estimates that tourism accounts for up to 10% of global gross domestic product, making it the world's biggest industry. The potential for tourism to contribute significantly to poverty alleviation is considerable. Work since 1998 by the Pro-Poor Tourism Partnership (Ashley, Goodwin & Roe) has demonstrated that tourism can contribute to poverty reduction and that for many of the least developed countries, and in many rural areas, tourism is one of the few current viable strategies for economic development.

According to the statistics the rate of average annual international tourist arrivals worldwide grew about 4.0 percent during period between 1996 and 2006. In the mentioned period from 1996 to 2006, the surveys show that there was a growth in the tourist arrivals averaging 6.7 percent a year in the Asia and Pacific. The market share had an increase from 15.7 percent in 1996 to 19.8 percent in 2006 in the Asia and Pacific. There was also a decline for the Americas moving from second to third place behind Asia and Pacific while Europe remained the top regional tourist destination. The global market shares declined slightly from 19.9 per cent to 16.1 per cent for Americas and 57.8 per cent to 54.4 per cent for the Europe over the decade from 1996 to 2006.

International tourism arrivals in Iran rise from 489 in 1995 to 1 659 thousands of persons for2004, by a percentage increase of 239 (UNWTO, Tourism High lights 2007 Edition).

Tourism Industry is now a significant source for the foreign exchange revenues in most countries across the globe, including some least developed countries. The Industries' economy generated about 12 per cent of total export earnings and 10 per cent of GDP for Iran in 2006 (World Travel & Tourism Council, WTTC 2006 Tourism Satellite Accounts).

For many countries in general and the least developed countries in particular, tourism is a sector in which they have comparative advantages for which they can efficiently utilize domestic resources to earn FDI (Foreign Direct Investment), If used appropriately, such foreign exchange can purchase the investment goods necessary to support more broadly based economic development and also a contributor to the development of the infrastructure and make jobs to enhance poverty reduction policies.

It is often necessary, however, to develop and implement policies that take advantage of the potential benefits of tourism in socio-economic development.

Tourism contributes to the socio-economic development of least developed countries through foreign exchange earnings and the creation of job opportunities;
Tourism stimulates the development of the transport infrastructure, which facilitates access to and from the least developed countries. Theses contribution needs to achieve a sustainable development of the Iranian tourism industry.

METHODOLOGY

2.1. Analytic Hierarchy Process (AHP)
The Analytic Hierarchy Process (AHP) is a commonly used multi-criteria decision making method (Saaty, 1980). AHP performs pair-wise comparisons between factors in order to prioritize them using the Eigen-value calculation framework.

The Analytic Hierarchy Process (AHP) can distinguish five major stages: determine the hierarchical tree, identifying the criteria, sub-criteria options (in this method only the criteria and titles have been expressed), data gathering, how to calculate the data rate and inconsistency rate, be drawn and implemented (Ghodsipour, 2000).

2.2. Design hierarchical decision tree:
The first step in the hierarchy process is to create a graphical representation of the problem in which that objective, criteria and options is shown. The graphical representation is shown primarily as a decision tree for this study as below:

2.3. Determination of criteria and options:
In this stage, after identifying the primary objective, the researcher would use the expertise and experience and expert opinions of people familiar with the purpose of the study and attempt to determine the criteria and options and achieve the objectives with regard to them.

2.4. Data gathering
In this stage in order to gather basic data, questions about the purpose of the studied objective (to select options and priority classification of the evaluated criteria selected) from experts (or the information of questionnaire), will be asked. After gathering the basic data, paired comparison tables based on each criterion and Paired Comparison of criteria will be designed.

2.5. Calculating data:
The process of calculating data operations include the following steps: estimated geometric mean values of paired comparison matrix of criteria and options, normalization, calculation of the harmonized average criteria and options and to determine the total weight of the options regard to weight of the studied criteria.

RESULTS

According the AHP approach, in this study we used a series of criteria for comparison of tourism condition including: the number of entrance of tourists to the destination country, tourism or service fees and tourism income of the country, the cost of exits of tourists to other countries (which have negative effects on tourism of the studied country), health status, security and individual freedom in the destination country for three key countries of ECO and three other countries in the Persian Gulf. The results of this study is as follows:

3.1. Comparison of tourism situation within the ECO countries using hierarchical analysis:

In this section, using the results of the paired comparison matrix driven from primary data obtained in the software (Expert Choice) that has been analyzed, the situation of the tourism industry in Iran in comparison to some countries in the ECO, and based on the decision making factors are demonstrated in the table 1.
The reported results in all the tables have shown the inconsistency rate as close to zero.
The decision making factors in this study, are all shown with the same weight.

Table 2, demonstrates the total weight and the ranking of the countries in comparison to the selected criteria. Based on the results of the table, if the main factor needed to decide the selection of countries, is the tourist entrance in the selected country, Turkey would rank as first, Kazakhstan second, Iran third and Pakistan is in the last ranking of this table.
The total weight of the countries due to the tourism expenditure criteria in the country that includes the travel cost (services) and the cost of transportation in the destination country (which both costs express the income of the destination country of tourism), proves that Turkey ranks first, Iran second, Kazakhstan third and Pakistan ranks fourth

Table 3, demonstrates the final weight of the countries in comparison to the number of arrivals criteria, expenditure of the arrivals and departures, safety and security of the individuals. That Kazakhstan, Turkey, Iran and Pakistan are ranked from the most to less weighted country. In other words Iran has the worse situation after Pakistan in the tourism field among the selected ECO Countries.

3.2. Comparison of tourism in the Persian Gulf states by using hierarchical process:

In this step the tourism situation of Iran will be compared with the major Persian Gulf countries.
Based on the results of table 4, Iran in comparison to three other countries of the Persian Gulf ranks as last in all criteria (except the two cost criteria), and in the two exceptional criteria (arrival and departure expenditure), Iran ranks third (in the first criteria before Kuwait and in the second ranks before UAE).
In the ranking of arrival amounts criteria Saudi Arabia ranks first and unfortunately Iran is the last country in the number of arrivals.
In the comparison of the entrance cost criteria, again Saudi Arabia ranks first and Iran ranks third above Kuwait in this criteria.
In ranking the countries in tourism expenditure criteria from the destination country to other countries, Saudi Arabia ranks first and then puts Kuwait and Iran is in a better situation in comparison to UAE. In other words Saudi Arabia has had the less tourism departure among four studied countries and UAE has the worse situation of tourism departure within the four

countries.

And finally according to the results of three criteria: health, security and personal freedom, UAE ranks first, Kuwait is in the second place, Saudi Arabia in third and Iran ranks as the last country.

Table 5 demonstrates the final weight of options of all criteria in the Persian Gulf countries. According to this table, Saudi Arabia ranks first; UAE is the second, Kuwait is in third place and Iran is in the last ranking, in other words, Iran is in the worse situation according to considering all criteria in the tourism industry in comparison to the studied countries in the Persian Gulf.

According to the tourism expenditure criteria (from the studied country to other countries), Kazakhstan, Pakistan, Turkey and Iran are in the hierarchy places. Based on this fact, Iran is in the last ranking and shows the highest tourism expenditure (departure income of the country).
The final weight of the countries (ECO) in three criteria health, safety and personal freedom, shows that Kazakhstan is in the first ranking, Turkey in the second place, Iran third and Pakistan is in the last place in the ranking.

DISCUSSION

According to the obtained results from this study the following suggestions will be proposed:

4.1. Due to the main factors of the competitive development, we suggest that the official planners review the results of this research and design the new long term plan for the development of the Iranian tourism industry by considering the potentials and obstacles. Also they should institutionalize the innovation culture in the subsections of the tourism industry.

4.2. Considering the turmoil situation in the tourism industry of Iran in comparison with other Arab states and ECO (based method AHP results), proposed competitive model should be utilized according to the following proposals:

4.2.1. Designing the legal, financial and administrative frameworks to remove the obstacles and limitations (referred to in this study) of developing the industry.

4.2.2. Preparing suitable investment opportunities in the private sector of the tourism industry in order to attract investors and financial support.

4.2.3. Forming the appropriate and accurate marketing strategy to satisfy the tourist's interests Creating new communication channels between the governmental and private sectors and new training programs to educate skilled manpower in the industry. Also providing a master database accessible to the tourists to get all the information they need to travel across the country.

Referring to the basis of the proposed competitive model, the creation of key tourism attractions (e.g. history, culture, environment, and climate) is necessary and should be well managed. Also development of factors like health, personal freedom and investment on infrastructure (air ports, roads) should be considered as well.

FIGURE/TABLE LEGENDS

Figure 1.2. Decision making tree to compare the situation of ECO countries in the Tourism industry

Table 1. Final weight of criterions
Table 2. Final options in each criterion
Table 3. Final weight of options respect to all criteria
Table 4. Final options in each criterion
Table 5. Final weight of options respect to all criteria

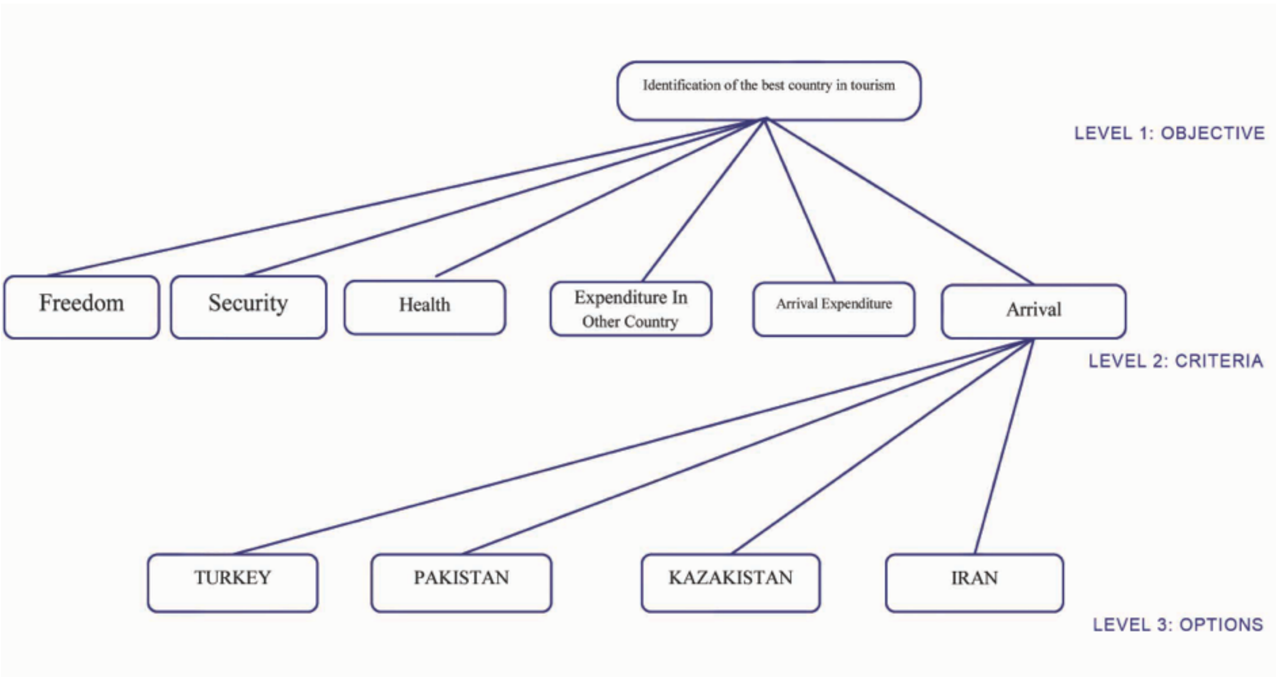


Figure 1.2. Decision making tree to compare the situation of ECO countries in the Tourism industry

Table 1. Final weight of criterions

Personal freedom	*Safety & security*	*Health*	*Tourism expenditure in other countries*	*Tourism expenditure in the country*	*Arrivals*	*Criterion*
Weight	*0.167*	*0.167*	*0.167*	*0.167*	*0.167*	*0.167*

Source: research finding

Table 2. Final options in each criterion

Personal freedom			Safety & security			Health			Tourism expenditure in other countries			Tourism expenditure in the country			Arrivals			
Rank	Weight	Counntry	Rank	Weight	Counntry	Rank	Weight	Counntry	Rank	Weight	Counntry	Rank	Weight	Counntry	Rank	Weight	Counntry	
1	0.57	K	1	0.39	K	1	0.3	K	1	0.47	K	3	0.04	K	2	0.11	K	
3	0.14	I	3	0.23	I	3	0.26	I	4	0.07	I	2	0.08	I	3	0.09	I	
4	0.00	P	4	0.13	P	4	0.14	P	2	0.31	P	4	0.03	P	4	0.03	P	
2	0.29	T	2	0.26	T	2	0.29	T	3	0.15	T	1	0.85	T	1	0.78	T	
0.00			0.00			0.00			0.00			0.00			0.00			Inconsistency Index

Source: research finding

Table 3. Final weight of options respect to all criteria

Inconsistency Index	TURKEY	PAKISTAN	IRAN	KAZAKHSTAN	
0.00	0.44	0.11	0.14	0.31	Weight
	1	4	3	2	Rank

Source: research finding

Table 4. Final options in each criterion

Personal freedom			Safety & security			Health			Tourism expenditure in other countries			Tourism expenditure in the country			Arrivals			
Rank	Weight	Counntry	Rank	Weight	Counntry	Rank	Weight	Counntry	Rank	Weight	Counntry	Rank	Weight	Counntry	Rank	Weight	Counntry	
4	0.09	I	4	0.14	I	4	0.19	I	3	0.24	I	3	0.11	I	4	0.09	I	
2	0.3	K	2	0.31	K	2	0.28	K	2	0.27	K	4	0.03	K	3	0.16	K	
3	0.14	S	3	0.21	S	3	0.25	S	1	0.33	S	1	0.53	S	1	0.50	S	
1	0.47	E	1	0.34	E	1	0.29	E	4	0.17	E	2	0.34	E	2	0.24	E	
0.00			0.00			0.00			0.00			0.00			0.00			Inconsistency Index

Table 5. Final weight of options respect to all criteria

Inconsistency Index	*EMIRATES*	*SAUDI ARABIA*	*KUWAIT*	*IRAN*	
0.00	*0.301*	*0.308*	*0.239*	*0.152*	*Weight*
	2	*1*	*3*	*4*	*Rank*

Source: research finding

BIBLIOGRAPHY

1. Goeldner, R. I., & Ritchie, J. R. B., (2006). Destination Competitiveness. *International Handbook on the Economics of Tourism*, Dwyer, L & Forsyth, P. (eds.). Northhampton, M.A: Edward -Elgar Publishing.
2. Ghodsipour, S. H. (2000). *The obstacles of the tourism development of Iran.*
3. Sinclair. (1998). Tourism Satellite Account. Recommended Methodological Framework. New York, 20 (11), 1621-1630.
4. World Tourism Organization (2004, June). *Statement by World Tourism Organization at the United Nations Conference on Trade and Development – 11th Season.* http://wwwunctadxi.org/sections/u11/docs/GeneralDebate/15wto-eng.pdf.

Ataallah Zojaji, DBA, EU Business School alumnus

SUSTAINABILITY DISCLOSURE, AND THE LIMITS OF DIVERSITY

Alain Berger

ABSTRACT: *This essay reviews some aspects of the literature and the findings of a DBA (doctorate in business administration) research which investigated the relationship between sustainability disclosure and board diversity. It investigated the limits of diversity through two types, diversity as variety and diversity as separation. Diversity as variety assumes that each group member adds its own experience and point of view in a discussion, while diversity as separation assumes that each group member may have fundamentally different values and opinions. This latter type of diversity could potentially lead to misunderstandings and conflicts. This analysis was conducted on a sample of Swiss listed firms and used, among others, diversity and cultural variables which were tested against sustainability disclosure. To measure sustainability disclosure, it used specific content indexes previously developed by academic scholars. This analysis suggests that cultural variables and cultural dimensions may be used to determine an optimal level of diversity within a board of directors, ensuring a level of diversity which provides greater creativity, innovation and increased decision quality, however without compromising on fundamental values, beliefs and attitudes of board members.*

KEYWORDS: **board diversity, cultural diversity, sustainability disclosure, corporate social responsibility, voluntary disclosure**

PART 1: SOME LITERATURE ON THE SUBJECTS

overnments, activists, as well as many other internal or external stakeholders such as the society at large, customers, consumers or employees, have become adept at holding companies to account for the social consequences of their activities (Porter & Kramer, 2006). Over the last thirty years, the concepts of stakeholders, corporate social responsibility (CSR) and sustainability gained in importance and visibility until a point that these terms became commodities in the business language. The increase in importance is, among others, due to the explosion of information technology, the liberalization of markets, the liberalization of political institutions and the emergence of environmentalism and other social values (Freeman et al., 2007). Today's world is connected, wireless, plugged in, and turned on. The

Internet is the hottest marketing tool in years, and the growth of smaller yet faster computers that can communicate with each other continues to fuel the information revolution (Freeman et al., 2007).
Heightened corporate attention to CSR has not been entirely voluntary. Many companies awoke to it only after being surprised by public responses to issues they had not previously thought were part of their business responsibilities (Porter and Kramer, 2006).

Over time, stakeholders' influence and power change, evolve. A stakeholder may have strong influence today, but no more tomorrow. A firm may face consumers' boycott today, and environmental pressure tomorrow. One of the risk a firm may face is reputation.
Barnett (2007) talks about stakeholder influence capacity. He argues that CSR accounts for the path-dependent nature of the firm relations with its stakeholders, and that the effects of CSR on corporate financial performance (CFP) vary across firms and time. On this basis, investigating for the relationship between CSR and CFP may provide different results at different times, and this might be one reason explaining the mixed results found so far by scholars researching causality between corporate social performance (CSP) and CFP (Margolis & Walsh, 2003).

To raise their voice, activists usually target the most visible or successful companies merely to draw attention to an issue, even if those corporations actually have had little impact on the problem at hand. For example, Nestlé, the world's largest purveyor of bottled water, has become a major target in the global debate about access to fresh water, despite the fact that Nestlé's bottled water sales consume just 0.0008% of the world's fresh water supply. The inefficiency of agricultural irrigation, which uses 70% of the world's supply annually, is a far more pressing issue, but it offers no equally convenient multinational corporation to target (Porter and Kramer, 2006). This explains why larger multinational companies may disclose more on their corporate social responsibility and activities in relation to society than many smaller firms do.

This essay reviews some aspects of the literature and the findings of a DBA (doctorate in business administration) research which investigated the relationship between sustainability disclosure and board diversity, as well as the limits of diversity. The findings are summarized in this article. But let's start with the clarification of some important definitions.

CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE

Many observers from society, NGOs, politics or financial institutions constantly scrutinize the behaviors of firms, making them accountable for their actions. As a consequence, debates about CSR have moved all the way into corporate boardrooms (Porter and Kramer, 2006). Firms need to communicate more and more on their actions in relation to society, be it with their stakeholders, shareholders, NGOs or various observers from different organizations. While corporate social responsibility disclosure is, in most countries, not compulsory, there are trends towards increasing regulation.

Sustainability disclosure became a key communication tool that companies use in order to build their image and reputation in regards to their actions towards society. While sustainability disclosure might show only one side of the actions that a company takes, the positive side, it becomes more and more difficult for companies to hide or transform reality, as many observers constantly scrutinize companies. In addition, academics developed models allowing scholars to better assess the quality of sustainability disclosure and performance of firms. Some academic models worth mentioning are those from Rahman and Post (2012), who review some environmental corporate social responsibility concepts and constructs and propose their own, or the content analysis frameworks, developed by Clarkson et al.'s (2008) and Sutantoputra's (2009), which take into account the potential self-report bias that companies may have, in other words their tendency to improve reality.

These frameworks, used to rate the quantity and quality of sustainability disclosure provided by the sample firms, indeed suggest a content index which increases the weight of what is called "hard disclosure items", in other words the objective and verifiable items disclosed by companies such as key performance indicators, and lower the weight of what is called "soft disclosure items", in other words the more subjective and less verifiable items, such as management statements or future intentions. These content indexes actually underlie the fact that companies cannot easily lie on hard disclosure items while they can more easily disclose nice statements around items that are less easily verifiable by observers, allowing researchers to have a framework to respectively assess both the environmental and the social performance of firms.

