
New global dimensions of business excellence

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Abstract: This study explores the concept of business excellence and provides a new dimension to global business excellence. Drawing on extant literature, the study traces the history of business excellence and seeks to answer the question of how society views business excellence in the world today. The grounded theory research method is used to conceptualise a model of new global excellence showing the role that ethics play in business. The findings are that there are conflicting accounts in literature and praxis in relation to the role of business excellence models in business. Some see it as a strategic model while other consider as an operational tool. The findings suggest there is the need for a resultant shift in emphasis from quality and award systems and rather consider the tactical role of the business excellence models in organisations and the implications for quality training and development in organisations.

Keywords: business excellence; business ethics; new global excellence; new trade theory.

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1 Introduction

Looking at the way businesses are conducted in our world today, there appears to be a great shift in the business world, from emerging markets to the well-established economies. This calls for a deep introspection of business mores, practices and contents among which the concept of excellence stands out almost as a by-word for businesses – small, medium and large (SML) scale. The world is already one decade into the 21st century, which appears to be a different business century as compare to the 18th, 19th, and 20th (Friedman, 2012). Among other things, it appears to call for new business standards, a type, which is influenced by consumer power, discerning and a demanding world-wide consumer community. This requires businesses to scale new heights of business excellence (BE). The application of BE, through an understanding and use of models, criteria, concepts, and values, has wide appeal to many organisations (Manna et al., 2011).

Discernibly, businesses of all sorts have to reinvent themselves in the seemingly dynamic and seamless 21st century which is seen as an altogether new business world, marked by the rise of new economic and business powers such as China, India, Brazil, South Africa and countries of the Gulf Corporation Council (GCC).

At the threshold of the 21st century, the world witnessed a good start with information technology and economic upheavals that appeared to make wonderful and unimaginable strides by proving to be great business help-mate, extending the business frontiers to new ones. The world saw the emergence of the new Euro currency zone. Then, the triumph of the free-economy and a free-trade model, followed by the World Trade Organization (WTO) in 1995 to supervise free flow of trade in goods, services and investments across borders instilling energy into foreign trade and investments. This orchestrated the conduct of business to let it appear things were on course and businesses were getting so good. Ironically, the terrorists struck the World Trade Center (WTC) in New York, in the USA or even world symbol of business spirit 9/11/01, devastating the great state of the USA and opened up a new chapter of US wars in Iraq and Afghanistan, throwing the US economy into a mess and disorder. Notwithstanding, the US economy seemed to be doing well with housing boom and financial ‘Innovation’, as mortgages backed securities, which latter proved to be disastrous. The US in an ambidextrous manner combine war and peace and growth. At the same time, China was making great leap forwards in growth and so was India. Then, came the collapse of the financial giant (\$639 billions) on the 15th September, 2008 (Mamudi, 2008; Ahmed, 2013) and setting of the global financial crisis. This occurred in the mist of this highly seemingly changed economic and business world, with notable BE models. Hence, there seems a need for businesses to re-examine and recast themselves in a different world and give new interpretations, meaning and dimensions to various businesses concepts. For businesses to genuinely excel, requires, first and foremost, an attempt to confront and give business models, concept an altogether new interpretation and understanding to take businesses

closer to the people and greatly contribute to the welfare of the greater consuming public with lack of unethical issues.

This study attempts to examine new understanding of the cardinal businesses concept of excellence, with which the world of businesses so closely allied with. The question is, what is society's view of BE today? We attempt to confront the question by re-investigating some key conceptual models of BE and by sharing our own understanding with the international business and research community. The development of the model flow from a recognition by the authors that, there is still significant gaps in the understanding of what constitutes BE (Dahlgaard-Park and Dahlgaard, 2007; Taticchi et al., 2010). Notably, the conspicuous absence and emphasis on ethical influences on the conduct of businesses.

The key objective of the paper therefore, is to investigate the nature of BE, to take a view of the new business environment and its driving forces and the people's expectation of it. This is done through a review of the ongoing crisis in businesses all over which appears to distance businesses from their people or customers. We examine the need for reorientation of business visions, missions and strategies, and understand the new global dimensions of BE in the changed business environment or globalised business (Rosemann and de Bruin, 2005; Harrington, 2006; Maier et al., 2008). Overall, the note to the new dimension(s) of excellence arising out of the new economic order, the financial crisis of 2008, and its perceived causes and consequences is postulated. We suggest a normative framework that better accounts for measurements, management and delivery of world performance.

