# TOWARDS SUSTAINABILITY: REQUIRED COMPETENCIES OF MANAGEMENT GRADUATES

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Abstract: India is transiting to a knowledge society where the goal of business is changing. In this knowledge era business houses are concentrating on people, planet and profit that lead the path towards prosperity, sustainability. Sustainability is developing prosperity, without compromising the life of future generations. There are three pillars of sustainability: social, environmental, and economical. Today companies are integrating ideas of sustainability in their core functions to have business success. With see changes in the country's economy new models of business is coming up. Companies are setting up that are more resilient and thrives in the long term. In a true sense a sustainable business model is a more accepted model in today's business place that generates profit while improving societal and environmental conditions. This has given room for many new opportunities which in turn has given way to the fresh graduates to be more productive and contribute for the development of the organization as well as the nation. To meet the goals of sustainability and sustainable business there are many challenges the management graduates particularly needs to face. The development of a country is directly connected with quality education. The education system in India has to undergo a lot of reformation to produce competent students to match the requirements to drive sustainable development. Existing courses in Management Education needs to be more realistic to realize the needs of sustainability. Currently the success factor of Universities and Colleges is to produce graduates not just with the degree but in addition to it to produce competent prospective candidates for employment or entrepreneurs who can conduct themselves productively and efficiently in the dynamic economy and bring social change. This paper reports a literaturebased analysis of the coverage of the competencies required for considering sustainability aspects for management graduates. The study aims to specify the required competencies for management students to become managers with regards to sustainability, and to provide guidance on how to close the competency gap.

**Keywords:** Competencies, Dynamic Economy, Employability, Sustainable Development, Management Education.

# Introduction

The Education system prevailing today is responsible to produce quality students with appropriate knowledge, skill and abilities called as competencies to face the challenges of business and society. Nurturing people with the right kind of competencies required towards peace, progress and sustainability is the fundamental activity needed for the economic development of the country. Management education can bring reformative changes towards socio-economic development of the country by imbibing required competencies among the would-be business leaders towards a sustainable economy. But it's a matter of concern that our management graduates turned as business leaders are limiting their attention only to the business. Business is integrated to society and at this juncture much more is expected from a management graduate. Specific competencies are needed by every Management graduate to get employed or become entrepreneurs and contribute to the sustainable development of the country having in mind for the wellbeing of the people inside and outside of the organization as well as the ecosystem or the planet for the present and the future generations.

Most large companies acknowledge the need to be more responsive to the shifting societal expectations, to be better able to establish trusting relationships with stakeholders, and to become more open and accountable. And yet those same companies often struggle to translate good intentions into good practice. In no small way this is due to the lack of any serious, practical guidance addressing the outmoded way in which leaders tend to be selected and developed. Its high time management schools bridge that "sustainability competency gap " among the graduates .

Business as usual won't get the job done – and sustainability as usual won't suffice. If we are to expect climate change, build truly fair and inclusive economic growth, and navigate a radically reshaped world, it is time for a change. Businesses that thrive in the future will be those that figure out how to harness these changes to address real human needs – placing sustainability at the heart of business strategy. And to make it possible management education plays a key role. The additional responsibility of every management institute is to educate the graduating students to be thought leaders, social entrepreneurs and drive sustainable development. Due to the increasingly complex and dynamic nature of organization and business because of digitalization, technological advancement along with concern for humans, there is change in business opportunities which need to be identified or in most cases opportunities to be created and utilized in the most productive manner. Thus, there is a need that the business schools along with imparting relevant, current, and cutting-edge knowledge, impart the essential competencies needed by the students to integrate people, profit and planet and to expand their scope of functioning after obtaining a management degree.

### 1. Objectives of the study

The study was planned with the following objectives:

- 1. To identify the Competencies required by the management graduates to drive sustainable development.
- 2. To assess the influence of current management education in motivating management students to become a social change agent.
- 3. To identify existing competency gap towards corporate sustainability and identify strategies to addressed it.
- 4. To create awareness among management students regarding sustainable development and clarify their role in it.

### 2. Literature review

### Sustainability and Business

Sustainability is most often defined as meeting the needs of the present without compromising the ability of future generations to meet theirs. It has three main pillars: economic, environmental, and social. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The goal of which is to achieve balance/harmony between environment sustainability, economic sustainability and socio-political sustainability.