DIFFERENCE BETWEEN SUSTAINABILITY AND CORPORATE SOCIAL RESPONSIBILITY (CSR)

A key question was raised, while starting the research, to understand the difference between sustainability and CSR. Going back into literature, it appeared that *Sustainability* could be defined as being a concept which "... meets the needs of current generations without compromising the ability of future generations to meet their own needs" (The Brundtland Report, 1987). In term of business, sustainability means creating both economic and social value while meeting stakeholders' expectations. Sustainability usually includes three dimensions, economic, environmental and social. It appeared that, over time, more and more scholars and business people talk about sustainability instead of corporate social responsibility. How then to define CSR? How to differentiate sustainability versus CSR?

Werther & Chandler (2011) define *Strategic corporate social responsibility* as "the incorporation of a holistic CSR perspective within a firm's strategic planning and core operations so that the firm is managed in the interests of a broad set of stakeholders to achieve maximum economic and social value over the medium to long term", while defining *Sustainability* as "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs", borrowing on WCED's (1987) definition of sustainable development.

Other scholars, such as Kakadabse et al. (2005) state that there is still no consensus on a commonly accepted definition and agree that this area still lacks a common ground which is accepted by the majority and a necessary development to assert legitimacy, credibility and value of research on the social and environmental responsibilities of business towards society. While not intended to exhaustively review the existing literature, Kakadabse et al. (2005) find that definitions of CSR range from highly conceptual to very practical or managerial statements, and that depending on the stakeholders' interests, CSR is defined either in a business- or society-centered way, and it is frequently related to the concept of sustainability (Kakadabse et al, 2005).

The thesis has retained few definitions of Sustainability and CSR, which, when put together, allow for a better understanding of the terms. The idea of a license to operate and a social contract, concepts stipulating that society grants a license to a business in counterparty of the business making positive contributions on social and environmental aspects around it, was retained. Additionally, the concept developed by the Brundtland Report (1987) remains also a key element in the definition of the term "sustainability".

Another definition retained is the one provided by Galbreath (2011) which includes in the definition three interlocking principles: i) economic growth, ii) environmental quality, and iii) social responsiveness. Galbreath (2011) means that firms have a responsibility to ensure that economic growth is achieved through the demonstration of environmental quality and social responsiveness. Under economic growth, firms have to create value in a way that enable them to remain economically viable for an indefinite time. Under environmental quality, firms have to limit their impact on the natural environment while minimizing the use of natural capital. Under social responsiveness, firms have to continually contribute to the social well-being of society and individuals (Galbreath, 2011).

A last definition which was also considered in the thesis is the one developed by Montiel (2008), on Corporate Social Responsibility and Corporate Sustainability (CS). Montiel (2008) states that both concepts are converging despite their paradigmatic differences on environmental issues. In CSR, environmental issues are a subset of a broader social performance dimension, while in CS, the social dimension has become an increasingly important part of the sustainability paradigm. Contemporary businesses must address economic prosperity, social equity and environmental integrity before they can lay claim to socially responsible behavior or sustainable practices (Montiel, 2008).

CORPORATE SOCIAL PERFORMANCE AND CORPORATE FINANCIAL PERFORMANCE

An investigation into the relationship between CSR and CFP showed that much has been written on CSR over the last thirty years. Many scholars tried to answer the question "Does it actually pay to be good?" Overall, findings on the relationship between CSP and CFP have been mixed. Margolis & Walsh (2003) published a meta-study, investigating 127 published studies empirically examining the relationship between companies' socially responsible conduct and their financial performance between 1972 and 2002. It appears that after more than thirty years of research, it cannot clearly be concluded whether a one-dollar investment in social initiatives returns more or less than one dollar in benefit to the shareholder (Barnett, 2007). These mixed findings have been attributed to a variety of shortcomings present in the research of scholars approaching the topic from a myriad of (a) theoretical angles (Barnett, 2007).

Barnett (2007) rather tries to reorient CSR research and make it firm-specific. He quests for a deeper understanding of the underlying drivers of whether and when a particular firm may earn positive financial returns from CSR (Barnett, 2007). Talking about the relationship between CSR and CFP, he states that CSR improves CFP by improving a firm's relationships with relevant stakeholder groups, and while such relationships improve and trust builds, transaction costs decline and certain risks decline or are eliminated. There is thus an indirect relationship between CSR and CFP, where CSR activities should show a relevance towards increased social welfare and increased stakeholder relationship. According to Barnett (2007), the boundaries of CSR resource allocations are depicted in figure 1.

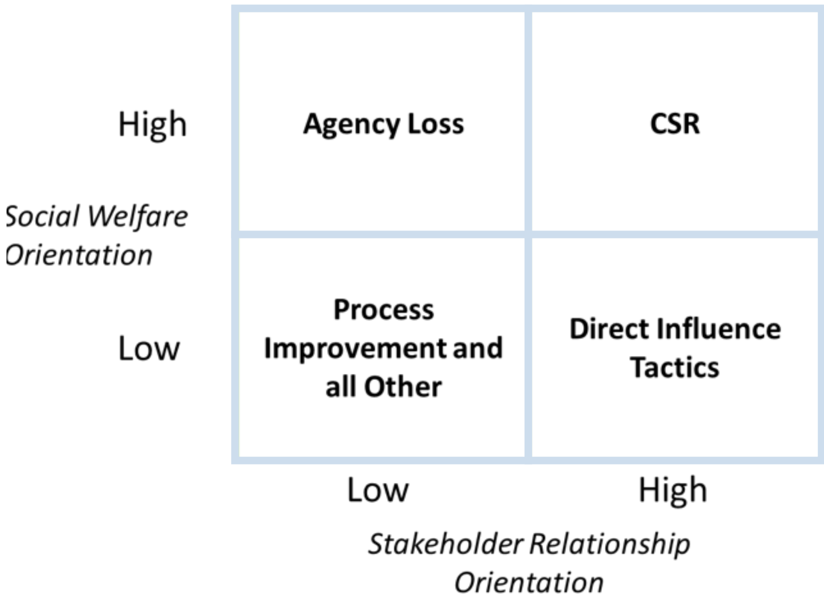


Figure 1. Types of Corporate Resource Allocation.
Source: Barnett (2007)

CSR is concerned with increasing social welfare, which is to be found only in either one of the upper squares of the above picture. However, Barnett (2007) posits that if a CSR event has no stakeholder relationship orientation in addition to a social welfare orientation, the company resource would rather be an agency loss: a misallocation of shareholders' resources. As a consequence, CSR is very firm-specific, and a same activity performed by two different firms might not be characterized as being CSR for both of those.

Porter and Kramer (2006) further confirm this firm-specific characteristic of CSR in stating that many companies have already done much to improve the social and environmental consequences of their activities, but that yet these efforts have not been nearly as productive as they could be, mainly for two reasons. First, observing organizations pit business against society, when clearly the two are interdependent, and second, these same organizations pressure companies to think of corporate social responsibility in generic ways instead of in the way most appropriate to each firm's strategy (Porter and Kramer, 2006).

THE RATING GAME

In 2004, a published survey made by SustainAbility, a think-thank and strategic advisory firm working to catalyze business leadership on sustainability, and Mistra, assessing the quality of 15 worldwide Socially Responsible Investing research agencies, came to the conclusion that RobecoSam's research division was the *worldwide leading sustainability research* organization. They concluded that RobecoSam is well positioned to identify companies leading their industry in terms of sustainability and shareholder value creation thanks to its unique methodology (Beloe et al., 2004; Bertelsmann Foundation, 2006).
GlobeScan (2014), a sustainability consultant whose mission is to unite business and society in envisioning and delivering a sustainable and equitable future for all, and Sustainability (2014), have been surveying leading sustainable development experts and practitioners from the Corporate, Government, NGOs, Institutional and Service sectors for the last twenty years (under the name "The Sustainability Leaders"). Their objective is to track the evolution of the sustainability agenda and rate both the corporate sustainability leaders and the raters. In 2012 and 2013, the Dow Jones Sustainability Index was rated the most familiar and second as the most credible rating to experts, after the Carbon Disclosure Project, and the KLD database (now part of MSCI ESG indices) was ranked number twelve most familiar and number eight most credible rating.

As companies started to increase reporting on their CSR activities, there has been in parallel a strong growth in CSR ratings and rankings (Porter and Kramer, 2006). Many companies entered this game, seeing not only a business opportunity but also the possibility to influence the firms' behaviors in their relation to society.

While an increase in the number of rating agencies could at first look to be positive, it appears that it rather increases confusion among observers. Rating companies all use their own rating criteria, in addition to keeping them confidential. For example, the Dow Jones Sustainability Index includes aspects of economic performance in its evaluation and weight customer service almost 50% more heavily than corporate citizenship, while the FTSE4Good Index contains no measures of economic performance or customer service at all. Even when criteria happen to be the same, they are invariably weighted differently in the final scoring (Porter and Kramer, 2006).

Since the 1990s, the KLD database was used by scholars to measure the corporate social performance of firms (Waddock & Graves, 1998; Sharfman, 1996; Cho & Patten, 2007), as it was the first database which was made available to researchers. At this time, CSP was measured either in term of a single issue (such as pollution control, corporate crime and corporate philanthropy) or as a more comprehensive approach, relying mainly on the Fortune magazine corporate reputation survey, survey data or content analysis of annual corporate documents. Kinder, Lydenberg and Domini & Co (KLD) then made available their social performance database, which appeared to represent the largest, multidimensional CSP database put together to date. But since, sustainability took roots in the business world and while RobecoSam's database, which is compiling data to create the Dow Jones Sustainability Index since 1999, appears today as the most complete and reliable sustainability database thanks to its methodology and coverage universe, as mentioned above, there is no information available on the methodology used and the weighting criteria.

In addition, there is another important question related to how a rating agency can judge if a certain criterion has been met or not. As those organizations have too few resources to audit a universe of complicated global corporate activities (Porter and Kramer, 2006), they use measures for which data are readily available. For example, the Dow Jones Sustainability Index uses the size of a company's board as a measure of community involvement, even though size and involvement may be entirely unrelated (Porter and Kramer, 2006).

As a consequence, it appears difficult to rely on rating agencies to assess sustainability disclosure and sustainability performance of firms. This is the reason why this study took an academic approach, relying on previous work performed by both scholars, Clarkson et al. (2008) and Sutantoputra (2009).

CLARKSON ET AL'S (2008) AND SUTANTOPUTRA'S (2009) CONTENT ANALYSIS INDEXES

Clarkson et al. (2008), in collaboration with an environmental disclosure expert, developed a content analysis index based on the GRI (Global Reporting Initiative) sustainability reporting guidelines to assess the extent of discretionary disclosures in environmental and social responsibility reports (Clarkson et al., 2008). Sutantoputra (2009) developed a systematic social disclosure rating system for analyzing firms' social performance through their corporate social responsibility (CSR) reports or similar social disclosures, to be used to complement Clarkson et al's (2008) environmental rating. Both rating systems list the items that firms should disclose in order to score high (see Exhibits 1 and 2).

Both content indexes are constructed so that firms voluntarily disclosing environmental and social figures or preparing social responsibility report in using the GRI guidelines, score high. The GRI guidelines require firms to disclose mainly figures which are easily verifiable by society, called hard figures, by opposition to figures which are rather unverifiable intentions or statements, called soft figures. Hard disclosure items are not easily mimicked by poor environmental and social performers (Clarkson et al., 2008), implying that firms using the GRI guidelines and disclosing environmental and social information are expected to score high when using both content indexes, while poor performers are not expected to use the GRI guidelines or to score low when using both content indexes. Clarkson et al.'s (2008) environmental disclosure rating includes 95 items, out of which 79 hard and 16 soft disclosure items. Sutantoputra's (2009) social disclosure rating includes 83 items, out of which 67 hard and 16 soft disclosure items.

While this research focuses on sustainability disclosure, and not sustainability performance, it might be interesting to note that there is a recurring debate taking place around the relationship between environmental / social disclosure with environmental / social performance? Clarkson et al. (2008) reviewed empirical literature on the relation between environmental disclosure and environmental performance, but found mixed results. They decided then to revisit this relation by testing competing predictions from economics based and sociopolitical theories of voluntary disclosure, using a more rigorous research design (Clarkson et al., 2008). They focus exclusively on environmental and social responsibility reports or similar disclosures on firm's web sites in using their own content index. They test two competing theories. On one side, the voluntary disclosure theory, which suggests that companies have incentives to disclose "good news" to differentiate themselves from companies with "bad news" (Clarkson et al., 2008), applied to environmental performance, suggests that companies with superior environmental performance, due to their proactive environmental strategy, have incentives to inform investors and other stakeholders of their strategy by voluntarily disclosing more environmental information (Clarkson et al, 2008). On the other side, sociopolitical theories (which include political economy, legitimacy and stakeholder theories) argue that companies whose social legitimacy is threatened have incentives to increase environmental disclosure to i) educate and inform relevant public about changes in their performance, ii) change perceptions about their performance, iii) deflect attention from the issue of concern by highlighting other accomplishments, and iv) seek to change public expectations of their performance. Sociopolitical theories predict then a negative association between corporate environmental performance and the level of discretionary environmental disclosure (Clarkson et al. 2008). Among the studies supporting these sociopolitical theories are Patten (2002), who finds, after controlling for firm size and industry classification, a significant negative relation between performance and disclosure.

Clarkson et al's (2008) results find a positive association between environmental performance and the level of discretionary disclosure in environmental and social reports or related web disclosures, consistent with the voluntary disclosure theory and inconsistent with the prediction of a negative association from sociopolitical theories. On the social side, Sutantoputra (2009) developed a social disclosure rating system following Clarkson et al.'s (2008) framework. Sutantoputra's (2009) index is intended to complement Clarkson et al.'s (2008) index, allowing ethical investors to have a framework for analyzing both companies' environmental and social actions.

As stated previously, the study focused on sustainability disclosure, not sustainability performance, but Clarkson et al.'s (2008) conclusions were interesting in the sense that they allowed to consider as a proxy for environmental performance, the level of discretionary environmental disclosure as computed with Clarkson et al.'s (2008) content index, and in the same spirit, it allowed to consider as a proxy for measuring social performance, the level of social disclosure as computed with Sutantoputra's (2009) content index.

THE RELEVANCE OF DIVERSITY AND BOARD DIVERSITY

Both Barnett (2007) and Freeman et al. (2007) talk about the importance of stakeholders and of managing them. Talking about the relationship between corporate social responsibility and financial performance (CFP), Barnett (2007) states that CSR improves CFP by improving a firm's relationship with relevant stakeholder groups, and while such relationship improves and trust builds, transaction costs decline and certain risks decline or are eliminated. Barnett (2007) shows the very firm-specific role of CSR and the indirect relationship between CSR and CFP.

Freeman et al. (2007) state that business is about how customers, suppliers, employees, financiers (stockholders, bondholders, banks, and so on), communities, and managers interact and create value, and that to understand a business is actually to know how these relationships work (Freeman et al., 2007). They add that the executive's job is to manage and shape these relationships, hence the term "managing for stakeholders". As CSR is very firm-specific, different companies govern their CSR strategies and investments in different ways. By definition, the board of directors has a key role and responsibility in defining, implementing and supervising the activities of the firm, among which those related to CSR and sustainability.

Ayuso and Argandona (2007) explore the question on how to organize board composition in order to ensure responsible corporate governance and advocate for a stakeholder approach to corporate governance. They claim that having stakeholder's directors on the board ensures that the rights and legitimate expectations of these stakeholders will be respected.

A number of studies examined board's characteristics under, among others, demographics, competencies, personality and values, confirming this trend. In other words, board diversity research rose in prominence (Zainal et al., 2013).

ROLE OF THE BOARD OF DIRECTORS

Two schools of thought discuss the role of the board of directors around the two main functions it serves for organizations (Hillman and Dalziel, 2003): i) monitoring management on behalf of shareholders (agency theory) and ii) providing resources (resource dependence theory). Board diversity theories belong to this latter. A diverse board may provide additional resources to the corporation, including advice and counsel and links to other organizations. These linkages can provide channels for communication with, and access to support from external organizations (Bear, Rahman and Post, 2010). Board resources diversity may also enhance network ties, and affect the board's critical function of monitoring management. In addition, gender composition, another typical diversity variable looked at by scholars, is expected to have a positive impact on social capital and CSR (Bear, Rahman and Post, 2010). Investigating the relationship between female directors and their impact on governance, Adams and Ferreira (2009) find that female directors have better attendance records than male directors, and that male directors have fewer attendance problems the more gender-diverse the board is, further confirming a positive relationship between gender diversity and increased board effectiveness (Adams and Ferreira, 2009).

Various scholars wrote about diversity. For example, Freeman et al. (2007) say that "diversity, managing diversity, and valuing diversity have become central ideas in understanding how companies manage the employee relationship. […] Key differences are race, gender, sexual orientation, age, education and culture." Milliken and Martins (1996) argue that the potential cognitive benefits of having a heterogeneous group stem from arguments that have to do with the impact of diversity on creativity and requisite variety, and, citing Nemeth (1986), that the quality of reasoning in majority opinions is enhanced by the existence of consistent counterarguments from a minority. Diversity in organizational decision-making groups may lead to higher quality decisions being made because the group thinks in more realistic and complex ways about its context (Milliken and Martins, 1986). Siciliano (1996) says that "… equal proportion of younger directors are suggested mechanism for strengthening organizational performance through a diversity of outlook", and she then hypothesized that "Boards having members with a greater spread in age would be associated with organizations having better organizational performance". In addition, Siciliano (1996) also hypothesizes that "Organizations with larger boards would have greater diversity in board member occupation, gender and age". Results showed no relationship between diversity in age groupings and the organization's efficiency, however directors from diverse age groupings had somewhat higher efficiency (Siciliano, 1996).

Zenou, Galia and Ingham (2013) claimed that age diversity is also an important indicator of board diversity, and their results show that age diversity plays positively on the intensity of environmental innovation (Zenou, Galia, Ingham, 2013).

The resource dependence theory suggests that boards should be more diverse in order to better understand the expectations of its stakeholders, to answer faster to any change in the economic environment, or to better face any threat against the firm. As sustainability disclosure became a key communication tool that companies use in order to build their image and reputation, a more diverse board may bring additional experience and viewpoints in the discussion, more awareness towards sustainability, and increased sensitivity on these non-financial dimensions which are the environment and the people. This broad diversity appears to act as an important channel for a board, to be more connected to the external environment and to be more receptive to stakeholders' expectations, as it is increasingly suggested in the literature, and ultimately to be aware of the needs to provide increased sustainability disclosure to society. A more diverse board is also expected to develop additional links with external organizations, linkages which may ultimately act like a mechanism for sustainability disclosure, as firms increasingly need to provide additional information to such organizations to continue prospering and doing business with them.

DIVERSITY AND SUSTAINABILITY

The study discussed here precisely investigated the relationship between sustainability and diversity. Improved communication should help the company understand the interactions between its stakeholders and ultimately improve financial performance (Freeman et al., 2007; Barnett, 2007). However, increased board diversity may also lead to differences of opinion, disagreement and conflicts (Harrison and Klein, 2007), which may ultimately have a negative impact on the way a corporate board works. In the same direction, Milliken and Martins (1996) argue that diversity appears to be a double-edged sword, increasing the opportunity for creativity as well as the likelihood that group members will be dissatisfied and fail to identify with the group, while Williams and O'Reilly (1998) argue that different theories often lead researchers to offer plausible but contradictory predictions of the effects of diversity on groups and individuals.