In the sections that follow, the review of the literature on existing BE, the new BE, new economy and business, the new trade order (NTO), the crises are presented after which the methodology is described. The development of our model follows and the recommendations and concluding remarks given.

2 Literature review

In this section, literature is revived thematically with a historical account of BE, followed by the new global economy and conduct of business, the NTO and the economic and financial crises of 2008 and its impact on BE.

2.1 Business excellence

BE as a concept has seen many definitions. Gunasekaran (2008, p.15), after review of numerous papers provides an all-encompassing definition as "the outstanding practices in managing the organisation and achieving results, based on a set of concepts such as orientation, customer focus, leadership and constancy of purpose, management by processes and facts, people development and involvement, continuous learning, innovation and improvement, partnership development, and public responsibility".

BE is about developing and strengthening the management systems and processes of an organisation to improve performance and create value for stakeholders (Gunasekaran, 2008).

The concept of BE could be traced back to the 1950s when after the Second World War, Dr. W.E. Deming educated Japanese manufacturing companies to make use of statistical quality control techniques and helped in developing the ruined Japanese economy. Deming focused on market orientation, people involvement and continuous improvement and advocated the plan, do, check, act (PDCA) cycle for continuous improvements. A number of Japanese manufacturers practiced his teachings and experienced dramatic increases in the quality and productivity of their products. As a result, the Union of Japanese Scientists and Engineers (JUSE) introduced the 'Deming Prize', the first globally known BE model, in 1951 to honour Deming (Union of Japanese Scientists and Engineers, 1951).

The improved quality combined with the lowered cost accentuated new international demand for Japanese products in the USA and Europe. By the mid-1970s, Japan was beginning to seriously undermine its American and other Western competitors first in cars, then in a whole range of electronic goods. Then in 1980, the National Broadcasting Corporation White Paper in the USA, entitled "If Japan can, why can't we?" featured Deming's approach to quality which triggered a quality revolution in USA. In the 1980s, major corporations in the USA and other countries began to adopt Deming's principles (Kume, 2002). It was followed by global politico-economic turbulence during the 1980s and 1990s with the dismantling of the Soviet Union, economic liberalisation in China and India, democracy in Latin America and the rise of regional trading blocs. Subsequently, rapid growth in transportation, communication, and computerisation coupled with the use of the internet led to a steep rise in competition across the world. This has compelled organisations to redefine their management systems and policies to get an edge over competitors. With the objective of helping industries to enhance competitiveness in their respective countries, several national governments and industry associations came forward and established national and regional quality awards to serve as BE models (Talwar, 2008).

The existing BEMs have, in most cases, been developed or supported by national bodies as a basis for award programs and for the widespread adaption of the principles and methods of TQM and BE. Today, more than 80 national and state/regional awards base their frameworks upon the Malcolm Baldrige National Quality Award (MBNQA) criteria or the European Foundation for Quality Management (EFQM)/European Excellence Award criteria (Mann et al., 2011), and around 30,000 European organisations were using the European excellence model in 2006 (Heras-Saizarbitoria et al., 2012). Table 1 provides a summary of business models based on the UN regional classification.

Table 1 BE models/national quality awards by UN region

<i>Region</i>	<i>Number</i>	<i>Countries</i>
Sub-Saharan Africa	3	Mauritius, South Africa, Southern African Development Community (SADC)
East Asia and the Pacific	17	Australia, Brunei, Republic of China, Fiji, Hong Kong, Indonesia, Japan (2), Republic of Korea, Malaysia, Mongolia, New Zealand, Philippines, Singapore, Thailand, Vietnam, International Asia Pacific Quality Award
South Asia	7	India (4), Nepal, Pakistan, Sri Lanka

Source: Talwar (2008), Calingo (2002) and UNECE (2004)

Table 1 BE models/national quality awards by UN region (continued)

<i>Region</i>	<i>Number</i>	<i>Countries</i>
Europe and Central Asia	46	Austria, Belarus, Belgium, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany (2), Greece, Hungary, Iceland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malta, The Netherlands, Northern Ireland, Norway, Poland, Portugal, Romania, Russia (2), Scotland, Serbia and Montenegro, Slovakia, Slovenia, Spain (2), Sweden, Switzerland (2), Turkey (2), UK (2), Ukraine, Wales, European Union (EQA), Iberoamerican Quality Award
Middle East and North Africa	9	Egypt, Iran, Israel (2), Jordan, Morocco, Oman, Qatar, UAE
USA	12	Argentina, Brazil (2), Canada, Chile, Colombia, Costa Rica, Ecuador, Mexico, Paraguay, Peru, Uruguay, USA (2)

Source: Talwar (2008), Calingo (2002) and UNECE (2004)

In chronological order, Table 2 presents major contributors to the concept of BE from its evolution to the recent decade.