Together with the tendencies of earlier centuries, corporations operating in the 21st century need to face new, ever more significant challenges. One of the most striking challenges is sustainable development, or sustainability in itself, as it has become a central issue for today's corporations and it also has an outstanding impact on the majority of a corporation's business operations. According to Kerekes and Wetzker (2007), corporations bearing in mind such criteria for sustainability as economic goals, social orientation and environmental awareness have to be prepared for the fact that, while social and environmental standards have become more stringent, the social and environmental nature of their activities will eventually be one of the most important factors of their competitiveness.

While the idea of sustainability deeply influences the life of corporations, they cannot state – especially in the Eastern European countries – that their activities are in line with the principles of corporate sustainability, mainly because of the lack of related theoretical and methodological knowledge and leadership shortcomings.

The definition of corporate sustainability states that economic interests cannot be isolated from social and ecological limits and interests. For example, sustainable business takes into account the interests of future generations, biodiversity, animal protection, human rights, life cycle impacts, and principles like equity, accountability, transparency, openness, education and learning, and local action and scale. Innovation for sustainability involves networks of actors with very different perspectives, interests, and cultures spanning different levels and contexts. Gyula Fullop (2012).

# 3. Competencies needed by management graduates to drive Sustainability

Corporate leaders can be considered competent who, firstly, take the responsibility of operating their corporations in a broader sense that goes well beyond economic responsibility and integrates social and environmental concerns as well, and secondly, have the ability to integrate elements into their everyday decisions and activities that allow the practical manifestation of their broader responsibility, as was noted by Szegedi in his study (2011).

Table 1 below shows the competencies that underscore the work of various authors and that support the competencies in innovation for corporate sustainability. In this table, six comparable competence categories are used. This competency is in the fields of systemic thinking, learning, integrating, developing alternative models and methods, networking and building coalitions that span diverse groups.

From the relevant literature we can see that adopting approaches to sustainability requires, broadly, three core skills: a flexible mindset and strategic and technical capabilities.

Sustainability requires a 'can do' attitude (in essence, a positive mindset) which sets the tone for overcoming 'business-as-usual' attitudes. Moving away from 'business as usual' requires a cultural change, but without personal commitment there can be no industry-wide change. So, at its most fundamental, sustainability is about exploring and identifying personal values. More often than not, there is a strong correlation between personal values and sustainability values. Moreover, aligning personal values with organizational values to provide a united vision is a key part of the sustainability learning journey.

# Table 1.

Managerial Competencies required towards organizational competencies in innovation	
for corporate sustainability	

Authors	sion		nc		gragt						sb		u U			erts	er	
	European Commission (2001)	an (10	Clarke and Roome (1995)	et al. 03)	Partidario and Vergragt (2002)	men 95)	VROM-raad (2002)	t al. 95)	oold 95)	wk 99)	Boons and Berends (2001)	ma 95)	Shilling and Osha (2003)	Martens et al. (2003)	Foster and Green (2000)	Dyllick and Hockerts (2002)	Winter and Steger (1998)	Wynne (1995)
	pean Com (2001)	Roome (2001)	irke and Ro (1995)	Sweet et al. (2003)	lario and V (2002)	Remmen (1995)	VRON (20	Rip et al. (1995)	Herbold (1995)	Hawk (1999)	ons and Be (2001)	Jelsma (1995)	illing a (20	Marten (20	ster an (20	ick and Hc (2002)	inter ar (19	Wy (199
Managerial Competencies	Euroj		Cla		Partid						Boc		Sh	^	Fo	Dyll	Wi	
1. System thinking	v	v	v	v			v			v				v				
<ol> <li>Competencies for learning and developing</li> </ol>																		
<ul> <li>a) To learn and translate learning into action, to deal</li> </ul>	v	v	v	v	v	v	v	v	v		v	v				v	v	v
effectively with the																		
requirements, values, assumptions and cultures of																		
various interacting network																		
actors, to successfully																		
understand and execute innovation activities with																		
the network																		
<ol><li>Competencies for integrating</li></ol>																		
business, environmental and social problems, perspectives																		
and information																		
a) To integrate the	v	v	v	v	v	v		v					v					
perspectives and knowledge of different actors in the network																		
b) To integrate traditional	v	v					v	v						v		v		
criteria of efficiency with eco- and socio-efficiency																		
and effectiveness																		
<ol> <li>Competencies to develop alternative business models,</li> </ol>		v			v		v			v								
methods and trajectories that																		
are more synthetic, dynamic,																		
and pragmatic, to enable radical or systemic innovation																		
5. Networking and social																		
competencies																		
<ul> <li>a) To develop social relations with (culturally) unfamiliar</li> </ul>	v	v	v	v	v	v			v	v	v	v			v		v	v
actors in- or outside the																		
organization for																		
information gathering, experimentation and																		
negotiation																		
<li>b) To create and cultivate broad, diverse, inclusive</li>	v	v	v		v	v			v		v	v	v		v			
networks for learning to																		
cope with uncertainty and																		
for gathering information																		
and diverse approaches from actors																		
c) To build trust, a shared		v		v	v					v	v							
vision and agreement on basic values																		
d) To involve local actors &	v	v				v			v				v	v				
6. Coalition and collaboration																		
building competencies																		
<ul> <li>a) To promote joint action by many different (local)</li> </ul>	v	v	v	v	v	v	v	v	v			v	v	v	v			
stakeholders, an open																		
process of innovation and																		
adaptation, building a shared vision, supporting																		
collaboration and collective																		
problem finding																		
<li>b) To integrate differences in information processing and</li>				v														
decision styles, to deal with																		
differences in the width of																		
focus and the desired degree of maximization of																		
the result																		