An interesting paper is the one written by Harrison and Klein (2007), who posited that diversity constructs have not one, but three fundamental types: separation, variety and disparity. By separation, they mean differences in position or opinion among unit members, primarily of value, belief, or attitude, where such differences reflect disagreement or opposition. Opposing views which may lead to reduced cohesiveness, conflicts and potentially distrust (Harrison and Klein, 2007). Such a diversity is considered as negative within this study on board of directors. By variety, they mean differences in kind or category, primarily of information, knowledge or experience among unit members, each unit member having unique or distinctive information. Such variety leads to greater creativity, innovation, and increased decision quality (Harrison and Klein, 2007). Such a diversity is considered as positive within this study on board of directors. By disparity, they mean differences of socially valued assets or resources held among unit members, such as pay and status; differences that at their extreme privilege a few over many, bring inequality or relative concentration. Increased disparity among board members may lead to higher internal competition, resentful deviance, withdrawal (Harrison and Klein, 2007). Such a diversity is negatively perceived within from the perspective of board of directors. An illustration of the three types of diversity follows.

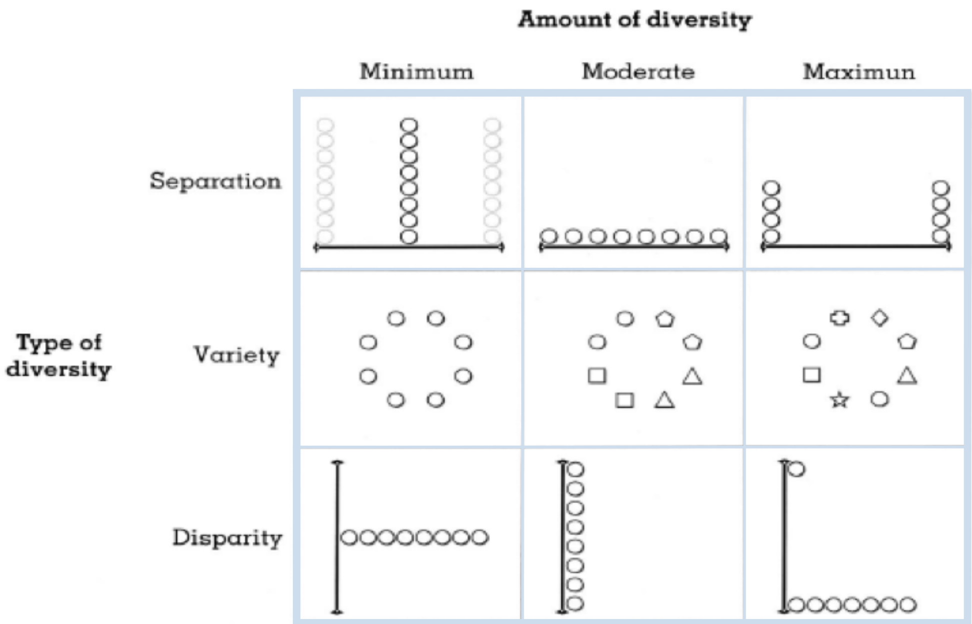


Figure 2 - Pictorial Representation of Types and Amounts of Three Meanings of Within-Unit Diversity. Source: Harrison and Klein (2007)

Let's consider a board of directors composed of eight directors. Among those directors, four of them view the direction of companies with an objective of maximizing shareholder value, while the other four direct companies with an objective of shared value (maximizing stakeholder value). We have here a case of diversity as separation. Opposing views which may lead to reduced cohesiveness, conflicts and potentially distrust (Harrison and Klein, 2007). Such a diversity is considered as negative within a board of directors.

Among the eight directors, four are men and four are women. All eight directors show a rather diversified nationality, age or tenure, and all are from a different culture or ethnicity. We have here a case of diversity as variety. Such variety leads to greater creativity, innovation, and increased decision quality (Harrison and Klein, 2007). Such a diversity is considered as positive within a board of directors.
All eight directors have a rather different pay level, for example due to their involvement or existing prestige within their own employment. We have here a case of diversity as disparity. Increased disparity among board members may lead to higher internal competition, resentful deviance, withdrawal (Harrison and Klein, 2007). Such a diversity is negatively perceived within a board of directors.

On the basis of current knowledge, most studies on board diversity have investigated the diversity type variety, although assuming that, in cases when diversity as variety is high, it may negatively impact the performance of a group. However, this DBA thesis investigated diversity of board of directors from two different angles: variety and separation. It intended to look at the relationship between sustainability disclosure and both types of diversity, and to find if, and to what extent, each type of diversity mitigates or influences the sustainability disclosure of firms. While any variable could be used as a diversity as separation, this study used Hofstede et al.'s (2010) cultural variables, which are as follows: i) individualism versus collectivism, ii) large versus small power distance, iii) strong versus weak uncertainty avoidance, iv) masculinity versus femininity, v) long term versus short term orientation, and vi) indulgence versus restraint. Without going into more details here, these dimensions are largely independent of each other's and occur in nearby all combinations (Hofstede, 1983), and were considered appropriate to investigate the relationship and causality between those and sustainability disclosure.

THE CASE OF SWISS FIRMS

Historically, the Swiss corporate landscape has been characterized by relatively high degree of stability, mainly due to i) the continuing strength of Swiss financial markets, ii) the concentration of equity ownership with, for example, family-owners and other block-holders, iii) a high degree of interlocking directorships and iv) the virtual absence of corporate takeover market (Ruigrok et al., 2007). In most of the listed companies, there is a two-tier board structure. While the two-tier board structure is not legally required, companies are usually organized, on one side with a board of directors (supervisory board) in charge of supervising and controlling the activities of the firm, and on the other side with an executive board in charge of managing the day-to-day activities. Due to this two-tier board structure, most of directors are independent, although usually the CEO belongs to both boards. There is no legal requirements for Swiss companies to disclose information on environmental and social activities, except those linked to the recent passing of a new EU directive (Directive 2014/95/EU) mandating increased non-financial disclosure for firms listed on a EU stock exchange or having significant operations in the EU (Grewal, Riedl and Serafeim, 2015), and asking firms to provide a description of their diversity policy with regards to aspects such as, for instance, age, gender, or educational and professional backgrounds as well as the objective of such diversity policy (Directive 2014/95/EU of the European Parliament and of the Council, 2014). Few theories have been trying to explain why companies voluntarily disclose CSR information. Consistent with Gamerschlag et al.'s (2010) arguments, this research relies, among other, on the political cost theory to explain why managers disclose CSR information. By disclosing information on their social and environmental performance, firms want to minimize the potential costs arising from the interaction between the firm and its natural and societal environment (political or societal costs) (Gamerschlag et al., 2010). Switzerland is characterized by an open and international orientation as well as relatively closed ownership networks (Ruigrok et al., 2007) and international board of directors. From a cultural diversity perspective, Switzerland has four national languages, twenty-six different counties with all their own constitution, parliament, government and legal system. Its culture is influenced by both Latin and German traditions. Switzerland appeared then to be an ideal field to investigate the cultural diversity of boards of directors for this study.

The study performed a cross-sectional analysis with data collected for the years 2013 and 2014 on 101 Swiss companies. It investigated the relationship between two or more variables at a certain time and the strength of this relationship through a regression analysis. In addition, the tests investigated the causality between the variables, as annual reports are usually issued few months after the end of the fiscal year, and board members in office at the end of the fiscal year are the ones in charge of supervising and deciding about the level of sustainability to be disclosed in the annual reports. The selected companies represent 98% of the market capitalization of the Swiss Performance Index. Two models were developed, one for each diversity type (diversity as variety and diversity as separation), and hypotheses were posited. Correlation and multivariate regression analyzes were performed for both models, on each of the variables developed, for three sustainability dimensions, i.e. sustainability, environmental and social dimensions. Tests were run at the 95% significance level.

PART 2: KEY FINDINGS

This research provided interesting and relevant findings in investigating the relationship between diversity and sustainability, environmental and social disclosure, which can be summarized in the following three tables:

Table 1. Summary of findings – multivariate regression analyzes between sustainability disclosure and diversity variables

Relationship between sustainability disclosure and....	**Multivariate regression analysis findings (p<0.05)**
Diversity as variety	Number of women (positive)
Deviation of diversity as variety	Gender diversity (positive)
Diversity as separation	Certainty (negative)
Deviation of diversity as separation	-
Overall diversity	Number of women (positive) and Certainty (negative)
Deviation of overall diversity	-

Table 2. Summary of findings – multivariate regression analyzes between environmental disclosure and diversity variables

Relationship between environmental disclosure and....	**Multivariate regression analysis findings (p<0.05)**
Diversity as variety	Number of women (positive)
Deviation of diversity as variety	Gender diversity (positive)
Diversity as separation	Certainty (negative)
Deviation of diversity as separation	-
Overall diversity	Number of women (positive) and Certainty (negative)
Deviation of overall diversity	Gender diversity (positive)

Table 3. Summary of findings – multivariate regression analyzes between social disclosure and diversity variables

Relationship between social disclosure and....	**Multivariate regression analysis findings (p<0.05)**
Diversity as variety	Number of women (positive)
Deviation of diversity as variety	-
Diversity as separation	Certainty (negative)
Deviation of diversity as separation	-
Overall diversity	Number of women (positive) and Certainty (negative)
Deviation of overall diversity	-

There are two main findings valid for the three tests run on sustainability: i) a positive relationship with variables Number of women / Gender diversity, and ii) a negative relationship with variable Certainty.

Analysis of the relationship with Number of women / Gender diversity

In line with previous literature (Adams and Ferreira, 2009; Siciliano, 1996; Bear, Rahman and Post, 2010; Galbreath, 2011; Zhang, 2012; Boulouta, 2012) who tend to see a positive relationship between diversity and financial or social performance figures, the tests run for this study show that there is a positive relationship between Number of women and sustainability, environmental and social disclosure, as well as between Gender diversity and sustainability and environmental disclosure. The number of women of the sample companies ranges between 0 and 4, and gender diversity ranges between 0% and 40%. These findings confirm the expectations that, on the basis of the resource dependence theory, a diverse board brings additional resources and perspectives in the boardroom, leading the firm to disclose additional CSR information (Freeman et al., 2007). In addition, the findings are in line with current business trends calling for an increase in the representation of women on boards of directors.

Analysis of the relationship with Certainty

Certainty is a factored variable created out of two Hofstede's (2010) cultural variables, Power distance and Uncertainty avoidance, as these two variables showed a high and significant correlation between themselves.

Power distance is about how less powerful members of organizations and institutions accept and expect that power is distributed unequally. In organizations, the level of power distance is related to the degree of centralization of authority and the degree of autocratic leadership (Hofstede, 1983).Uncertainty avoidance is about how societies accept uncertainty or instead try to create security and avoid risks (Hofstede, 1983).

It can be understood that, through their significant positive correlation, both variables tend to move in the same direction: a society which expects that both power is distributed unequally and authority is centralized, will rate high in uncertainty avoidance, typically preferring to be within a certain environment.

As both variables are highly correlated, they have been factored into one, called Certainty, which should be understood that, if a country shows high Certainty, it should be expected to show low sustainability disclosure, which is the finding from the tests.

Additional conclusions were drawn from this study, such as i) the possibility to integrate Hofstede's (2010) cultural dimensions into a sustainability and diversity research, ii) testing Clarkson et al (2008) and Sutantoputra (2009) environmental and social content indexes on a universe of Swiss firms, and iii) the possibility to show that firms claiming to use the GRI framework to disclose sustainability disclosure indeed scored higher.

To conclude, the study was able to develop a new diversity model, classifying firms according to their potential efficiency on the basis of their diversity variables.

Table 4. Diversity Model – classification of diversity according to its type and level

High efficiency High diversity as variety Low diversity as separation Category 1	Unknown High diversity as variety High diversity as separation Category 2
Unknown Low diversity as variety Low diversity as separation Category 3	Low efficiency Low diversity as variety High diversity as separation Category 4

Category 1 includes diversity as variety variables with high diversity, and diversity as separation variables with low diversity. Firms with a majority of variables from this category tend to show a high level of efficiency or performance, as they benefit from diversity as variety without suffering from diversity as separation. Category 4 includes diversity as variety variables with low diversity, and diversity as separation variables with high diversity. Firms with a majority of variables from this category tend to show low level of efficiency or performance, as they suffer from high diversity as separation without benefiting from diversity as variety. Categories 2 and 3 include either both diversity as variety and diversity as separation variables with high diversity, or both diversity as variety and diversity as separation variables with low diversity. It is difficult to predict the level of efficiency or performance of a firm with a majority of variables from these categories, as it depends of the actual level of diversity of both types.

While discussion around diversity existed already before Harrison and Klein (2007), Palmer (2006), in the same direction as Milliken and Martins (1996) and Williams and O'Reilly (1998), used different terms to discuss about diversity, stating that « The relationship between the diversity of work-groups and their performance continues to be a key concern in the study of organizational behavior. Several models have been proposed to explain this relationship, generally concentrating on the interplay between two main factors: diversity as a source of varied knowledge and viewpoints that a group can draw upon to increase its performance, and diversity as a source of dissension in groups, causing group fracturing and bias, leading to decreases in performance » (Palmer, 2006). Van Knippenberg at al. (2004) developed a model called the categorization-elaboration model (CEM), trying to integrate existing research in diversity and group performance into a unified framework (Palmer, 2006). This model assumed that there is no linear relationship between diversity and performance, but instead predicts a curvilinear relationship such as the one sketched in figure 3.

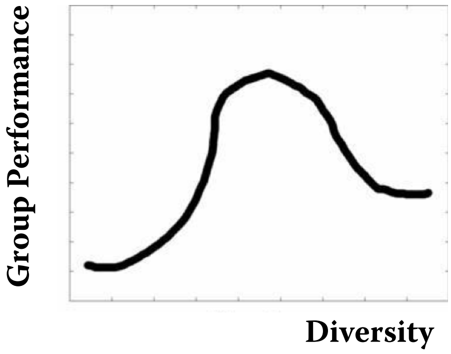


Figure 3. Curvilinear relationship between diversity and group performance (Palmer, 2006)

Integrating Harrison and Klein (2007) theories on diversity as variety and diversity as separation and the results of the tests performed in this study, a model based on indifference curves is suggested (figure 4) to integrate both types of diversity, potentially replacing figure 3.

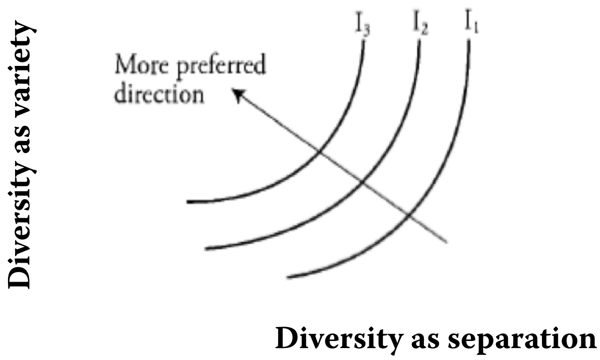


Figure 4. Indifference curves on diversity

This figure represents the diversity indifference curves. It links both types of diversity and the curve is drawn for a specific level of efficiency or performance.

As an example, a decrease of the level of diversity as variety on curve I_1 is to be simultaneous to a decrease of the level of diversity as separation so that a firm keeps a similar level of efficiency or performance. In other words, companies which suffer higher diversity as separation need to counter-balance this potential negative impact with a high diversity as variety.

The arrow on figure 4 shows that a move from curve I_1 to I_2, and from I_2 to I_3, should be a target that firms want to follow in order to improve on their efficiency or performance. This move actually increases diversity as variety and decreases diversity as separation. It reflects the positive relationship tested through diversity as variety variables, and the negative relationship tested with diversity as separation variables.

It might be important to mention here that there is no diversity magic for companies, but rather a need for every firm to find its own optimal level of diversity in order to maximize its intended objectives, and ultimately its value.

BIBLIOGRAPHY

1. Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics,* 94, 291-309.
2. Ayuso, S., & Argandona, A. (2007). Working paper. Responsible corporate governance: towards a stakeholder board of directors?, 3(701).
3. Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review*, 32(3), 794-816.
4. Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics*, 97(2), 207-221.
5. Beloe, S., Scherer, J, & Knoepfel, I. (2004). Values for money: reviewing the quality of SRI research. *SustainAbility and Mistra*. London
6. Bertelsmann Foundation (2006). Who is who in corporate social responsibility rating. A survey of internationally established rating systems that measure corporate responsibility, conducted by Schäfer, Beer, Zenker, Fernandes, University of Stuttgart.
7. Boulouta, I. (2012). Hidden connections: the link between board gender diversity and corporate social performance. *Journal of Business Ethics*, 113(12). 185-197.
8. Cho, C. H., & Patten, D. M. (2007). The role of environmental disclosures as tools of legitimacy: A research note. *Accounting, Organizations and Society*, 32(7-8), 639-647.
9. Clarkson, P.M., Li, Y., Richardson, G.D., & Vasvari, F.P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33(4-5), 303-327.
10. Directive 2014/95/EU of the European Parliament and of the Council (2014), *Official Journal of the European Union*.
11. Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). Managing for stakeholders – survival, reputation, and success. New Haven: Yale University Press.
12. Galbreath, J. (2011). Are there gender-related influences on corporate sustainability? A study of women on boards of directors. *Journal of Management & Organization,* 17, 17-38.
13. Gamerschlag, Moeller, & Verbeeten (2010). Determinants of voluntary CSR disclosure: empirical evidence from Germany. *Review of Managerial Science*, 5(2-3), 233-262.
14. GlobeScan, www.globescan.com.
15. Grewal, J., Riedl, E. J., & Serafeim, G. (2015), Market reaction to mandatory non-financial

disclosure, Working paper 16-025, Harvard Business School.

16. GRI, Global Reporting Initiative, https://www.globalreporting.org/Information/about-gri/Pages/default.aspx. and https://g4.globalreporting.org/introduction/purpose-of-gri-sustainability-reporting-guidelines/Pages/default.aspx.
17. Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32(4), 1199-1228.
18. Hillman, A. J., and Dalziel, T. (2003). Boards of directors and firm performance: integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383-396.
19. Hofstede, G. (1983). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14(2), 75-89.
20. Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). Cultures and organizations: software of the minds (Rev. 3rd ed.), New-York: McGraw-Hill.
21. Kakabadse, N.K., Rozuel, C., & Lee-Davis, L. (2005). Corporate social responsibility and stakeholder approach: a conceptual review. *Int. J. Business Governance and Ethics*, 1(4), 277-302.
22. Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: rethinking social initiatives by business. *Administrative Science Quarterly*, 48, 268-305.
23. Milliken, F., & Martins, L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21, 402-433.
24. Montiel, I. (2008). Corporate social responsibility and corporate sustainability. *Organization and Environment*, 21, 245-269.
25. Nemeth, C.J. (1986). Differential contributions of majority and minority influence. *Psychological Review*, 93, 23-32.
26. Palmer, V. (2006). Simulation of the Categorization-Elaboration Model of Diversity and Work-Group Performance. *Journal of Artificial Societies and Social Simulation,* 9(3)3. http://jasss.soc.surrey.ac.uk/9/3/3.html
27. Patten, D. M. (2002). The relation between environmental performance and environmental disclosure: a research note. *Accounting, Organization and Society* 27(8), 763-773.
28. Porter, M. E., & Kramer, M. R. (2006). Strategy and society – the link between competitive advantage and corporate responsibility. *Harvard Business Review*, December 2006, 78-92.
29. Rahman, N., & Post, C. (2012). Measurement issues in environmental corporate social responsibility (ECSR): toward a transparent, reliable, and construct valid instrument. *Journal of Business Ethics*, 105(3), 307-319.
30. Ruigrok, W., Peck, S. & Tacheva, S. (2007). National and gender diversity on Swiss corporate boards. *Corporate Governance: An International Review*, 15(4), 546-557.

31. Sharfman, M. (1996). The Construct validity of the Kinder, Lydenberg and Domini social performance ratings data. *Journal of Business Ethics* 15(3), 287-296.

32. Siciliano, J. I. (1996). The relationship of board member diversity to organizational performance. *Journal of Business Ethics* 15(12), 1313-1320.

33. SustainAbility, www.sustainability.com

34. Sutantoputra, A.W. (2009). Social disclosure rating system for assessing firms' CSR reports. *Corporate Communications: An International Journal*, 14(1), 34-48.

35. Van Knippenberg, D., De Breu, C., & Homan, A.C. (2004), Work Group Diversity and Group Performance : an Integrative Model and Research Agenda, *Journal of Applied Psychology*, 89(6), 1008-1022.

36. Waddock, S.A., & Graves, S.B. (1998). The corporate social performance – financial performance link. *Strategic Management Journal*, 18.

37. WCED (1987), United Nations. Our common future. The Brundtland Report, Oxford, UK: Oxford University Press.

38. Werther, W. B. Jr, & Chandler, D. (2011). Strategic corporate social responsibility – stakeholders in a global environment, SAGE 2011, 2nd edition.

39. Williams, K. Y., & O'Reilly, C. A. (1998). Demography and diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior*, 77–140.

40. Zainal, D., Zulkifli, N., & Saleh, Z. (2013). Corporate board diversity in Malaysia: a longitudinal analysis of gender and nationality diversity. *International Journal of Academic Research in Accounting, Finance and Management Sciences,* 3(1).

41. Zenou, E., Galia, F., & Ingham, M. (2013). Board composition and environmental innovation: does board diversity matter ? 1-33.

42. Zhang, L. (2012). Board demographic diversity, independence, and corporate social performance. *Corporate Governance*, 12(5), 686-700.

Alain Berger, DBA, is a professor of Finance and Accounting
at EU Business School Swiss campuses

HOW COMPANIES USED MARKETING TECHNIQUES DURING THE ECONOMIC CRISIS IN GREECE TO INSPIRE CUSTOMER LOYALTY AND BUILD EMOTIONAL CONNECTIONS.

Konstantinos Biginas, Antonia Koumproglu, and Peter Wyer

ABSTRACT: *This paper brings to light evidence from the Greek market that has been shaped by the effects of the economic crisis. The paper focuses mainly on the factors that affect brands' growth in Greece. Part of this paper also presents research on the drivers of Greek consumer behavior towards buying the appropriate brand. The aim of the article is to examine marketing strategies which can be followed during times of economic downturn. The article focuses on the Greek market as the current economic crisis has affected companies and their marketing actions since 2010 when the crisis unfolded. The impact of economic crisis is currently influencing economic development in Greece as the country is severely hit by recession. As expected, consumers in Greece today are more price sensitive than quality sensitive and less brand loyal than before. The research objective of this article is to explore marketing and branding actions of companies during economic crisis in Greece. Even during hard times brand identity needs to remain strong. Appropriate marketing actions should be taken to allow companies to reach consumers from their selected target group. Attention should be paid specifically to consumers with lower incomes and reduced purchasing power. The research goal is to suggest marketing opportunities during economic crisis in Greece and highlight the significance of branding for consumers with reduced income. The article attempts to analyse what effective brand building is, identify developing steps during 'unstable economy' periods and identify the mains risk which brands face during economic crisis. Using examples from the Greek market as case studies this article studies the difficulties companies faced during the economic crisis and examines their marketing steps. Suggestions for brands that deal with challenging situations during the economic crisis are made based on the outcome of the research. Despite the difficult economic situation in Greece, companies still try to find alternative ways to increase their market share, approach new target groups and access new markets. As this study suggests, there are opportunities for smaller companies and less known brands to survive and prosper. Price reduction is not always the answer. There are always opportunities to invest into marketing without spending an enormous budget. Opportunities include social media that have zero or very low cost, student projects, etc. The main issue,* *which worries all companies during economic downturns, is uncertainty that can affect their very existence in the market. Evidence from Greece suggests that quite a large percentage of SMEs were forced to shut down operations, exit the market or even transfer their operations to another country (for example, Bulgaria). One should bear in mind that consumer reactions to product introductions are now instantly national and in some cases global. Brand is, and should be considered to be, a valuable asset for every company that can increase profitability and volume of sales. As Kay suggests (1995), effective branding can assist companies to build their reputation and turn this distinctive capability to a competitive advantage. Reputations are created in specific markets. A reputation necessarily relates to a product or a group of products. It is bounded geographically too. Many reputations are very local in nature. Changes in the Greek economy influenced a lot of brands, some even failed to survive. As Wreden (2007) suggests, the next branding era is the "demand economy" where customers will want service, support and offerings. Companies in Greece will need to adjust to the new reality despite the hard economic times.*

KEYWORDS: Greek Market, Economic Crisis, Branding, Entrepreneurial Marketing, Marketing Strategies, Consumer Loyalty.

INTRODUCTION

This paper examines the effective utilization of entrepreneurial branding initiatives by Greek companies during the economic crisis, teasing out guiding insight capable of informing existing and would-be small businesses and entrepreneurs and enhancing existing understanding embedded within the current literature. Integral to the paper is the identification and analysis of marketing actions which have been taken by new ventures and small companies that have gone through a critical stage of rebranding during the economic downturn and which were able to foster consumer loyalty and build strong brand equity.

The paper commences with selective focus on key areas of the existing literature to distinguish between traditional marketing processes and activities and entrepreneurial marketing, giving specific attention to the concept of entrepreneurial branding.
The existing literature-based insight is then used as analytical frames of reference to facilitate examination of a selection of Greek businesses, exploring in particular the construct of brand identity and its role in the effecting of specialist retailers brand expansion and the related influence of the entrepreneur on the brand process. A case study approach is adopted, focusing upon four small Greek specialist retailers and a digital platform of influencers who promote Greek tourism.

Each case study is utilized to illustrate the ways in which entrepreneurial branding can be applied in challenging and resource-constrained contexts; and where possible to provide richer understanding of how and to what extent brand identity is interdependent upon the characteristics of the entrepreneur. The resultant insight from each case study is considered and where appropriate a synthesis of insight from all case studies is derived. The understanding in its totality is summarized in terms of guiding insight convivial to informing the world of small business development practice and the small business and marketing literature bases.

GUIDING INSIGHT FROM KEY AREAS OF THE LITERATURE

The strategic marketing literature first began to focus upon small businesses some 20 years ago (Carson and Gilmore, 2000; Gilmore et al, 2001; Julien and Ramangalahy, 2003). Key topics such as small business market orientation, international growth and strategic operations have progressively received extensive attention (Julien and Ramangalahy, 2003; Kara et al, 2005; Blankston et al, 2006; Paccito et al, 2007). Several researchers have identified the absence of market orientation and skills in smaller businesses which often leads to lower performance levels and higher risks of business failure (Alpkan et al., 2007; Blankson and Stokes, 2002; Brooksbank et al., 2004). However, there is some evidence that the role and relevance of marketing in SMEs depends on certain differences in marketing activities and on the organization for marketing within these companies (Simpson et al, 2006). At the turn of the millennium it was still being argued that there is still insufficient knowledge about marketing in small business and, in particular, in relation to the understanding of strategic marketing practices (Siu and Kirby, 1998). More recently, researchers have delved into a relatively young, highly dynamic research field, namely entrepreneurial marketing (EM) (Kraus et al 2011) which combines two well-known fields of research, 'Entrepreneurship' and 'Marketing', creating a link between those two disciplines which have not yet been adequately investigated. The study of small and start- up companies is and should be vitally important in this domain. Today, about 80 to 90% of all enterprises in both developed and developing economies are predominantly SMEs (Carson, 2010; Kopecká 2013; Kraus et al, 2011). With so many enterprises underserved by academic research, the EM domain has sought to take account of the nature of SMEs and the impact their characteristics have on how they do business and especially in relation to marketing.

As the global marketplace has become a reality, the need to expand the traditional marketing concept from exclusively customer-centric practices to the adoption of more radical, proactive and disruptive approaches to risk management, resource leveraging and value creation has become imperative. To compete in this volatile and dynamic environment, companies must shift their focus from driving transactions to maximizing customer lifetime value. Marketing practices require something extra by way of entrepreneurship skills to compliment them, a mindset for opportunity driven decision-making and innovativeness. The commonly used definition of entrepreneurial marketing (EM) is "…a spirit, an orientation as well as a process of passionately pursuing opportunities and launching and growing ventures that create perceived customer value through relationships by employing innovativeness, creativity, selling, market immersion, networking and flexibility" (Hills and Hultman, 2008). This definition incorporates elements of entrepreneurship (proactivity, opportunity, risk taking and innovativeness) and marketing (customer focus, resource leveraging, guerilla marketing and value creation), capturing a certain type of behavior appropriate to a fragmented, dynamic and hostile business context.

A pragmatic frame of reference utilized within this study is Stokes (2000) distinguishing of key differences between EM and traditional marketing, with regard to business orientation, strategic and tactical levels of activity and ways of gathering market information. Thus:

- In terms of business orientation it is propounded that, unlike traditional marketing that is defined by customer orientation, EM is defined by entrepreneurial and innovation orientation. If the classical marketing concept requires an assessment of market needs before developing a product, entrepreneurs start with an idea and then try to find a market for it.
- At the strategic level, traditional marketing requires a top-down approach, a clearly defined sequence of activities such as segmentation, targeting and after that positioning. Successful entrepreneurs practice a reverse process from the bottom up. Having identified a possible market opportunity, an entrepreneur tests it through a trial-and-error process. After that, the company begins to serve the needs of some clients, and then expands as the entrepreneur, in direct contact with clients, finds out their preferences and needs. Later, new customers with a similar profile to those who have purchased the product are added. Often this process is not deliberate, as new customers come as a result of initial customer's recommendations – word of mouth becomes a key small business marketing tool. Thus, the target market is formed by a process of elimination and self-selection.
- At the tactical level, EM does not fit into the 4P's model because entrepreneurs are adopting an interactive marketing approach, given their preference for direct and personal contact with customers. Entrepreneurs interact with customers during personal selling and relationship marketing activities. Such interactions are enhanced by word-of mouth marketing and are essential for generating referrals.

In terms of market information gathering, entrepreneurs are aware of the importance of monitoring the marketing environment. But they use informal methods such as personal observation or collection of information through their networks of contacts. Rejecting formal research methods is a logical consequence of the fact that they do not believe in the ability to predict the future.

During periods of recession marketers find themselves in poorly charted waters as consumers set stricter priorities and reduce their spending. As sales start to drop, businesses typically cut costs, reduce prices, and postpone new investments. Marketing expenditures in areas from communications to research are often slashed across the board—but such indiscriminate cost cutting is a mistake. As priorities change, consumers may altogether eliminate purchases in certain categories, moving them from essentials, say, into expendables.

The question that arises then is what do organizations applying entrepreneurial marketing look like? First of all, entrepreneurial marketing oriented companies' communication strategy is two-way and individualized, or at least tightly targeted at thinly sliced segments. Second, firms with entrepreneurial processes (R&D) connected with market research (e.g. marketplace scanning, customer feedbacks, or product pre-tests) should be expected to receive higher amount of turnover from new product launching than others without these interactions. Also, being responsive to market needs (e.g. flexibility of adaptation, or speed of trends absorption) would facilitate an early seizing of opportunities, minimizing losses to a certain extent and, consequently, increasing the efficiency of product development budgets. Lastly, entrepreneurial operations develop organically within their environment applying networking initiatives with their stakeholders and placing the customer at the center of their social networks and dialogues (Jones and Rowley 2011).

Entrepreneurial marketing can help SMEs overcome their principal limitations of scarce resources, expertise and impact. Indeed, the degree of market orientation of an enterprise may well impact its overall business performance, both in the context of young and small enterprises and in the process of launching new products (Hills and Hultman 2011b). Hisrich (1992), Hills and Hultman (2011), argue that there are many links between the two concepts. Both are driven and affected by environmental turbulence and both have a behavioral orientation. Evidence abounds that shows how the application of the marketing concepts and tools has helped entrepreneurs to achieve high level of success in the marketplace. Entrepreneurs, in their character of innovativeness found the use of marketing principles and strategies very effective in engendering success in entrepreneurial practices. Marketing within the smaller firm can often be viewed as an integral part of managing entrepreneurial activities and, the sum of marketing plus entrepreneurship is greater than individual component parts (Anukam, 2009).

Wan, Chattopadhyay and Sun (2012) stress that branding is very important for small and start-up companies, which need a clear and sharp identity that molds and shapes the company as it evolves to become a significant player in its industry and target segment (Urde, 2013; Aaker, 2004; Mahdi, Mobarakabadi and Hamidi, 2015). An entrepreneurial branding strategy is one that interacts with the market and tries to change market conditions actively. Entrepreneurial marketing for new ventures and small businesses is a vision driven, incremental, and informal learning process that permeates all levels in the firm. Value creation is a two- way interactive, flexible co-creation process with a speedy reaction to shift in customer preference and use of innovations to improve customer value. This strategy aims to create new market opportunities in the light of opportunistic but sustainable development, positively influencing the basic conditions of corporate and social growth. For startups and the entrepreneurs involved, one of the most important aspects in determining long- term success is the creation of a sustainable and attractive brand (Keller, 2001; Hoeffler and Keller, 2003).

A company following this strategy is a driver for corporate sustainability in society and therefore gains much higher credibility. On the other hand, it is also necessary to assure through the implementation of sustainability a high maturity in internal sustainability aspects. Again, most important are society-related aspects (those that have major positive impact on society and those to which society reacts sensitively whether they are fulfilled or not). Market responsiveness is an important and defining factor in the entrepreneurial branding process of an enterprise. The personality traits of an entrepreneur are important drivers of emotional bonding between brand and consumer. The personality approach has three supporting themes: personality, consumer and brand-self congruence (Urde, 2013; Mühlbacher and Hemetsberger, 2008). A brand community from a customer-experiential perspective is a fabric of relationships in which the customer is firmly situated at the center.

The symbolically charged interaction between the brand and the consumer motivates the latter to choose one brand over another. Because a brand personality sets off a process of social identification between the brand and the self of the consumer, it is assumed in the personality approach that the fulfilment and expression of self is one of the strongest basic driving forces that predispose consumers to act on and consume brands (Schindehutte et al., 2009, Jones & Rowley, 2011). Whalen and Akaka (2016) as well as Goldsmith (1999) argue for another, perhaps easily overlooked element of importance in the context of EM: The direct integration of the customer into the core business model, which Whalen and Akaka (2016) refer to as a process of opportunity co-creation. The personality of the brand generates attention and interest from consumers, who feel that they can use the symbolic benefits of the brand in their construction and expression of self. Therefore, an "extrovert" entrepreneur in branding is the one who manages to establish such relationship with its consumers. The above theorization with all the fundamental points it makes about the nature and importance of managing stakeholder relationships in branding extends beyond the traditional marketing approach that views the market more or less as a "given" thing, a place for transactions according to positivist thinking (Varadarajan, 2009,) and planning activities to achieve goals, such as achieving sustainable competitive advantage. The market nowadays as we have illustrated thus far should be seen mainly as a socio-relational process by which producers and consumers co-produce and co-consume not only a product but a lifestyle, an identity, according to a more social constructivist thinking (Hankinson, 2004). Social constructivists hold assumptions that individuals seek understanding of the world in which they live and work. Individuals develop subjective meanings of their experiences - meaning directed toward certain objects or things. For Martin (2009) this culminates in the replacement of the traditional Four Ps (product, price, promotion and place) with the concepts of person, process, purpose and practice(s), all "grounded in relationships and networks" (Martin, 2009: p.400).

By modeling the decision-making process according to effectual logic, we find that entrepreneurs do not believe that the future can be predicted and therefore they do not consider that setting objectives should be of great importance. They start with what they have (tangible and intangible assets), what they can do (capabilities) and whom they know (networks) and build various options with different ends. Choosing an option is not based on maximizing the results but on how much one can afford to lose by choosing that option. Effectual logic favors building partnerships and attracting stakeholders before the entrepreneur is clear what markets to serve or what products to offer. Thus stakeholders are allowed to express their views and shape the company as a result of collective efforts. This way of thinking contradicts the causal marketing models (Sarasvathy, 2011) which provide an upside-down approach: the entrepreneur starts from dividing the market based on a rigorous research, analyzes and selects a target segment based on predicted returns and risks and then develops strategies to attract the target segment. Effectual logic starts from bottom-up: the entrepreneur identifies – in his personal network – a partner or a customer. Along the way he adds other customers/partners, forms an initial customer base which is extended in a contingent fashion and eventually define the market for the product/firm.

In the following section we consider entrepreneurial marketing in practice, focusing upon a set of ‘Case Insights’ which demonstrate the development and effective utilization of entrepreneurial branding during the economic crisis in Greece. We begin our case study analytical approach with the claim that the characteristics of social constructivist/interprevist worldview are well aligned with qualitative research. Eisenhardt and Graebner (2007, p. 25) report that building theory from case studies is a research strategy that involves using one or more cases to create theoretical constructs, propositions and/or midrange theory from case-based, empirical evidence. The theory is emergent in the sense that it is situated in and developed by recognizing patterns of relationships among constructs within and across cases and their underlying logical arguments. Very importantly, the case study approach helps uncover the contextual conditions and characteristics that give rise to successful entrepreneurial branding initiatives, taking into account the subjective experiences, perceptions and expectations of the entrepreneurial mind in each different case. The company data was derived mainly from the corporate website and social media pages of the companies in question.

THE CONTRIBUTION OF ENTREPRENEURIAL MARKETING IN ECONOMIC DOWNTURN CASE COMPANY ONE: THE MEDITERRANEAN LAND

(Web page: http://www.themedland.com/)

The company “The Mediterranean Land” with acronym “TML P. C.” is one of the most successful local brands in the country of Greece. The idea of the company came after the announcement from UNESCO in 2010 to include the Mediterranean diet in the Representative List of the Intangible Cultural Heritage of Humanity, upon a request made jointly by Greece, Spain, Italy and Morocco. Greece, because of its climatic conditions and morphology, produces most of the main products that make up the Mediterranean diet. Having faith in the fertile Greek land’s products, the company decided to promote these characteristics globally, showing that this small country of the Mediterranean Basin – ‘a land for flowers and bees’ – is blessed by the Gods.

The company started its own beekeeping unit and in cooperation with other units it created a portfolio of Greek products embodying its efforts in a Trading Company of Greek Standardized Food Products, ‘TML P.C.’ (which stands for the brand name ‘The Mediterranean Land’). The goal was to design collateral elements of olive oil, honey and balsamic vinegar line products that transport the essence of the homeland Mother Nature. The company’s approach to creating a cohesive brand identity relied mostly on integrating its basic elements of naturalness and tradition in all of its communication and marketing initiatives. The company chose the names ‘athena’ for its olive oils line, ‘nectar’ for its bee products line and ‘acetum’ for its balsamic vinegars line. All of the products’ bottles are made of top quality Italian glass, while the logos are printed directly on them, creating a unique package that costumers never throw away. Through the brand name “The Mediterranean Land” the aim of the company is to reflect the philosophy of the company to offer products that fully incorporate all the benefits of the acknowledged Mediterranean diet, using the most approved and traditional practices and precluding any artificial processes.

The company artfully employs storytelling to engage consumers from all over the world with the brand, adding stories from suppliers and employees to edify and entertain consumers who look to make conscious, educated choices when buying food from themselves and their families. Also the success story of the brand name is that the company managed to create an intension though its brand and inform the consumers all over the world about the high nutritional and medicinal qualities of the Greek products and offer them the best quality in a very special package. The "The Mediterranean Land" brand is recognizable as a synonym of quality, elegance and a healthy lifestyle. The quality and the package leave everyone satisfied, as all the aromas and tastes of the Greek countryside are gathered in its beautiful bottles.

It is thus obvious that in today 'consumer culture people no longer consume for merely functional satisfaction, but consumption becomes meaning-based, and brands are often used as symbolic resources for the construction and maintenance of identity. Clifford Geertz (1973), a seminal cultural anthropologist of the latter twentieth century has said that all human behavior is symbolic action. We are not therefore a species concerned with mere transactions. We are creatures of meaning. The "Mediterranean Land" have successfully capitalized on and organically incorporated in their brand identity the traditional, cultural values that signify "Greek identity" as a cultural, historic and geopolitical space. Branding today must be a company-wide initiative based on core values. A company's performance in the marketplace sprouts from the core essence of the brand rather than a manufactured image. This is perfectly reflected in the branding strategy of the "Mediterranean Land" which lives by and breaths the core Greek-Mediterranean values.