Source: 'Club of Economics in Miskolc' TMP Vol. 8., Nr. 2, pp. 17-22, 2012.

#### Table 2.

Primary skill set and themes for sustainability

Theme	Primary skill sets					
	1.1 Values, motivation and action					
	1.2 Awareness of core principles and themes					
1 Mindset	1.3 Communication and collaborative working					
	1.4 Systems and futures thinking					
	1.5 Leadership					
	2.1 Business case and strategy					
2 Strategy	2.2 Change management					
	2.3 Innovation					
	3.1 Technical Level 1					
3 Technical	3.2 Technical Level 2					

Source: Defining a profession: core competencies for Sustainability, Stephen Bickell, July 2013.

Taking a responsibility for sustainability requires adequate competencies. These "sustainability competencies" have most explicitly been addressed in the extensive literature on "Education for Sustainable Development" (ESD). A report on ESD in European higher education states: "The competency required for Sustainable Development is manifold, but the basis of it is relevant knowledge and an ability to think, act and take responsibility out of a holistic understanding of the preconditions of life on earth in a global perspective. It includes the ability to continuous learning from others and the ability to cooperate over disciplinary and professional borders, to think and analyze critically and to solve problems seeing possibilities and limitations in one's processional role. An important ability is also that of complex thinking and using specialists for different areas leaders need to have the ability to create enthusiasm and to think in new creative ways.

A frequently cited concept in Education for Sustainability Development literature is that of "Gestaltungskompetenz" (shaping competence). This Gestaltungskompetenz encompasses a set of key competencies which are expected to enable active, reflective and co-operative participation toward sustainable development. Learning processes which are based on this approach enable students to have the skills, competencies and knowledge to "modify and shape the future of society, and guide its social, economic, technological and ecological changes along the lines of sustainable development".

De Haan identified eight (sub-)competencies of the "Gestaltungskompetenz", that later developed into the following set of key competencies:

- Competence for perspective-taking: Being open-minded and creating knowledge from new perspectives.
- Competence for anticipation: Being forward-looking in analysis and evaluation of developments.
- Competence for interdisciplinary knowledge acquisition: Acquiring interdisciplinary knowledge and acting on it.
- Competence for dealing with incomplete and overly complicated information: Recognizing risks, dangers and uncertainties and being able to evaluate them.
- Competence for cooperation: Being able to plan together with others and take action.
- Competence to deal with individual decision-making dilemmas: Being able to handle conflicting goals when reflecting on action strategies.
- Competence for participation: Being able to take part in collective decision-making processes.
- Competence for motivation: Being able to motivate one's self and others to take action.
- Competence for reflecting on goals: Being able to reflect on one's own goals and those of others.
- Competence for moral action: Being able to use ideas of justice as a basis for making decisions and acting.
- Competence for independent action: Being able to independently plan and act.
- Competence for supporting others: Being able to show empathy towards others.

The development of knowledge and understanding has both personal and shared elements to it. Social interaction allows one to relate or mirror his or her ideas, insights, experiences and feelings to those of others.