CASE COMPANY TWO: THE RELAUNCHING OF FIX HELLAS

(Web site: http://www.fix-beer.gr/en)

GREECE FIX is a brand of Greek lager beer. The FIX brewery was founded in 1864 in Athens, Greece and grew significantly fast. FIX (or FIX HELLAS, its most common trademark) became synonymous with beer in Greece, enjoying a virtual monopoly in the country for about 100 years until the mid-1960s, operating a number of factories that also produced soft drinks. International competition affected company sales. It lost first place in the Greek market in 1973 and continued to decline until 1983, when it went out of business. In 1995, the FIX trademarks were bought by D. Kourtakis wineries from the National Bank of Greece, which had received the FIX trademarks in the liquidation of the company. Kourtakis organized the Olympic Brewery to produce FIX Hellas beer, with a label design strongly reminiscent of the original FIX label. The new FIX beer was not financially successful and, in 2009, the Olympic Brewery Company was sold to Hitos AVEE and, in 2010, FIX beer was again available.

The relaunched beer has a new label, with references to the gold medals and prizes won by the original FIX beer. An aggressive advertising campaign, with references to the strong historic legacy of FIX beer in the Greek society, has dramatically boosted sales, effectively leading to a strong comeback of the brand. The company's ambitions for the relaunch of FIX are based on a decisive and comprehensive strategic plan. Anew state-of- the-art brewery is established in Ritsona, Evia with capacity to cover what proved to be only 20% of consumers' demand.

Subsequently, the unprecedented success of the launch resulted in an imperative need for the extension of the facilities to 12,500 square meters and an increase in production capacity to 450,000 hectoliters on a yearly basis, while, at the same time, employees increased from 30 to over 230 people over a 3 years period.

With the right processes and the right minds as we can see from the example above a rebrand can lead to improving marketing endeavors. Understanding the key pieces to a corporate rebrand is critical to developing a successful message to the brand's targeted audience. In the midst of severe austerity and declining consumer confidence in Greece, the company's goals shifted in a new direction with a view of updating the brand to connect with an evolving target audience. The main premise for this rebranding strategy has been to revive traditional Greek values, celebrate brand history in the uniquely-shaped geopolitical and historic space that demarcates national Greek identity and ultimately put across the compelling message that not only is it ok to be Greek during these very challenging times but that Greek citizenship should be viewed as a source of national pride and individual strength. The above multiple outlook on identity is captured eloquently on the brand's landing page which tells the story of its founder, Ioannis Fix, in post-revolution Greece just after its liberation from the Turks.

CASE COMPANY THREE: ALI-BEER

(Website: https://www.facebook.com/public/Ali-Beer)

Craft beer is becoming increasingly popular in the southern euro zone nation of Greece. But young brewers such as Nikos Roidos is one of the few who can stand their ground in the market with a new product, while most Greek retailers keep grappling with weak domestic demand. Despite a challenging market environment, demand for new Greek beer brands is on the rise. This is one of the reasons why Roidos decided to return to his crisis-hit home country after studying abroad. The idea of Roidis and his friends was to brew their own beer in Greece, but getting the funding to finance their business idea was hard. In the end, a combination of private capital and EU subsidies convinced a bank to grant a credit line for this business idea.

The brand is currently focusing its efforts on Facebook, Instagram, and Twitter, and its approach to social marketing is twofold: tell a dynamic story and go heavy on visuals. Nearly all posts—created by a four-person social team with input on paid promotion from the media department—have a visual component and often also integrate video. To optimize for Facebook, where videos auto-play without sound, Ali-Beer has been using closed captioning for calls to action. On Twitter, the campaign led to extended conversations with fans, even inciting some of them to adopt the brand voice in their replies.

The market orientation of SMEs is highly dependent on the marketing knowledge of the entrepreneur or small business owner, who tends to be a generalist rather than have management or marketing skills (Hogarth-Scott et al., 1996). However, there is now an acknowledgement that although the SME's approach to marketing may not fit established theories, successful SMEs are able to capitalize on their unique benefits of 'smallness'. On the basis of the above case study investigation, it can be said that an entrepreneurial orientation toward customers requires a judicious relationship management, relationship proactiveness, and technological innovativeness.

CASE COMPANY FOUR: BLOGTROTTERS - A DIGITAL PLATFORM THAT CHAMPIONS SUSTAINABLE TOURISM DEVELOPMENT IN GREECE

(Website: http://www.discovergreece.com/en/blogtrotters)

Digital influencer community Blogtrotters to showcase country's strength as a sustainable travel destination in support of United Nations World Tourism Organization's International Year of Sustainable Tourism for Development

Digital influencer community Blogtrotters are invited this year to tell stories of successful sustainable tourism practices in Greece, in support of the United Nations World Tourism Organization's (UNWTO) designation of 2017 as the International Year of Sustainable Tourism for Development.

Marketing Greece's digital platform Blogtrotters, whose concept this year is Travel in Balance, has dedicated the year 2017 to the promotion of sustainable tourism development, with the aim of highlighting real-life examples. For the past four years, the digital influencer community (bloggers, Instagrammers and vloggers) has played a vital role in this innovative storytelling platform. Sustainable travel experiences in various destinations around Greece are being designed for members of the community. Through a series of themed trips, based on the three goals underpinning the International Year of Sustainable Tourism for Development - economy, environment and society/culture -, participants have the opportunity to explore diverse forms of sustainable travel in Greece. In 2016, the Blogtrotters digital platform, whose concept was Greece beyond the Senses, achieved 145 million social media impressions, with 57 international influencers visiting more than 50 destinations throughout Greece and producing 80 blog posts and 19 vlogs.

The preservation of cultural values and heritage, environmental protection and natural resource management, and sustainable local economic and social development constitute the elements that inspire influencers to convey authentic, responsible travel experiences to their audience. The digital influencers communicate their stories through blog posts, vlogs and social media posts across the web. The impact of the influencers' content on their followers is measured via a unique digital Sustainability Footprint that comprises the storytelling, resultant coverage and sharing of the content among the general public. The strategically-targeted and methodical promotion of key characteristics of the country's tourism product, such as bioclimatic architecture, the farm-to-table dining trend and the preservation of local customs, will showcase sustainable practices and encourage others to follow suit.

CASE COMPANY FIVE: ADOLO, PLOMARI

(Website: http://www.adolo.gr/adolo.html)

Discovering the premium version of the No. 1 spirit of Greece. The challenge of branding a traditional product for a premium audience.

After the branding success of Ouzo Plomari, the leading Greek spirit drink, Yalos was commissioned to brand its new premium version, called "Adolo". Their target audiences are opinion leaders who dare to challenge themselves with new choices. The retail environments are a selection of contemporary bars, gourmet restaurants and glamorous parties. "Adolo" is a really special spirit, subject to three stages of distillation in order to keep the most valuable part of "the core". Since, packaging has been proven to be one of the most critical factors in the marketing efforts and ultimate success of a spirit brand, Yalos implemented its expertise packaging design on three axes:

- Transforming the traditional character of the well-established brand of Ouzo Plomari to an upmarket visual impact.
- Harmonizing the experience of the elegant flavoring of the spirit, with the shape of a crystal clear elegant bottle.
- Incorporating the visual elements of the distillery brass kettle and hence delivering the look and feel of copper.

Within the following section we tease out, make explicit and synthesise key areas of entrepreneurial branding insight employed within the case businesses, offering this insight as points of learning capable of informing small business development.

FORMING GUIDING FRAMES OF INSIGHT FROM THE CASE STUDIES

Consideration and synthesis of the insight embedded in each of the case studies provides a set of learning points and frames of reference capable of guiding even the smallest of businesses in their approaches to marketing, and reflection upon, the potential for entrepreneurial brand building. Key learning points can be summarized as follows:

- All of the case study businesses have quality in-demand products or services. But each possesses and effectively communicates an offering which transcends the physical parameters of their actual product or service. In all cases, the product or service carries with it a surrounding persona that touches the heart and senses of the company's customer base or potential future customer.
- That surrounding persona varies somewhat from case to case but involves communication of characteristics and factors that customers do or subsequently will associate with the company product as the brand grows in substance.
- Such characteristics include strengths of company history or historical legacy of the actual product or the region or the country.
- The product and its persona are communicated in such a manner by the companies so as to foster a real connection with existing and potential customer bases.
- All the case businesses manage their product-customer interface as a process of trust and confidence building engagement.

Either because of long-term activity within the market places they serve or through diligent assessment of the marketplace, the case companies have sound understanding of whom their audience is and of how best to communicate with them.

In the case of Ali Beer, it can been explicitly detected that the build-up of brand identity is significantly dependent upon the characteristics of the entrepreneur, including his natural orientation to a young niche marketplace and his understanding of the propensity of that customer base toward active interface with social media. Such interdependence between brand identity and entrepreneur characteristics is implicit in the other case insights. In many instances, contemporary communication channels are judged a prime source of customer and potential customer engagement – thus social media is deemed a low cost and effective source of brand building.

Moreover, it is brand storytelling that is in most cases perceived to be a truly effective customer engagement mode. Utilization of the brand storytelling mode is not only an internet-based marketing approach of which many small businesses can avail themselves, such small enterprises can also anchor-in in parallel word-of-mouth marketing activities (which they traditionally rely on). Here those customers or potential customers already involved in the online storytelling can be encouraged to pass the word and reel in their friends to the storytelling: a kind of automate form of potential customer base building.

It appears that storytelling can be a lead way of distinguishing the company and its brand in the marketplace. The case businesses support the proposition that people are hungry for and remember a good story – and that many can afford time to, and even have desire to, engage in and contribute to a good story.

The case businesses suggest that the story can personify the brand and help carve out profitable market position. Opportunity exists to embrace most stakeholders in the storytelling or story building, such as suppliers and employees. Arguably, this can communicate a sense of confidence in customers and potential customers with regard to full context contribution by key players in the businesses production function.

Within the case studies, whether the customer engagement communication is by storytelling or more traditional marketing channels, brand is being built, established and cemented by focus upon product or service quality and appealing to and playing on people's emotions.
Emotional and psychological components of brand building exemplified within the cases include call to people's feelings and perspectives surrounding naturalness, wellbeing, health and lifestyle – and emotional orientation regarding a sense of historical, regional or national history and tradition.

In some instances, the case businesses give emphasis in their brand building activities to use of traditional production process and authenticity – and shunning the use of the artificial.
For some the play toward the emotions and senses is incorporated into approach to packaging design and materials – with such as elegance, aroma and quality captured and communicated by combination of product and its package.

Opportunity exists for many businesses to foster synonymity between company, brand and such as quality, health and lifestyle – for instance, building trademark synonymous with Greek beer.
With regard to branding by storytelling - use of contemporary technology is matched to careful understanding of specific customer niches and associate user types; with the telling of a dynamic, compelling story and use of engaging visuals such as videos and other interactive visual components underpinning the enticement to engage.

And finally - advances in technology enable close measurement of the impact of storyline, content and content sharing by participants. This in turn enabling the business to determine effectiveness of storytelling and its future shaping and role in the brand building process.

CONCLUSION

We enter our concluding summary with proviso as to breadth of insight that we are at this stage able to offer in relation to our presented case studies, given that we have as yet not been able to pursue primary investigation with the case businesses – and rather currently rely on secondary data and insight. However, in the context of the summary case insight in its current totality, one can conclude that careful and detailed consideration of the brand building activities and approaches of currently successful enterprises small and large can provide valuable guiding insight and the triggering of developmental ideas for owner managers of micro and small businesses in all sectors. Including those whose perceptions at present lead them to believe that branding and brand building are predominantly the domain of large well-resourced companies. Clearly, as the above learning points suggest, the potential for effective brand building in smaller businesses is high. Operating as a successful entrepreneur involves identifying a sustainable market niche and ability to work hazy ideas to commercial reality. Sustaining and building forward that 'commercial reality' can be significantly enhanced by developing a strong brand – if one is guided by this paper, an ultimate requirement of the successful entrepreneur in the future will be ability to tell a good story.

BIBLIOGRAPHY

1. Aaker, D. A. (2004). Leveraging the corporate brand. *California Management Review*, 46 (3), 6-18.
2. Alpkan, L., Yilmaz, C. & Kaya, N. (2007). Market orientation and planning flexibility in SMEs: performance implications and an empirical investigation, *International Small Business Journal*, 25 (2), 152-72.
3. Anukam, A. & Nwaizugbo, I. (2009). Assessment of Entrepreneurial Marketing Practices among Small and Medium Scale Enterprises in Imo State Nigeria: Prospects and Challenges. *Review of Contemporary Business Research,* March 2014, 3(1), 77-98.
4. Blankson, C., Motwani, J.G. & Levenburg, N.M. (2006). Understanding the patterns of market orientation among small businesses, *Market Intelligence and Planning,*

24(6), 572-90.

5. Blankson, C. & Stokes, D. (2002). Marketing practices in the UK small business sector, *Market Intelligence and Planning*, 20(1), 49-61.
6. Eisenhardt, K., & Graebner, M. (2007). Theory Building from Cases: Opportunities and Challenges. *Academy of Management Journal*, 50(1), 25-32.
7. Carson, D., Cromie, S., McGowan, P. & Hill, J. (1995). *Marketing and Entrepreneurship in SMEs: An Innovative Approach*, 1, London: Prentice Hall.
8. Carson, D., & Gilmore, A. (2000). Marketing at the interface: not 'what' but 'how' . *Journal of Marketing Theory and Business and Management Studies*, 1(2), 1-7.
9. Elliot, R., & Percy, L. (2007). *Strategic Brand Management*. New York: Oxford University Press Geertz, C. (1973) *The Interpretation of Cultures*. Basic Books.
10. Gilmore, A. (2011). Entrepreneurial and SME Marketing. *Journal Of Research in Marketing and Entrepreneurship*, 13, 137-145. http://dx.doi.org/10.1108/14715201111176426
11. Gilmore, A., & Carson, D. (2009). Innovative marketing in SMEs: an empirical study. *Journal of Strategic Marketing*, 17(5), 383-396. http://dx.doi.org/10.1080/09652540903216221
12. Goldsmith, R. E. (1999). The personalized marketplace: beyond the 4Ps. *Marketing Intelligence & Planning*, 17 (4), 178-185.
13. Hankinson, G. (2004). The brand images of tourism destinations: a study of the saliency of organic images. *Journal of Product and Brand Management*, 13(1), 6–14.
14. Hills, G.E. & Hultman, C.M. (2006) Entrepreneurial marketing. Lagrosen, S. & Svensson, G. (eds) *Marketing.*
15. *Broadening the Horizons*. Denmark: Studentlitteratur.
16. Hills, G. E., Hultman, C. M., & Miles, M. P. (2008). The evolution and development of entrepreneurial marketing. *Journal of Small Business Management*, 46 (1), 99- 112.
17. Jones, R., & Rowley, J. (2011). Entrepreneurial marketing in small businesses: A conceptual exploration . *International Small Business Journal*, 29 (1), 25-36.
18. Julien, P. A., & Ramangalahy, C. (2003). Competitive Strategy and Performance of Exporting SMEs: An Empirical Investigation of the Impact of Their Export Information search and Competencies. *Entrepreneurship Theory and Practice*, 227-245. http://dx.doi.org/10.1111/1540-8520.t01-1-00002
19. Keller, K.L. (2001a). Building customer-based brand equity: A blueprint for creating strong brands. *Marketing Management* July/August: 15– 19. 154.
20. Keller, K.L. (2001b). Mastering the marketing communications mix: Micro and macro perspectives on integrated marketing communication programs. *Journal of Marketing Management* 17, September: 819–48.
21. Mahdi, Z., Mobarakabadi, H., & Hamidi, K. (2015). Brand Identity and Brand Image.

Advanced Social Humanities and Management, 2 (4), 117-121.

22. Martin, D. (2009). The entrepreneurial marketing mix, *Qualitative Market Research: An International Journal*, 12 (4), 391-403.
23. Mühlbacher, H. & Hemetsberger, A. (2008). What the Heck is a Brand? An Attempt of Integration and its Consequences for Research and Management. *Proceedings of the 7th International Congress Marketing Trends*, Venice 2008, 1-19.
24. Kopecká, J. A. (2013). *Why Didn't They Ask the Supplier*?, Delft: University of Technology.
25. Kraus, S., Eggers, F., Harms, P.D. R., Hills, G. E., & Hultman, C. (2011). Diskussionslinien der Entrepreneurial Marketing-Forschung: Ergebnisse einer Zitationsanalyse', *Zeitschrift für Betriebswirtschaft,* 81(6), 27-58.
26. S., Sarasvathy, S. D., Dew, N., Wiltbank, R. & Ohlsson, A.V. (2011). *Effectual Entrepreneurship*. Oxford, UK: Routledge.
27. Schindehutte, M., Morris, M. H., & Pitt, L. F. (2009). *Rethinking marketing: The entrepreneurial imperative*. New Jersey: Pearson Prentice Hall.
28. Stokes, D. (2000). Putting Entrepreneurship into Marketing: the Processes of Entrepreneurial Marketint. *Journal of Research in Marketing and Entrepreneurship*, 2(1), Spring, 1-16.
29. Upshaw, L.B. (1995). Building Brand Identity: A Strategy for Success in a Hostile Marketplace, New York, NY: John Wiley and Sons.
30. Urde, M. (2013). The corporate brand identity matrix. *Journal of Brand Management*, 20 (9), 742-761.
31. Varadarajan, R. (2009). Fortune at the bottom of the innovation pyramid: The strategic logic of incremental innovations. *Business Horizons*, 52(1), 21–29.
32. Whalen, P. S., & Akaka, M. A. (2016). A dynamic market conceptualization for entrepreneurial marketing: the co-creation of opportunities. *Journal of Strategic Marketing*, 24 (1), 61-75.
33. Wai-sum Siu & David A. Kirby, (1998). Approaches to small firm marketing: A critique, *European* Journal of *Marketing,* 32 (1/2), 40-60.

Konstantinos Biginas, MSc, PhD candidate, Management Leadership & Organizational Change, and Antonia Koumproglu, MA, PhD Candidate in Education, University of East Anglia, are Professors at EU Business School Online campus. Peter Wyer is the Dean of London College of International Business Studies

THE CRUCIAL HUMAN FACTOR IN INNOVATION

Georges Haour

ABSTRACT: *Why do so many European young adults adamantly refuse to be salaried and elect instead to be self–employed – often using the tools of internet? Essentially because (large) firms do not appear to them as treating their employees decently, as they have become politico-financial animals, with numerous "shit jobs", as a result of the tyranny from their share-holders (which are, ironically, often pension funds of workers…).*
The relentless need for high returns prevents articulating cogent and credible "strategies" over the mid-term that could make the staff feel good to be part of such a human organisation.
CEOs have thus become ambassadors of their firm, surrounded with spin doctors and lawyers. They are at the orders of the board's representatives of their short-termist shareholders.
Nowhere is the disregard for the "human factor" more damaging than in the process of innovation - ultimate buzzword…This paper focusses on this process, as a way of highlighting the central role of motivation in the success of the enterprise.

KEYWORDS: human factor; innovation; motivation; strategies.

Drawing from learnings gained from practice, as well as from studying the process of innovation, the author concludes that, by far, the success of an innovation project is essentially a function of the talent and motivation of the persons involved. Therefore, management may bring considerable value by taking the time of ensuring these two critical requirements. In comparison with this priority, firms should place little importance on "frameworks" and consultants' "models"; instead, managers should trust their collective strength, rather than escaping into hiring external "help".

After looking at the act of creation, fire of innovative activity, this paper concentrates on technology-intensive innovations. The latter provides a powerful tool for changing the world and creating wealth. As they represent the key force in this dynamics, technical knowledge workers constitute our focus: their profile and what they require, in order to thrive. Attention will then be given to what these requirements mean for management. Lastly, the importance of the human factor will be illustrated with the specific aspect of innovation, which involves the complex transition of “academic” research to commercially successful ventures, following the path called “technology transfer”.

INTRODUCTION: CREATION, ESSENCE OF INNOVATION

After looking at the act of creation, we’ll briefly look at past literature concerned with the human factor in innovation. The dominating drivers for change and innovation in the coming years, will then be evoked. Finally, the objective of the present paper will be presented.

THE MYSTERIOUS ACT OF CREATION

Arts and Science constitute central elements of the human genius. Ultimate masterpieces, such as Plato’s *Republic*, Monteverdi’ *Orfeo*, amazing works of art from the Ming dynasty, Leonardo da Vinci’s *La Joconde*, Bach’s Saint John Passion, Hokusai’s wondrous *Ukiyoe*, Monet’s impressionist paintings, Stravinsky’s “*Rite of Spring*”, the work of Paul Klee, Fleming’s discovery of penicillin, because of “his prepared mid”, Berg’s *Wozzeck*, are a few examples. These superb creations are the products of the genius, passion and commitment of *individuals*. They are most appropriate to depict the great myths of humanity. Carl Jung calls on works of art to illustrate the icons of mankind’s mental universe (1).

In order to evoke the mysteries of the creation process, philosophers have sometimes described creative geniuses as sleepwalkers. Among them, Arthur Koestler (2) shows how Kepler made two mistakes cancelling each other, so that, guided by a mysterious inspiration, he arrived at the proper equation for the elliptic path of the earth. A perspective on scientific discovery is provided by Thomas Kuhn (3). According to his famed concept of “paradigm shift”, a scientific theory goes on as “normal science” until it is progressively challenged, to a point of crisis, at which stage a new theory takes over. Two theories shift like tectonic plates until they collide, causing an earthquake.

The creative genius of individuals is at the heart of the discovery process, whether in the arts, spice in our lives, or in the sciences. It constitutes the essence of the innovation process. By this phrase, we mean going from a novel idea to commercial success. In an attempt to improve their competitive position, firms orchestrate this difficult and unpredictable journey, in order to develop differentiated offerings and to make their operations more efficient.

DRIVERS OF CHANGE

Because of the digital revolution, the world is undergoing unprecedented, massive change. All sectors of activity are impacted by the “digital tsunami”. The latter includes 5G, first used on a large scale by Korean Telecom at the 2018 Winter Olympics, allowing a capacity to transmit data roughly 100 times that of present 4G.This “digital revolution” includes IoT- the internet of things. It is anticipated that fifty billions objects will be connected by 2020, offering an environment, which, no doubt, will be exploited by the “hackers”. Also come into play: robotics, big data & analytics, artificial intelligence (AI) and the much talked about blockchain.

A special event at IMD-International Institute for Management Development, in Switzerland, on October 4 and 5, 2018, dealt with this panoply of techniques, as they affect every *sector,* turning business models upside down and displacing jobs. The internet allows cutting out the "middle person", putting in direct contact consumers with suppliers of services. It makes it possible to accumulate enormous amount of data, which may be valuable to certain organisations. The slogan is: "data is the commodity of the XXIrst century". But data are useful only when they have a meaning.

Expected to be particularly impacted are the healthcare sector - partly because it has been so laggard to move in this area, manufacturing, entertainment & gaming, "fintech", as well as driver-less means of transportation, automobiles in particular. China, the ultimate internet country, is accelerating its efforts on many fronts with breakneck speed. Shanghai is already the world's capital for "Fintech".
When aware, our societies sometimes feel brutalised by the digital revolution. Concerns about cybersecurity are in order. Substantial economic losses are evoked, with figures around $2 trillion worldwide, in 2020, as a result of "hacking". The annual Def Con cybersecurity conferences (August 2018, in Las Vegas) are very well attended. "Mitigating risks" is in order. Ethical issues should be much more debated. It can be said that algorithms themselves are not "neutral", as they assume a certain set of values.

In dealing with this wild horse, there is sporadic "resistance": some people prefer queuing at human cashiers, rather than dealing with charm-less machines. For others, "the more digital the world becomes, the more handwritten notes I send". The "lights and shadows" of the digital brave new world should be lucidly evaluated and debated.

The "control" by citizens of their private data is a central concern. Having the right values, Europe is the first region in the world to take regulatory action, the GDPR, in full force late May 2018. Indeed, our toxic world demands "smart regulation", in order to protect citizens without stifling economic dynamism.

The digital, geopolitical and ecological changes are prompting consultants and business schools' types to utter much "gobbledygook" on the managerial attributes required to face these challenges. Words such as: "agility, leadership, ecosystems" and other "open innovation, cloud sourcing" are uttered *ad nauseam*, inadequate to help navigate the resulting rumbustious business environment. The discourse remains at the general, macro-level and does not articulate any "wisdom" useful to individuals.

BRIEF REVIEW

Considering how important the motivation and the talent of individuals involved in innovations, few authors look at the value system and the factors creating strong morale in these individuals. What specific practices and managerial approaches allow/stimulate such individuals to thrive and be productive? Similar considerations apply to public laboratories, non-profit institutions, as well as University research.

Entrepreneurship, or, rather, the entrepreneurial spirit, is necessary, but not sufficient for innovation to be successful. Its proactive energy constitutes the booster, which catapults innovative offerings into market. In this area, there is much hype about the so-called "entrepreneurial universities" (4). Several Chinese Universities are blowing the same trumpet. How does one *effectively* teach entrepreneurship? In the UK, the "Cambridge phenomenon" took place well before anybody was concerned with this question. It happened because there were a few compelling role models, as well as through good practice, such as, in particular, that at the St John's Innovation Centre, founded in 1987. Its first Director, Walter Herriot, well understood the needs of entrepreneurs.

Rather than giving many references of articles, let us highlight a 2012 OECD report reviewing this area (5). This report lists the components of an "entrepreneurial University". These are 1) Leadership and Governance, 2) Organisational Capacity, People and Incentives 3) Entrepreneurship development in teaching and learning 4) Pathways for entrepreneurs 5) Relationships with business, 6) Entrepreneurial University as an internationalised institution, and 7) Measuring the impact of the entrepreneurial university.

Papers on the human factor and innovation concentrate on the "framework conditions" promoting innovativeness. They are very "macro" considerations, including "typologies" for the staff. "Human resources" are taken as an aggregate entity. No consideration is taken as to how ensure, in talented *individuals*, the motivation and energy, required to make innovation succeed (6, 7). This is also the perspective of the 2014 edition of the annual Global Innovation Index (GII) from the World Intellectual Property Organization (WIPO), a ranking which has put Switzerland on the top place for in the last six years. That year, the GII edition focussed on the theme: "The Human Factor" (8). However, the report gives statistics on the number of graduates, professionals and number of science parks. These macro-issues do not tell anything about what motivates *individuals*.

OBJECTIVE OF THE PRESENT PAPER

In the universe of creativity, innovation and massive change evoked above, the present paper looks at the human factor in the innovation process. We focus on individuals working in companies, i.e. Large corporations, SMEs-small and medium enterprises, and start-ups.

Many innovations are non-technical in nature. The example of self-service shows that a major new approach may revolutionize a sector, retail in this case, without involving any technology. On a different level, the European Union constitutes one of the most remarkable innovations (and, often, a frustrating one…) in human history. Our world needs effective conceptual innovations, in order to deal with the rapid and massive changes affecting it. In the absence of "leadership", these are slow in coming, as the inertia in the system is astounding, probably only to be shaken by the compelling pressure from citizens. There are, however, signs of change. For the first time, the Queen of England has taken a public stand on an environmental issue: “I declare war on plastic”, she said on February 12, 2018[1].

Technical change, particularly in the digital sphere will continue to be key in solving world’s problems, and to create wealth for people. This paper focusses on the human factor in technology-intensive innovations, because they represent the lion’s share of the wealth-creation process. We first discuss the characteristics of the key actors in technical innovations, e. g. technical knowledge workers. We will then look at the implications of these characteristics for management. Lastly, we will look at the complex process of technology/ knowledge transfer.

THE TECHNICAL KNOWLEDGE WORKER

Technical knowledge workers are somewhat different from other knowledge workers. Managers of a department for technical development, such as R&D (Research and Development), must be sensitive to these differences discussed below.

TECHNICAL CONTENT VERSUS PROCESS

A student, working on the research towards obtaining a PhD in science, is likely to consider the world of management very pejoratively: what is paramount to such a student is the *content* of the scientific work and the challenge of progressing knowledge in a very specialized field. Indeed, scientists consider their expertise in a scientific discipline as central part of their identity. With it, scientists characterize themselves: they say “I am a physicist”, or “I am a biologist”, just like somebody would say: “I am a Medical Doctor”, or: “I am a lawyer”.

In contrast with the importance of technical *content*, people involved in *processes*, such as managers, consultants, are often considered peripheral. Collective memory confirms the supremacy of content over process. One example is the WWII *Manhattan Project*, which, set up with a staff of 130 000 persons to develop the nuclear bombs, which were dropped on Hiroshima and Nagasaki, on August 6 in 1945 (9). History does not recall the name of the project manager, but only the names of the physicists, particularly Robert Oppenheimer, head of the Los Alamos Laboratory, as well as Leo Szilard and Albert Einstein. This recognises the fundamental fact that, without expert technical knowledge, there is no project, whereas project management is sort of a commodity.

Our contemporary times sometimes seem to forget this basic fact. Excessive emphasis is often put on the marketing, the financing and managerial practices. Considerable “hype” surround start-ups, these budding firms which often have a technical innovation at their origin. In Silicon Valley, the proximity of Hollywood seems to encourage the “spin doctors” to hyperbolic exaggeration, when, in fact, the success rate is no better than anywhere in the world: roughly, 75% of technical start-ups die before five years. China seems to be on the same bandwagon, with occasionnal extravagant “story-telling” on start-ups, incubators, etc. It is nice to see Switzerland remaining true to quality of content, low key approach and soberness!

Who are the founders of *start-ups*? Engineers, of course. They bring the technical content, which constitutes the basis for the new business, but they need additional skills to develop it. These skills are often provided by a colleague having a different orientation. Most start-ups have two founders, who trust each other: one engineer contributes the technical content, the other one, more extraverted, deals with marketing and business. Technical experts develop management skills and business sense over time, following the path given in the graph below. A primary responsibility of managers is to help individual staff members develop. Occasionally, timely executive education programmes make it possible to accelerate and amplify this evolution. Thus, management development may truly be an agent of change. See Figure 17.1.

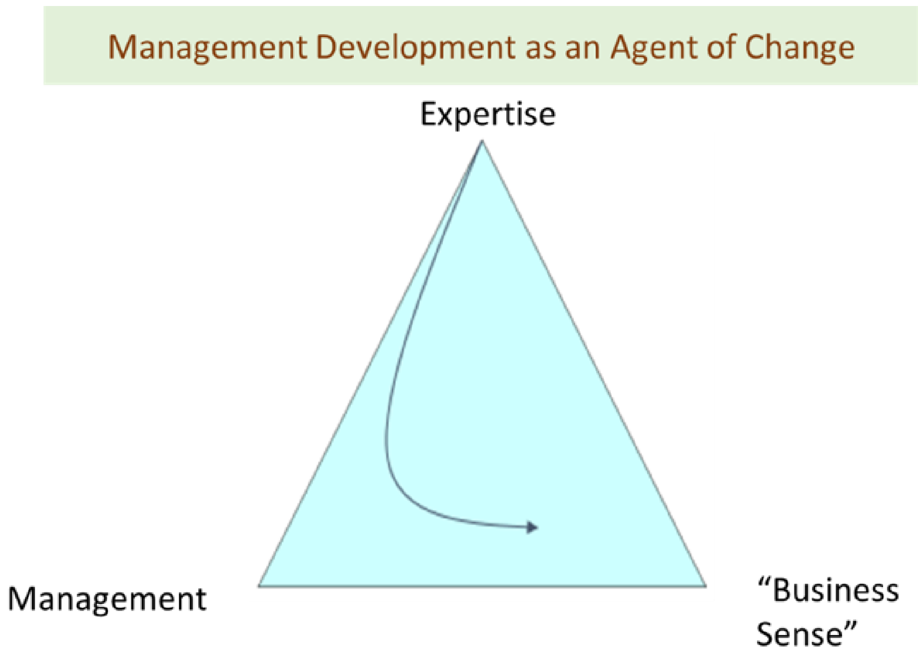


Figure 17.1 Management development as an agent of change (from reference 13)

NEED FOR AUTONOMY

Another characteristic of knowledge workers is their high need for autonomy. Since, expertise is so important to them, it defines much of their value system and behaviour. They feel that "they know best" and resent advice, or managerial interference. They are difficult to manage in the sense that, in order to be "accepted", a manager must be legitimate by background and track record. In certain cases, technical experts elect to remain technical contributors, growing in seniority without managing any staff. The technical path, parallel to the managerial cursus, constitutes the "dual ladder" system.

Knowledge workers, such as medical doctors, journalists, lawyers represent for managers a challenge similar to that of technical knowledge workers. It is often said that such staff are fiercely individualistic, just like cats. As is well known, there is no such thing as "corralling a herd of cats".

THE EXPERT SYNDROME

The pride of knowledge workers for their technical competency may be illustrated by a survey of researchers of the contract research organisation Battelle. They were asked: "Why are clients funding innovation projects with you as project manager?" More than 80% of their answers were: "because of my recognised expertise", while the clients' reply was "because we have an issue to resolve".
As a result of their pride, as well as their need of independence, knowledge workers are unlikely to readily engage in collaborations and exchanges with colleagues. Why should they, since they are so good themselves? Furthermore, engaging in a collaboration may expose areas of ignorance, a direct threat to their status of "prima donna". Here again, management must tactfully convince individual experts to engage and collaborate.
In an attempt to seduce "experts", start-ups offer "fun" office space, with colourful coaches, dart games, etc… Instead of such "gimmicks", it seems preferable to offer an excellent cafeteria, an efficient nursery for the employees' children, astute advice for personal finances, considerate "sabbaticals", or attractive rotations in other parts of the firm. In-kind advantages, provided by certain Chinese firms, such as company cars or low interest loans for purchasing real estate, are also effective in attracting and retaining staff.

KNOWLEDGE INERTIA

A firm, which has outstanding experts in a given discipline, say metallurgical engineering, will want to keep them busy with challenging projects in their specific field. This constraining legacy compels the management to continue ploughing the same furrow in comfortable complacency. In fact, these investments should be directed towards more future-oriented projects.

Companies find it difficult to interrupt projects. This is due to lack of courage and the fear of de-motivating the teams. This is an ill-placed concern. The key is to kill projects, not the project members! The reasons, business or otherwise, for stopping a project must be explained to the project team. If done properly, i.e. if the management *takes the time* to explain why an activity must be stopped, such interruptions provide an opportunity of a powerful pedagogical message. In most cases, management does not seize this opportunity.
For a company, such inertia often leads to disasters. Examples include Kodak, which failed to manage the advent of digital photography. At the level of a whole industry, in the early 1970s, the senior management of the Swiss watch sector rejected the quartz watch as a gadget, because it could not resolve itself to abandon the considerable and unique know how of their staff in precision making mechanical watches. The Japanese firms then took over the market. The Swiss sector only recovered when the "Swatch" was launched in the late 1980s, by combining innovations in design, provided by engineers Mock and Mueller, advanced manufacturing and marketing (10), under the leadership of Dr. Ernst Thomke.

KNOWLEDGE WORKERS NEED ORGANIZATIONAL STABILITY

Uncertainty is at the core of technical research. Indeed, if the results of a project were known, there would no need to carry it out. The daily work of the researcher is a constant battle, more or less acute, depending on the time, against unclear outcome. With uncertainty central to work, researchers feel the need to have a stable environment. Management must strive at providing this, in particular by supporting the researcher and showing empathy, when the project goes through difficult phases. This must be done in a positive manner, making relevant suggestions on how to proceed or on what colleagues to contact for help.

Mergers & Acquisitions (M&A) represent periods of major uncertainty. These must be as short as possible. The vision of the newly formed entity must be diligently formulated and its organisational structure clarified promptly. Duplications are eliminated, R&D departments being often at the top of the list of activities to be "streamlined", in order to reduce costs. Researchers are unsettled by such uncertainty, so that, during this period, the innovativeness and the research productivity go way down. It is therefore very important to point to the future, so that the innovative heart of the firm can start beating again. When Roche acquired the diagnostics company Boehringer Manheim, it decided to manage the merger fully internally, which was the proper thing to do. As a result, the merging process was carried out, retaining the trust from the staff, and with due speed, so that the innovation spirit of the development teams was relatively little altered (11). Roche, admittedly the best pharmaceutical firm in the world, has a history of intelligently handling relationship with new partners, such as Genentech, or Chugai.

THE RICHNESS OF DIVERSITY IN TEAMS

By and large, more diverse teams, or a more multi-cultural staff, are less conformist and more creative (12). There is a *caveat*: the desired outcome is obtained *only* if managers see a multi-cultural staff as a positive asset. Managers who are not at ease, or do not know how to effectively deal with diversity, actually destroy this potential.

Why is diversity an advantage for innovation? People, from various genders, social origins, county cultures, etc…engage more in debate and dialogue. Robust conversations develop, from which new ideas are more likely to emerge. Coming with different sets of contacts, they have antennas into diverse worlds. In this area, Europe's unique richness of diversity represents a considerable asset. For example, teams involved in projects from the European Union's "Framework projects" are the most diverse in the world. Such projects federate people from small and large firms, public and private, from Universities and private laboratories, coming from different countries. Managing such teams demand persons who are able to turn this complexity into an asset. When the sophistication of effectively managing highly diverse teams is lacking, however, this complexity is only cumbersome. In most cases, problems encountered in projects are managerial in nature, not technical. Not member of the EU-European Union, Switzerland fully participates in the EU programmes. This constitutes a testimony to the importance of being part of the European research area. It is, probably also, because such a multicultural country fully understands the power of diversity.

There are exceptions to the rule: effective innovativeness and market-orientation do not absolutely require staff diversity. For example, in Japan, in the 1980s, homogeneously Japanese staff, belonging to very Japanese companies, such as Canon, Sharp or Toyota, developed new, winning offerings, which conquered the world. Japan, with a monoculture population and little global outlook (on boards of Japanese firms, fewer than 1% of their members are not Japanese), continues to be a powerhouse for (technical) innovation.

RESEARCHERS-ENTREPRENEURS

As a manager of a unit at Battelle, in Geneva, the author of this paper hired a number of researchers from various countries, in order to build the diversity mentioned above. One phrase used to describe the job was: "I need researchers-entrepreneurs". The expression surprised, as these two words are not usually put together. In fact, common wisdom considers that these two profiles are not found in the same person. This is supported by the fact that, as mentioned above, engineers, starting new technical ventures, find a colleague as an associate, who brings an orientation towards business and entrepreneurship.

Our societies do not want everybody to be an entrepreneur; this would mean chaos. We want somewhat more numerous entrepreneurs; how many more is not clear. Importantly, we want more *effective* entrepreneurs. What firms really want is proactive employees, who take initiatives, engage with colleagues and move things forward, convince colleagues and federate their energy on worthwhile projects. The terms "intrapreneurship", or "corporate entrepreneurship", refer to an entrepreneurial spirit, which remains within the limits of the corporate system. In the recent period, corporations seem keen to work with very young companies, in the hope that their entrepreneurial energy will "infect" their corporate bureaucracies. One may be sceptical about the success of such endeavours. Furthermore, the start-ups are uneasy about such encounters, as they fear that their ideas may be stolen by the corporations. On the other hand, the corporate world must definitely learn to deal and interact effectively with start-up companies.

At the macro level, an indication of a country to have an entrepreneurial outlook is given by the ranking of the Global Entrepreneurship Monitor. Its 2017 report may be downloaded from: www.gemconsortium.org/report. According to this, the most entrepreneurial countries are Estonia, Israel, USA, Canada and The Netherland. In Europe, Switzerland is in the upper range, at the level on the UK. Only 15 to 20 % of start-ups are led by women. Rankings, however, should not be taken at face value. Their merit is to stimulate debate and discussions, in an attempt to better understand the issues.