Another component of sustainability competence is the ability to cope with uncertainty. The professional working on sustainable development applies his/her competencies in a context of uncertainty. And instead of denying this inherent nature of the context, by striving towards minimizing uncertainty and maximizing predictability, it might be more fruitful to accept uncertainty as an inescapable condition, and cope with it

In many ways' leadership skills encapsulate the skills that are required to embed sustainability. It is important to define what is meant by leadership. Effective leadership is as much about championing sustainability as about fulfilling the traditional role of great leaders. Leadership skills are required for sustainable economy which includes the ability to consistently work towards a longer-term vision of how the organization might contribute to a sustainable economy, together with an ability to inspire people – both inside and outside the organization – to act on corporate sustainability. Six separate corporate sustainability leadership competencies: ethics and integrity; external awareness and appreciation of trends; visioning and strategy formulation; risk awareness, assessment and management; stakeholder engagement; and flexibility and adaptability to change.

Competency	1	2	3	4	5	6	7	Definitions	How difficult to develop?
Perspective								Takes an all encompassing view of a problem or challenge. Has a broad range of interests, can see the bigger picture.	Moderate
Strategic Agility								Can articulately paint credible pictures and visions of possibilities and likelihoods. Can create breakthrough strategies and plans.	Harder
Politically Savvy								Maze bright, manoeuvres effectively through complex political situations. Views corporate politics as part of organizational life.	Hardest
Integrity & Trust								Is widely trusted. Can present the unvarnished truth in an appropriate and helpful manner.	Easier
Ethics and Values								Adheres to a set of values in good and bad times. Practices what she/he preaches.	Moderate
Managing Vision and Purpose								Communicates a compelling sense of core purpose. Makes the vision sharable. Creates mileposts & symbols to rally support for the vision.	Moderate
Understanding others								Understands why groups do what they do and can predict behaviours across different situations. Knows how to motivate them.	Hardest
Managing Diversity								Manages all classes of people equitably. Deals effectively with all races, nationalities, cultures, disabilities, ages and both sexes.	Hardest
Priority Setting								Can quickly sense what will help or hinder accomplishing a goal. Eliminates roadblocks and creates focus.	Easier
Managing Through Systems								Designs pratices and processes allowing remote management. Is comfortable letting things manage themselves without intervening.	Harder

Table 3.

Critical leadership competencies to drive sustainability

1= not important and 7= mission critical

Korn/Ferry uses the Lominger competency framework for leadership benchmarking. We refer to

the book FYI For Your Improvement as a reference guide and suggested reading for executives.

Source: http://cecodes.org.co/site/wpontent/uploads/publicaciones/Rol%20del%20Negocio/Cultura% 20Empresarial/PeopleMatterLead.pdf.

Many of the leadership skills for sustainability are variations of the classic leadership and management skills, i.e. analysis, priority-setting and relationship building. However, to navigate the transformation toward sustainability, leadership skills have to be directed at a broader and more complex set of issues and networks.

Businesses will have to be networked with governments and society, and we need people who know how to do that." Korn/Ferry refers to leadership competencies as the "DNA" of leadership. There is no perfect combination, but different leadership styles and skill sets are better adapted to different missions. Korn/Ferry's Peter Everaert says: "It would be too simplistic to promote a single ideal leadership profile to drive sustainability. One has to recognize that the best leadership style is always function of the challenge, the specificity of the organization and the environment in which its operates".

Weybrecht (2010) shows how a strategy sits at the hub of a giant sustainability jigsaw puzzle and provides the glue that ties all aspects of organizational behavior together. The corner pieces of the puzzle are the four key areas which an organization should use as a basis from which to address sustainability. At the heart of the jigsaw is strategy, while the pieces in between help tie it all together.

### Table 4.

All inclusive sustainability business model

<b>Ethics</b> Providing strong, clear governance to deliver ethical behaviour, transparent stakeholder relationships and effectively manage environmental economic and social impacts on the communities they serve	Accounting Building systems, establishing sustainability targets and objectives and providing sustainability information to influence decision-making	<b>Economics</b> Helps to understand the macro environment which influences the business. Explore mechanisms to allow companies to internalise costs to society and contribute positively to economic and social development
<b>Finance</b> Considering long-term opportunities that responsibly and effectively manage their environmental, economic and social impacts	<b>Strategy</b> The right approach for the right company implemented in a way that mobilises the whole company	<b>Marketing</b> Designing and promoting sustainable options and inspiring change
<b>Entrepreneurship</b> Identifying and exploring new sustainable (business) solutions both inside and outside the organisation	<b>Operations</b> Taking responsibility for all social and environmental impacts across the lifecycle of a company's products and services	Organisational behaviour Translating sustainability policy into action and creating a work environment where sustainability is embedded in the culture of the organisation including every aspect of the employee's lifecycle from recruitment to retirement

Source: Defining a profession: core competencies for Sustainability, Stephen Bickell, July 2013.