IMPLICATIONS FOR MANAGEMENT

We have reviewed the characteristics and motivational aspects of technical professionals. We now turn to what these mean for the management: what values, management styles and practices are most appropriate to motivate technical knowledge workers?

MOST OFTEN, "OUR STAFF IS OUR MOST PRECIOUS ASSET" IS AN EMPTY PHRASE

Annual company reports are replete with motherhood statements on "people empowerment" and "the most important element is our staff". Companies are like individuals: they do not truly practice what they know is good. One example is the level of effort taken by a firm to evaluate a modest investment, say Euros 200 000, while it is often negligent in their hiring new staff, which is the most important process in firms. It seems that spending money requires more attention than careful hiring. And yet, a mistake in hiring will cost the company enormously… but there is no "metrics" for this….

An indication of this misplaced priority is given by the generally poor welcome of new hires, on their first day at work. This is irresponsible, since the first weeks on a new job strongly influence the motivation of the new recruit for a long time. First line managers must be particularly attentive. A variation of the following fable, illustrating some of the pitfalls, has been published (13).

After obtaining her doctorate in computer science, Dr Joanne Talent vacationed in Yunnan, China, before starting her new job at Hubritech Corp., in Austin, Texas. By a balmy September morning, Joanne "reports" to work. No, the receptionist is not aware of her arrival; after contacting the personnel department, it turns out that her name is indeed in the roster of the staff. She is therefore allowed in, asking for Joe, her boss in the R&D department. Joe is nowhere to be found and does not answer his cell phone; he does not have an assistant, so Joanne goes form office to office to try to locate either her boss, or where she has her desk and computer. Finally, she runs into Isabel, who participated in one of the interviews and who invites Joanne to a cup of coffee at the cafeteria. There, they run into Joe, who seemed to have forgotten all about Joanne's arrival. From then on, things began to get organised for Joanne, but what a disastrous first impression! It is common sense that new hires should be tactfully welcome and taken care of, with their new office and project work organised.

Contrasting with the above calamitous behaviour, Laura, another manager from the same firm, had the habit of having the new hire share her office for a few weeks, in order to accelerate the information exchange and integration of new staff. Also, she organised a welcoming party for each new hire, as a sign of welcome and for accelerating the introduction to the staff. Laura's colleagues congratulated her for her good practices, but none of them followed her example… Most human organisations do not provide an environment, which encourages "borrowing with pride". This is due to insufficient engagement and little encouragement by the higher echelon of management to proactively spread best practices.

More broadly, Corporations are generally perceived by young people, particularly in Europe, as treating their staff poorly, largely as a result of the financial tyranny to satisfy share-holders. As a result, much young talent refuses to be salaried and chooses to become freelance professionals. Internet is a key enabler in this. If an employer only commits to try to make you "employable", to use a common phrase, then many youngsters prefer to take the risk for themselves and be free from the managerial morass. Complacent corporations do not seem to see this a serious problem, e.g. being deprived from having access to much good young talent.

THE FAMOUS "INNOVATION CULTURE"

"Innovation culture" is a catchall phrase. It conveys the idea of risk taking, openness, curiosity, "benefit of the doubt" and positive, inclusive attitude. It denotes an environment in which novel ways and ideas are welcome and flourish. Such an environment takes a long time to develop; it can be destroyed in a short time. It may be enhanced, but doing so takes sustained and consistent effort over a long time and with the support of the top management. In what I call, an "innovation journey", I work, as an adviser, with companies towards that objective.

The region's environment has a role to play. There is the glamourous, much talked about, Silicon Valley. There is also the region around Cambridge, UK. As indicated, a combination of an ethos of trust, a few powerful role models of successful Professors-entrepreneurs, a first class scientific and technical university, the so called "Cambridge phenomenon" started with the St Joh's Innovation Centre, in 1987. It developed over a period of 40 years. In 2018, a region, in a 30 km radius from Cambridge, is home to 24.500 firms employing 210 000 staff. This indicates that the average size of the firms is small. A rare company, the designer of chips ARM, grew to be more than 5 000 employees in 2018. It was bought in 2016 by the Japanese company Softbank, for more than £23 bio.

In the 1990s, the company 3M was mentioned as having an "innovation culture". No single fact, or policy, could be taken as the cause for this. In innovation, as for many managerial matters, there is no panacea, as discussed below.

ALL POLICIES MUST SUPPORT INNOVATION

These days, when asked: "what is the most innovative company in the world?" executives are likely to answer: "Google". As the largest advertising firm in the world, this company has "deep pockets" and play with numerous developments, many of them fail, as documented on the web (14). The firm Tencent, in Shenzhen, in the ultimate internet country, China, is a global leader in this area.

In innovative firms, ways of doing things, practices and policies, incentives, etc…all must be "aligned" to support an innovation-friendly climate. It starts with selecting the new hires. In order to attract more entrepreneurial candidates, a corporation may create an incubator for start-ups. British Telecom did just this, with its "Brightstar" incubator, in Ipswich, UK. Generating/maintaining an "innovative culture" importantly includes personnel policies, rewards and incentives, rules for promotion, etc every element must be evaluated and fine-tuned, so as to favour innovation. China, as a country, is obsessed to achieve this, at the national, provincial and municipality levels (15, 16). This contributes to accelerate the rapid progress of China towards becoming a main source of innovations for the world.

THE WALK AROUND MANAGER

We have seen that technical knowledge workers must deal with the stress of uncertainty. Indeed, there is also considerable uncertainty in the business side of the firm, more than ever in these times of rapid change and global competition. In addition, however, leaders of innovation projects must blaze the trail and face uncertainty in the technical realm.

This situation requires that the direct managers show empathy to the staff. It indeed helps if the manager has been a researcher in the past, preferably a "master of the craft". A non-technical professional is unlikely to be respected by technical knowledge workers over the long term. A positive policy is to rotate the R&D manager to a business job, before coming back to the R&D function. Empathy is not enough. The direct manager must be following the progress of the project and bring a positive contribution, with comments and suggestions, in order to help the project leaders accelerate the transition towards the markets. This involves suggesting colleagues to contact, appropriate publications or conferences, which would help the project leader.

These requirements point to the fact that first line managers must have a daily interaction with project managers. This "walk around management" is most appropriate to lead and motivate technical knowledge workers. Indeed, one dimension of this perspective is for managers to act as coaches, as discussed below.

MANAGERS-COACHES DEVELOP PROJECT LEADERS

One widespread scarcity found in companies is the lack of effective leaders of innovation projects. This is unfortunate, since the success of certain projects is key to the well-being of the firm. Developing project leaders require commitment over the long term, sustained effort and timely rotations, etc…All these things are not well done in our short term, financially-driven corporations. What is needed is that project managers are "mini CEOs," i.e. individuals with general management capabilities. This is even more acutely needed, as projects increasingly involve many different actors, as discussed below.

As indicated earlier, management often hesitate stopping projects. The result is that companies have too many innovation projects under way. This leaves the real key projects with insufficient resources and managerial "muscle". Furthermore, in recent years, the complexity of innovation projects have dramatically increased, as they must now federate several actors. See Figure 17.2: the diagram below shows the historical trend.

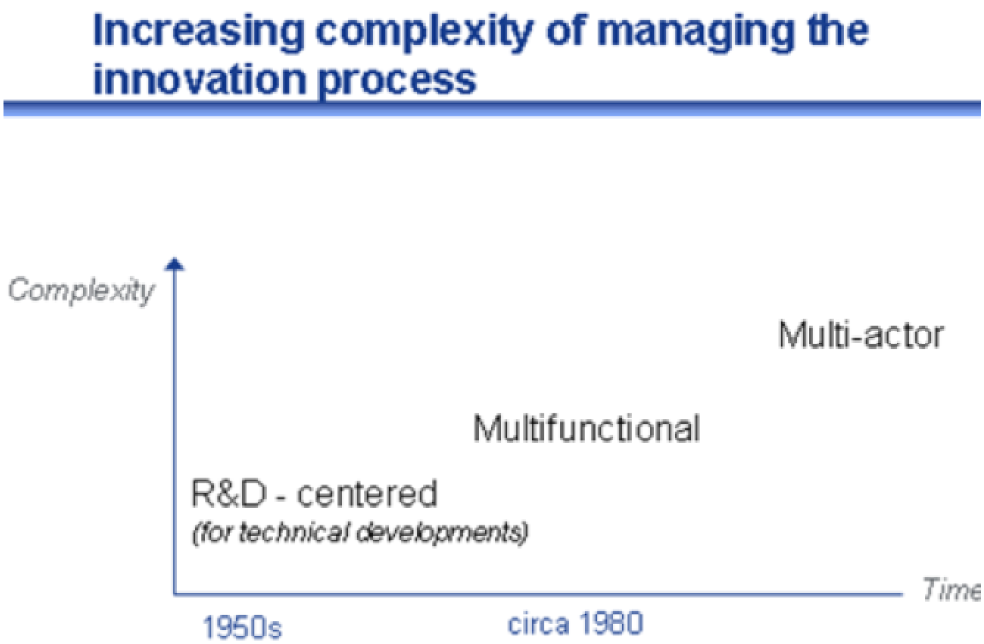


Figure 17.2 Increasing complexity of managing the innovation process

In the OECD countries, at the end of World War II (WWII), innovation was centred on science & technology, as implied by the phrase "technology push". Then corporate laboratories were located "in the woods", away from manufacturing and from customers. Inspiration came from the breakthroughs of an all-powerful Science: radar, jet engine and rockets, nuclear energy, advanced materials…

Circa 1960, "marketing" appeared *en force*. Offerings had to satisfy customers in competitive markets. This demanded a more concerted, broadly-based effort; hence the multi-functional innovation projects. These involved primarily R&D, manufacturing and marketing. It was – and still is - difficult to operate true multi-functional activities. In fact, the innovation process really involves all parts of the firm, including the top executives and the board.

Because of acute competition and the need to be faster, in the late 1980s, it became necessary to increasingly involve partners external to the firm: other companies, SMEs (small and medium-size enterprises), start-ups, universities and public research laboratories. This was initiated particularly in the area of mobile telecommunications and ICT-Information and communication technologies. This is part of what is sometimes called "open innovation", as though innovation had ever been closed. This requires extensive transfer of technology and knowledge, which is a complex process, as will be discussed in the section below. Multi-actor innovation projects constitute an element of the "distributed innovation" approach, first described in reference (13) and illustrated in Figure 17.3.

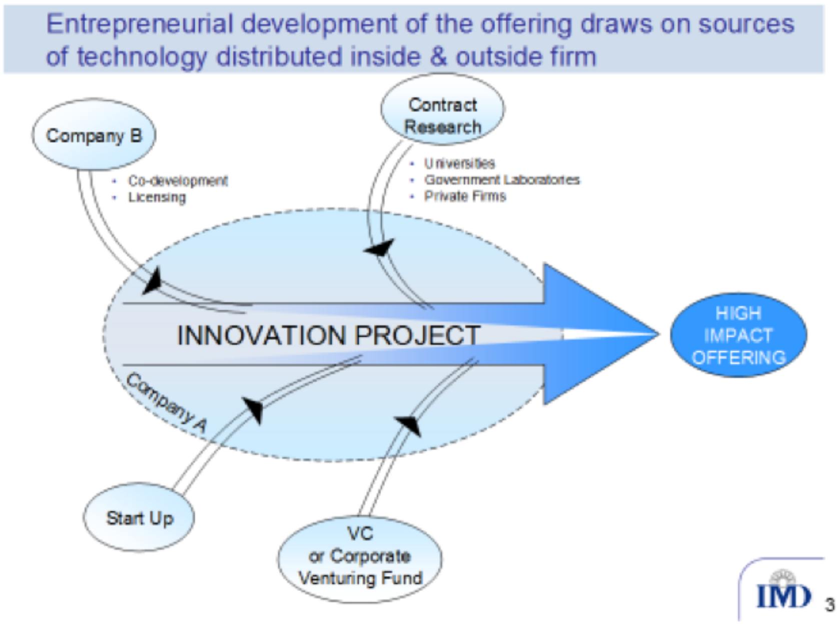


Figure 17.3 In a fully entrepreneurial perspective, the development of high impact offerings draws on sources of technology distributed inside and outside the firm (from reference 13)

This approach puts entrepreneurial spirit of the staff in the centre of the firm, i.e. a strong orientation towards the market, in order to develop so-called "high impact offerings". This means that, by proactively anticipating customers, the company comes up with offerings that are differentiating, and, it is hoped, commanding higher prices as a result, as well as slower price erosion. What is sought in this approach is not cheaper, but more *effective* innovations. Such *high impact offerings* are defined in the course of internal workshops, mobilising the company staff, who is the best and most knowledgeable to do the job, when properly motivated and led. This involves a dynamic of workshops and conversations across various functions of the firm, effectively "facilitated" by managers, or the staff. Indeed, a frim should embark on such a process only occasionally (every few years, or so), or it may involve one, or two, business units. Otherwise, the firm may be "excessively stimulated". In this process, the human factor is indeed key.

As already emphasised, companies lack effective leaders of innovation projects. As the later increasingly become *multi-actor*, the situation grows even worse. Such leaders require a good knowledge of technical matters, must be business/market-literate, good with people in multi-cultural settings. It takes a long time, as well as sustained effort, to develop such profiles of "mini CEOs". Part of their development should include short term assignments in various functions and locations of the firm. To be effective, this "short term expatriation" must be carefully prepared by managers on the sending and receiving sides of the traineeship. A good example is the Swiss Company Bühler, producer of machinery for the food industry. This company is committed to run an effective apprentice international programme.

The low attention of management for the development of staff beyond the traditional executive development, as well as the high turnover of employees, run against achieving such long-term development. It is unfortunate, because effective leaders of multi-actor projects is difficult to replicate, giving the firm a clear competitive advantage. An exception is constituted by Japan, where life-time employment is still largely the rule in large corporations, thus allowing long-term development of project leaders, including their wide rotation in various parts of the firm.

The role of top management in the human factor is candidly described in the book "Science Lessons" (17), by Gordon Binder, former CEO of the biotech company Amgen. The author draws on his experience, to explain his commitment and actions towards building effective teams, as well as hiring and retaining talented people. He also stresses the importance of company's values and to "walking the talk" about them every day.

We now turn to an element of technical innovations, which consists in transferring knowledge and technology from one institution/public laboratories to a private company, with the objective of enhancing its competitiveness and creating new activities and jobs. In this activity also, much of the success much depends upon the talent and motivation of the staff.

THE PEOPLE-CENTRIC PROCESS OF TECHNOLOGY TRANSFER

One vehicle for technical innovation is to transform the results of research, carried out in Universities or public laboratories into new, job-creating activities. Going from scientific results to business constitutes an extremely complex journey. It requires an understanding of business and markets, in addition to mastering the implications of technical intricacies, IP – intellectual properties issues, not to mention the people aspects. In fact, it is one of the most complex processes on earth (18).

How central the human factor is in the art of technology transfer is illustrated by the difficulty in turning public laboratories into customer – oriented contract research. A long time ago, the AERE-Atomic Energy Research Establishment of Harwell, south of Oxford, was the main research centre for nuclear research in the UK, between the 1940s and the late 1980s. At that time, it was decided to open the activities to external clients and the projects, appropriately, concentrated on R&D/consulting in the environmental sciences. This turned out to be a very challenging transition, as the professionals concerned did not have the skills, nor the motivation, to present their capabilities in ways that would attract firms' funding. Many engineers left until the staff was reduced to fraction of what it was. The decision was then to invest and turn the site into an innovation centre, with various laboratories and technical activities. In 2012, what was left of AEA was sold to Ricardo, a consulting engineering firm with 2900 professionals.

Other examples of this difficult transition are CSIR, in South Africa, and CSIR, in India. In the latter case, in the late 1980s, a sustained attempt was made to make the government laboratories more relevant to industry and society as a whole. It was hoped that the various laboratories would develop collaborative work and licensing activity with firms, such as Tata or Reliance. In spite of the considerable energy deployed, this transformation did not take place, again, as a result of the staff's insufficient skills and motivation to move down that road. In the best of circumstances, such a transition takes more than five years, such as was the case of CSIR, in South Africa.

As a result of the complex nature of the technology transfer process, but also because universities and firms constitute two very different worlds - as it should be, such collaborations, between these two worlds, are not as extensive and effective as it could. However, there exists a very broad range of activities connecting these two worlds, as illustrated below. See Figure 17.4.

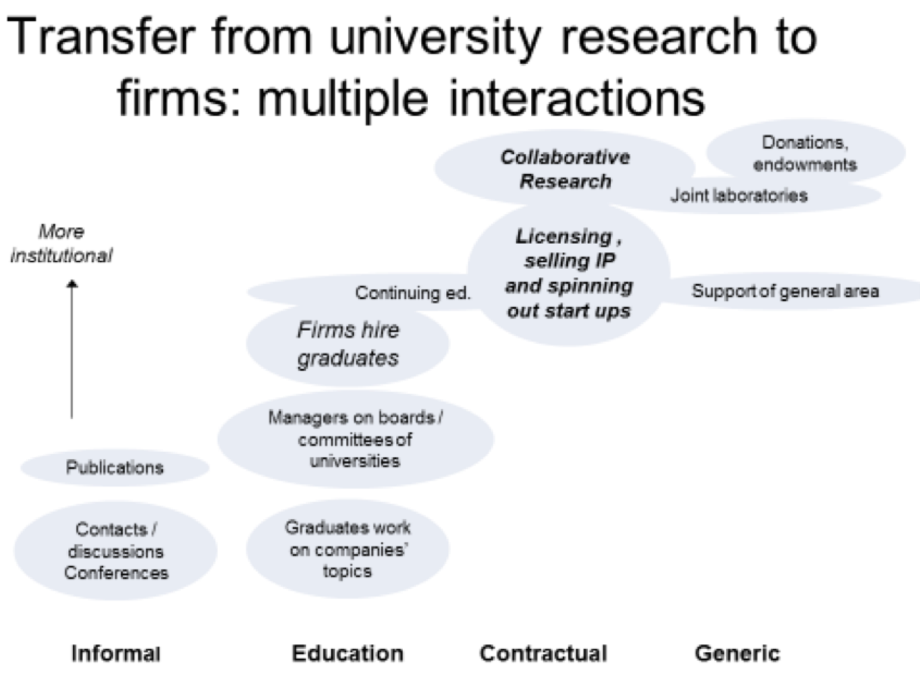


Figure 17.4 With a wide range of activities, firms engage with universities in many ways (from Science to Business, reference 18)

The most powerful vehicle for technology transfer is through people, i.e. the hiring of university graduates by firms. As is often said, transfer is best done by moving people. Historically, examples include the forceful transfer of artisans, experts in porcelain-making, from Meissen, near Dresden, to Berlin, by Frederick the Great in 1756. We look below at the three main channels for technology/knowledge transfer: collaborative research, licensing and spinning out new companies.

UNIVERSITY-FIRM COLLABORATIVE RESEARCH

A key channel for a firm to tap into expertise available in Universities is to fund research and development projects carried out by a team form that University. Companies use this vehicle more or less intensively. A company like Hewlett Packard routinely has more than 100 collaborations in place with Universities; quite a few of these involve Chinese Universities.

Pharmaceutical companies are practicing it the most, because they need to complement their own, unproductive drug development pipeline, by accessing new molecules and devices found in universities' medical research.

In contrast, SMEs do not use University collaboration much. This is particularly the case of Switzerland. In an attempt to remedy this situation , the Swiss government has creating a chain of Higher Schools (Hautes Ecoles), who are especially tasked to engage with SMEs, in order to help them become more competitive over the long term. Again, as stated elsewhere, "helping" SMEs develop their activity by better leveraging global markets is the safest way to create jobs back home.

Research directly funded by firms in Universities/public laboratories represent a small 7% of the total research budget, in the best research-intensive universities, as shown by the work carried out by the OECD, in Paris (19). Some universities wrongly include in the numbers of external funding the matching public monies provided by government grants. The lion's share (93%) of University research is funded with tax payers' money.

COLLABORATIVE WORK

Most frequently, collaborative research is carried out on a one-to-one basis. Often, the Technology transfer Office (TTO) is putting the two parties in contact; its role of facilitation, as a "middle person", must not be in the way of both sides having a productive dialogue. This will be further discussed later in this paper.

The firm and the university team must spend enough time together discussing the issues and the proposed work to address the issue, so that they establish a good understanding concerning the business goal, as well as the risks attached to the proposed project. Given that business and university constitute two different worlds, it is important to spend enough time on that phase. This considerably reduces the risks of misunderstandings, thus increasing the chances of success of the project. In the course of these discussions, both parties often *re-define* the issue and objectives, as a result of fresh input provided by these conversation. The proposal results from these discussions. A corresponding contract spells out intellectual property rights, budget & payments, and other administrative matters.

Once the contract is signed and the project begins, it is important that, following the relatively intense period of negotiations, both parties do not excessively reduce their interaction, as it so often happens. The project manager following up on the progress of the work, involving abundant and frequent, two-way communication with the client, will avoid many subsequent disappointments and pitfalls. One of the many qualities of a good project manager is that ability to effectively communicate in a timely way.

On the other hand, several firms may join together in funding a project in a university, or research lab. Such "multi-client projects" are practiced by contract research organisations, such as Battelle, to investigate a common issue. In this way, the cost of the research and development programme is shared among the participating firms. It may be a good way of assessing the merits of a new process, such as 3D printing, or block chain, for example. If patent material is developed in the course of the project, great care must be taken, at the proposal/contractual stage, to clearly define the IP rights of each participant. A type of multilateral projects is carried out as part of the *Horizon 2020* of the European Union, as discussed above in the "diversity" section, pointing that such projects are the world's most widely diverse projects.

STUDENTS IN FIRMS

Involving graduate students in the R&D activities of a firm constitutes another channel for transferring knowledge and technology. As an example, each year, the German firm Bosch invites roughly hundred students to come to work as trainees in the company. During this period, they are guided, so as to provide an effective contribution.

SMEs-small and medium-size enterprises may well benefit from such internships. Several countries (Holland, Singapore and Switzerland, for example) have instituted *innovation vouchers* in order to jumpstart such collaborations. Small amounts of money (less than 10 000 euros) are put at the disposal of the firm on the basis of a proposal involving work to be carried out by a graduate student. The process is non-bureaucratic, typically internet-based. Relatively frequently, the student is hired by the SME.

COLLABORATION IN NON-TECHNICAL AREAS

Firms rarely tap into university knowledge in non-technical areas. This is somewhat surprising, since so much of business success depends upon societal, non-business issues, and this is more and more so. Social sciences, such as anthropology and sociology, may well help better understand certain areas, such as acceptance of new technologies, or the interface person-machine. Closer to the traditional firms' need to "listen to the customers", *ethnographic marketing* attempts at monitoring the behaviour of customers in their interaction with products. This is often at the origin of improved, or new, designs of the offerings by the firm.

When doing business in China, firms should have a reasonable knowledge of that country's history and culture. This will be very appreciated by business partners in China. Universities can provide such knowledge in the course of appropriate educational programmes for managers.

LICENSING

Research carried out in Universities and public laboratories often lead to the filing, and sometimes, granting of a patent. The strength of the patent is its resilience in defeating the challenge from another patent in a suit, but mainly as the basis for creating new activities and commercial applications. The vehicle for the transfer is patent-based licensing.

Successful licensing demands a good knowledge of the industry and of the markets, as well as an ability to dialogue with managers, in order to explain the contribution of the contemplated deal. Second, this requires knowledge of the licensing "mechanics".

Professional associations, ASTP-Proton (Association of European Science & Technology Transfer Professionals), and AUTM-Association of University technology Managers in the USA, group the practitioners in this area. More generally, the LES-Licensing Executives society, headquartered in London, has members in many countries, who regularly meet, in order to facilitate exchanges and contacts.

The world's total licensing activity (down payments and royalties) represents more than 200 billion euros per year. The USA have the largest share - more than a third. Paralleling the growth of trade and exchanges, this number has grown in recent decades. There are several years between the granting of a patent and the ramping up of royalties derived from it. The share of University licensing represents a few per cents of the total, a small but not insignificant amount.

Having a strong patent constitutes a prerequisite. The rights and ownership of the patent must be clear and straightforward. Otherwise, potential investors will not engage in a negotiation. In the USA, in 1981, the Bayh Dole Act simplified matters, by entrusting the University with the ownership of patents, derived in the course of publicly-funded research. Universities may then sell rights on the patents, in an exclusive or non-exclusive way.

In the (usual) case of a product patent, many elements must be dealt with, starting with scouting for the appropriate company prospect. Then, preparation must be done, prior to conducting negotiations on the size of the market concerned, the impact of the innovation proposed, the field of use, the geography concerned, the royalty rate, etc…

University licensing offices must not aim at maximising revenues from licensing deals. They should license to the firm that offers the most chances to best develop its activities, as a result of the license. Job and value creation are the criteria for success of the TTO. Indeed, close to 90% of University licensing offices do not generate enough revenues to cover their expenses. This should be no problem, as long as the impact to society is substantial.

There are occasional large licensing deals, usually in the life-sciences sector. These multi-million "blockbusters", reported in the media, give the impression that University licensing is a gold mine. It is, but only for a very small number of deals per year.

UNIVERSITY SPIN OUTS

Creating a start-up company constitutes the third channel to bring to firms the results of research carried out in Universities and public laboratories. This is the most difficult and risky path. All over the world, whether in Cambridge, UK, or in the "glamorous" Silicon Valley, success rates are similar: only 25% of technical start-ups survive after five years. Making the transition from technical work to a successful company is highly difficult and complex. The figure below illustrates the steps along this path. Each step requires a highly competent and up to date advisory council. See Figure 17.5.

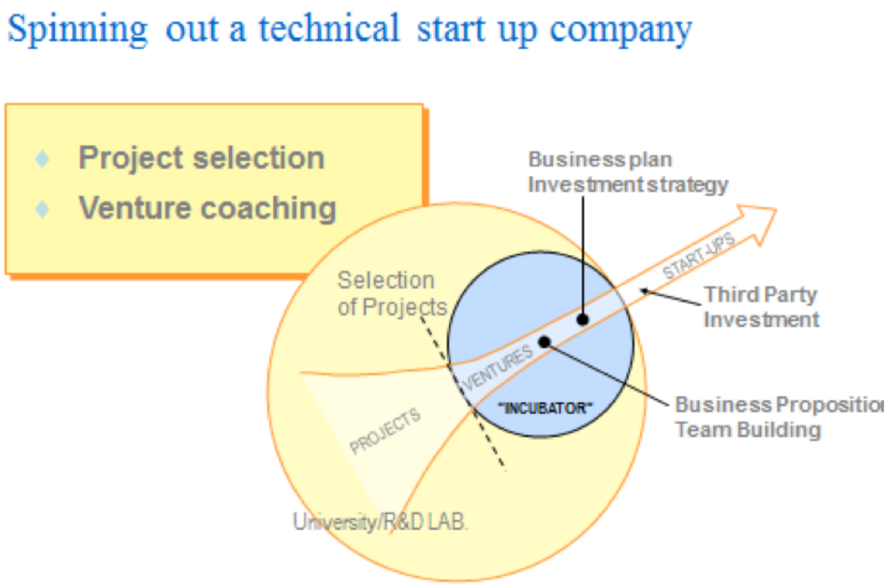


Figure 17.5 Steps in spinning out a technical start up Launching a start up

The origin of a technical venture is in the laboratories. Typically, university staff is not very knowledgeable about markets and business, or management. Therefore, forming a new venture is most likely to require that a third party be involved, who brings the relevant commercial knowledge. Projects carried out there must be steered towards commercial applications. The ventures presenting the most potential are selected by a board of persons, familiar with the technical and business aspects of the ventures.

Alumni of the universities may provide such know how. For example, this is the case of Imperial Innovations in London. In passing, this outfit is somewhat unique in that it is an incubator/accelerator listed at the London stock exchange; it concentrates on making money via spinning firms emanating from Imperial College's research, but also from other sources, in order to have a sufficiently abundant deal flow.

A key factor for the success of the venture is the quality of its team. Entrepreneurs are like "babies in the wood"; they need advice, guidance, suggestions, and very importantly, they need to be challenged with difficult questions. What is really distinctive in your offering? What is the competition to your approach? How robust is your business model? How about the Intellectual Property aspects? Etc…Also, business contacts and referrals are suggested to the team. Venture capitalists (VCs) primarily look at the quality of the team, and, when they invest in the venture, contribute business help and support to that team. This is what is called "smart money". Again here, the human factor is a dominating element.

This "coaching" activity is usually done in an "incubator", which aims at accelerating the launch and development of the venture. The value of an incubator is indeed not in the building, laboratories and reception desk. It is in this business coaching and in the learning taking place among the various entrepreneurial teams hosted in the incubator. Indeed, these contacts, as well as discussion forums and informal meetings, must be prompted, catalysed and organised by the coaches.

Over periods of several months, this "on demand" coaching progresses, from managerial issues, value proposition, business model, hiring new staff, IP strategy, to looking for financing. The coach helps with formulating the business plan and the requests for funding, as well as with specific sources of financing, such as Venture capital firms and "business angels", for example. It may include public funding. The start-up may reach the stage of an "exit", i.e. either being sold to a company in a trade sale, or, more cumbersome, but potentially more lucrative, being introduced to the stock exchange via an IPO-Initial Public Offering. .

An example of such a value-creation process was the British Telecom's "Brightstar", in Ipswich, UK. Attached to one of BT's corporate laboratories, Adastral Park, it aimed at exploiting the knowhow and patents in specific areas of this laboratory, whose staff was ready to take the challenge to transition from researchers to entrepreneurs. A number of coaches, knowledgeable about the business and this process, were hired to accompany the teams along this transition over a period of months.

Because of the arduous process of turning results of research into commercially viable ventures, the spin out route must be used as a last resort, when it is clear that it offers the best route for creating value. Also, the company should not be incorporated too early. A key requirement is to have a quality team eager to make the venture a success. If not, licensing out, or collaborative research must be preferred and a licensing deal often constitutes the link between the University and the new venture, as the start-up is a licensee of the university.

Universities' business schools should apply their expertise to the commercialisation of knowledge and technology. Indeed, it is not enough to launch start-ups; important is for them to *grow*. In this area, the USA are performing well, with numerous ICT firms, such as Microsoft, Oracle, Cisco, e Bay,…having rapidly grown to become dominant actors in their industry. China is truly outstanding in its ability to rapidly grow companies. In contrast, Europe's young companies seem to have what this author calls the "Peter Pan syndrome".

CHINA'S INNOVATION IS RELENTLESSLY PEOPLE-CENTRIC

China is rapidly becoming a major source of innovations for the world (16). Its entrepreneurial energy and agility, as well as its relentless business and customer orientation, are remarkable. Chinese entrepreneurs have an uncanny ability to extract value from an activity. Also, the support from the public sector for innovation and entrepreneurship is unfailing, at the national, provincial and municipal levels. The large Chinese market, highly competitive and demanding, provides a very formative environment for young ventures.

Many practices and policies show that China sharply realises that talent and energy are central to the success of innovation. A first indication is the great effort put in attracting and welcoming the returnees (about 400 000 each year). Sciences Parks, incubators and business

accelerators (2000 of them in the country), throw open arms to them, with staff, guidance, subsidy, tax breaks and services. Second, the "Thousand talent programme" is a government programme to attract experts in various areas, especially in fields where China has ambitious plans, but few professionals, such as the aircraft industry and its maker of civilian planes, COMAC. Third, the extremely vibrant scene is Shenzhen, where start-ups, SMEs and large firms, such as Tencent, Huawei and Foxconn collaborate and do business, alongside the dynamic "makers" movement.
In addition, China puts a lot of attention on education, which demands much improvements, as, by the way, is the case of numerous countries. There is a strong effort to boost existing universities, as well as to create new ones.

CONCLUSION ON THE CRUCIAL ROLE OF HUMAN FACTOR

Innovation is not about quantity of input, but about *effectiveness* of output. The amount of R&D investments only constitutes a rough measure of the level of innovation of a firm, or of a country. Companies may invest large budgets and have no useful outcome, except for the knowledge, acquired in the course of failed projects and useful for another one. The "innovation crisis" in the pharmaceutical industry illustrates this. Increasing investments are made for drug development, while the number of authorised drugs has been decreasing in the last years.

Innovation is a people-centric process. The key determinants of the effectiveness of the innovation process are the talent and the motivation of the people involved. This constitutes the "crucial human factor". Fully focussed on the individuals, management must truly engage with technical knowledge workers.

A similar challenge is encountered in one element of the innovation process, i.e. the transfer of technology/knowledge to turn results of university research into new activities and jobs. There also, the success of Universities' Technology Transfer Offices (TTOs) is predicated upon the quality and competency of its staff along several dimensions. TTOs-Technology Transfer Offices must be staffed with sophisticated professionals. Having well understood this, Switzerland acted accordingly and reached the first rank in the world for effectiveness in technology transfer in less than 15 years (18).

In addition to being carefully selected, such professionals must receive timely training in IP (intellectual property) and technology commercialisation. Specialised, short courses, combined with *apprenticeship*, must be used to accelerate the development of the staff (20, 21)). Young TTO officers must occasionally spend time as trainees. By learning about specific cases from experienced colleagues, they considerably enrich their experience, as well as their confidence in dealing with future situations and to communicate with colleagues effectively. A comprehensive manual on technology licensing is given in reference (22).

In our times of financial tyranny, management tends to lose the common sense notion that a low motivation of the staff represents a huge cost. Firms focus attention on processes and practices supposed to bring profits, but do not properly consider the crucial human factor.

Corporations talk about "brand equity". No equivalent attention is brought to "staff equity". Most often, in listed companies, managers are *not really engaged* with the staff. They operate in a world of financial "short termism". Hopefully, Chinese companies will not fall in this trap. Family-controlled companies, private equity firms, i.e. non listed, as well as cooperative companies, are more detached from such short term financial pressures, and, as a result, show more attention to the human factor.

Note: a different version of this text constitutes a chapter of a book (publication: March 2019) edited by Prof. Chen Jin, of Tsinghua University, Beijing.

BIBLIOGRAPHY

1. Jung, C.G. (1968). *Der Mensch und seine Symbole*. Olten.
2. Koestler, A. (2012*). The Sleepwalkers.* First published in 1959, Penguin Arkana..
3. Kuhn, T. (1962). *The Structure of Scientific Revolutions*. University of Chicago Press.
4. UKSPA: http://www.ukspa.org.uk/members/sjic
5. OECD: https://www.oecd.org/site/cfecpr/EC-OECD%20Entrepreneurial%20 Universities%20Framework.pdf
6. Di Christina, M. (2012). Human factor in innovation. *Scientific American*, 3017 (6).
7. Livesay, H. et al. (1996) Human factors in the innovation process. *Technovation*, 16 (4), 173-186.
8. EUIPO: https://euipo.europa.eu/ohimportal/documents/11370/71142/ The+Global+Innovation+Index+2014
9. http://www.history.com/topics/world-war-ii/bombing-of-hiroshima-and-nagasaki
10. On the *Swatch* (checked on Feb 26, 2018): https://www.bloomberg.com/news/ articles/2017-11-21/how-swatch-started-a-revolution-history-of-fashion-watches
11. Dr. Gerald Moeller, private communication.
12. http://onlinelibrary.wiley.com/doi/10.1111/fima.12205/pdf, on line as of January 29, 2018
13. Haour, G. (2004). *Resolving the Innovation Paradox*. Palgrave: London.
14. https://computer.howstuffworks.com/10-failed-google-projects.htm (checked on Feb 18, 2018)
15. Soiz, L. et al. (2017). *China's new sources of economic growth: human capital, innovation and technological change*. Australian University Press.
16. Haour, G. & von Zedwitz, M. (2016). *Created in China - how China is becoming a global innovator*. Bloomsbury: London.
17. Binder, G. (2008). *Science Lessons*. Harvard University Press.

18. Haour, G. & Miéville, L. (2011). *From Science to Business*. Palgrave: London. The book website is : www.sciencetobusiness.ch
19. OECD (2017). R&D Statistics. Paris.
20. Courses for TTO staff, from ASTP-Proton: https://www.astp-proton.eu/events/training-courses-2/
21. Intellectual Property course design manual, European Patent Academy (EPO, 2017).
22. Cannady, C. (2013). *Technology Licensing & Development Agreements*. Oxford University Press.

Georges Haour, PhD, is a Professor Emeritus at IMD, Switzerland

ON RESEARCH

Save the Date

RESEARCH FORUM 2019

TRUST IN INSTITUTIONAL INTERACTIONS

Bridging the Gap: Partnership,
Resources and Innovation

Wednesday, October 16th 2019
FER, rue de Saint-Jean 98, 1201 Geneva

EU Geneva

eu | Business School

Global Call for Papers

ON RESEARCH
ONE VISION | ONE NETWORK | ONE JOURNAL

(Third Edition; Fall, 2019)

ON RESEARCH is now inviting proposals for its third edition, aimed to be published tentatively in October 2019, in the form of empirical and theoretical papers, cases, and book reviews in one of its many focus areas.

ON RESEARCH is the flagship, academic, open-access, peer-reviewed journal, publishing the highest quality of scholastic works in the field of applied business research. The periodic review publishes both scholarly and expository articles on a diverse range of subject and thematic areas for an international and interdisciplinary readership. The periodic review is published on a biannual basis, and invites submissions based on global "call for papers." The publication accepts submissions from leading experts, industry leaders, academics, and senior students, which meet the blind screening and peer review criterias set forward by the advisory board.

Types of Contributions

Contributions to ON RESEARCH may be in the form of the following:

1. Original Essays (4,000-8,000 words)
2. Short Articles (1,500-2000 words)
3. Business Cases (upto 3000 words)
4. Book Review (1,500-2,000 words)

Deadlines & Key Dates

- Abstract Submission (250 words): **June 17, 2019**
- Confirmation of Acceptance of Abstract: **June 24, 2019**
- Final Manuscript Submission: **August 19, 2019**
- Peer Review Process/Copy Editing: **August 26 – September 23, 2019**
- Expected Date of Publication: **October 16, 2019**

How to Submit

Send us your abstract/proposal, which should contain the following information:

- The proposed title of the contribution
- Author(s) name(s). Joint contributions are welcome
- The type of contribution (original essay/short article/case/book review)
- Abstract of 250 words
- Short bio of author(s)
- Contact details of author(s)

All submissions are to be made only in MS Word format, and all questions and queries must be forwarded to research@euruni.edu

Note: All manuscripts shall be screened using anti-plagiarism software.

“Trust is not formed through a screen, it is formed across a table.
It takes a handshake to bind humans . . . and no technology yet can replace that.
There is no such thing as virtual trust.”

Simon Sinek

Geneva
Quai du Seujet 18
1201 Geneva
Switzerland
T +41 22 779 26 71
F +41 22 779 26 73
info.gva@euruni.edu

Montreux
Villa Ormond
Rue du Lac 18
1815 Clarens-Montreux
Switzerland
T +41 21 964 84 64
F +41 21 964 84 68
info.mtx@euruni.edu

Other campuses in:

Barcelona
Diagonal Campus:
Diagonal 648 bis
08017 Barcelona
Spain
T +34 93 201 81 71
F +34 93 201 79 35
info.bcn@euruni.edu

Ganduxer Campus:
Ganduxer 70
08021 Barcelona
Spain

Munich
Theresienhöhe 28
80339 Munich
Germany
T +49 89 5502 9595
F +49 89 5502 9504
info.muc@eumunich.com

Online
T +34 93 201 81 24
onlinecampus@euruni.edu

Programs in:

Moscow & Rostov-on-Don (Russian) | Almaty, Astana & Aktobe (Kazakhstan) | Taipei (Taiwan) | Hong Kong, Shenzhen, Shanghai & Beijing (China) | Kuala Lumpur & Kota Kinabalu (Malaysia)

Partnered with:

UNIVERSITY of DERBY

University of Roehampton London

UCAM Universidad Católica de Murcia

Follow us on:

www.euruni.edu

onresearch.ch