Because of its wide-ranging nature many organizations find it extremely difficult to place sustainability effectively; indeed, sustainability cannot be covered by any one single person or department in an organization. The responsibility for sustainability therefore lies principally at an individual level, not with a department, or sustainability expert. It is not 'someone else's problem'. Understanding this goes a long way to developing a strategic response. Sustainability competencies among management graduates must include all these above-mentioned aspects.

# 4. Competency and skills gap profile of Management Graduates

In the literature a variety of competencies are mentioned that are required for graduates to focus on sustainability.

Field (2002) believed a graduate should appreciate one's role in the organizational environment and "understand workplace relationships, dynamics and interdependencies and values that align with enterprise values". Magill and Herden (1998) emphasized the role of ethics as a set of basic values, including honesty and respect for diversity, which guide managerial behavior. To exhibit ethical and professional behavior is important (Bell, 2004, as

cited in Hurt, 2007). Robinson (2005) believed ERP is increasingly important to new graduates as professions and businesses become aware of their social duties.

Lifelong learning is a key competency Managing one's own learning in the context of business needs; using networks (people and technology) to support one's own learning; willingness to take advantage of learning opportunities; support others in their learning and contribute to the learning environment (Field, 2001). Life experience teaches a long which can drive towards sustainability. "Any graduate with additional life experience... is considered to have added value. It shows they have developed some skills which can be useful for the role we are recruiting either directly or transferable" (CIHE, 2008, p. 11). To address the issues of sustainability **Cultural and diversity management is a priority skill**. Diversity is defined as to "learn from and work collaboratively with individuals representing diverse cultures, races, ages, gender, religions, lifestyles, and viewpoints" (Casner-Lotto & Barrington, 2006, p. 16). **Adaptability & change management is highly needed to strive competency.** Be open to new ideas; showing ingenuity in solving problems and addressing challenges; openness to new situations and possibilities; the capacity to learn and change; being flexible and taking on board feedback (Field, 2001).

Providing vision, setting goals, accountability, driving change, motivating and supporting others and monitoring performance (Field, 2001). Ability to manage and motivate others (AIG, 2006b; Pedagogy for Employment Group, 2004). Brownell and Chung (2001, masters) argued that competency-based education provides the "most effective means for delivering on the promise of preparing graduate business students to become leaders in a truly global market place" (p. 143).

### 5. Findings and suggestions

The role of Management Education is vital in producing competent human resources with adequate business knowledge and exposure that leads to sustainable growth. Management institutions play a prominent role in not just generating business graduates but are constantly involved in the process of developing efficient employees. Therefore, with reference to the competencies identified the following suggestions are recommended towards maximizing impact of management education system on employability and entrepreneurial competency development and effective transformations from a student to prospective candidates to drive sustainable development.

- The regulatory bodies like University Grants Commission (UGC) and Universities must involve continuously in designing new programs to develop competencies that aims for sustainability.
- Curriculum should be revised continuously with the changing business needs.

- New specializations are needed to be implemented in sustainability and value-based education.
- Assessing the student ideologies in developing required competencies through focused assignments activities.
- Management education in India must be student-centric. It must be customized as per the aspirations of the students. The activities in the classroom must be to widen their competencies. It should cater to students as per the industry requirements. And encourage innovation, creativity in education that can make them thought leaders, social entrepreneurs.

Developing the right kind of competencies are vital to corporate competitive advantage through sustainability. Leaders in sustainability roles often have specific expertise in human rights, climate change or environment, health and safety for example. However, the role of a technical specialist is distinct from that of a leader who needs to search for new solutions.

# 6. Conclusion

The strategy for sustainable development aims to integrate people inside the organization, outside the organization and the planet. And aims at bringing harmony between humanity and nature despite technological advancement, digital world etc. Sustainable development is attempting to bring synchronization between the two antagonistic situation that is humanistic and digitalization.

In this specific context of sustainable development and education, every educational institute must help in competency building of competent graduates to be employees or become entrepreneurs who can become the change agents. To face the challenges of sustainable development the role of every management student as a would-be manager of a corporate world is unique. Inclusion of competencies to the managers no doubt will help the business organizations to contribute the best towards sustainable Economic Development of the country.

Competencies for sustainability need to be all inclusive and incorporate the need for uncompromising delivery which should create business imp, environmental impact and social impact.

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