Table 2 BE major contributors

<i>Contributor</i>	<i>Year</i>	<i>Core value</i>
Deming	1951	Constancy of purpose; quality process improvement; cease dependence on mass inspection; long-term relations with suppliers; continuous improvement in all systems; comprehensive training; leadership; drive out fear; Break barriers between departments; eliminate slogans, goals and targets for workers; eliminate numerical quotas; remove barriers to 'pride of workmanship'; vigorous education and retraining involve everyone in the transformation
Peters and Waterman's	1982	In search of excellence
Hayes and Wheelwright	1984	Restoring our competitive edge: competing through
Peters and Austin's	1985	Care of customers' is the external performance measure and the 'leadership (MBWA)' and 'constant innovation'
Schonberger's	1986	Book world class manufacturing
Fornari and Maszle	2004	In the Xerox business excellence model. The 'No. 6 excellence criteria: business.
The EFQMs business excellence model and the corporate social responsibility	1991	Results orientation; customer focus; leadership and constancy of purpose; management by processes and facts; people development and involvement; continuous learning, innovation and improvement; partnership development

Table 2 BE major contributors (continued)

<i>Contributor</i>	<i>Year</i>	<i>Core value</i>
Hamel and Prahalad's	1994	Competing for the future
Porter's	1998	Competitive strategy
Malcolm Baldrige Excellence Model	1998	Visionary leadership; customer-driven excellence; organisational and personal learning; valuing workforce members and partners; Agility; focus on the future. Managing for innovation; Management by fact; societal responsibility; focus on results and creating value systems perspective.
Collins'	2001	Good to great
Dahlgaard-Park and Dahlgaard	2007	World class measures

From this supporting literature, it is evident that the notion of BE points to the fact that it is the combined excellence of the internal business capabilities and the externally resultant measurable performances. The BE necessitates a fundamental criterion for any BE model to be conceptually acceptable – “business excellence models must measure and drive both internal capabilities and external performance that can really last”. Although the research community has no sign of shortage in attempts to create all-encompassing and universally applicable models, what is apparent is that “there has been no single agreeable best design of excellence model so far that can hold infallible against all or any criticisms”. We argue that “any viable normative framework for business excellence must therefore be able to accommodate measures that are situation sensitive”. Clearly that not all BE models meet this requirement, which then leads to a potential research gap to be considered.

2.2 *The new global economy and conduct of business*

The new global economy can be said to be structured along the lines of product and pricing, blocs, competition, and customer focus. It is remarkable that there appears to be altogether new and novel ways of doing business, all over, the key to which seems to be product and price excellence. There are interesting advertisements of ‘more for less’ or ‘more value for money’ that invariably catch the eye of the discerning consumers of today. There is also the rise of new economic and business powers on the global landscape – China, India, Brazil, South Africa, and UAE – which appear to swell by competition. It seems to be a text-book case of competition (Stiglitz, 1997), say, of the ‘survival of the fittest’. Businesses appear to have had it never so good, and so also their customers. It is a win-win or double win business situation, both internally and externally.

Long ago, Smith (1776), the father of economic science, is said to have propounded that the market is the only limiting factor for economic and business expansion through the division of labour and the economies of scale, for which he introduced the term *Laissez-faire*, which seems to be the leading business principle today and, the free-enterprise system appears to have survived the dark predictions regarding the collapse of capitalism due to lack of sufficient demand following the pauperisation of the masses. There is, no doubt, widespread poverty, but the poor do not make the bulk of the

population and they are on the increase interestingly, competition has no competition from its rival systems, which, however, should not make the system reckless and completely self-centred and reckless (Rajan, 2010).

In the dynamic UAE economy, for example, poverty is an insignificant phenomenon with the Emirates given to grown with welfare and the picture of the UAE economy is that of a thriving and bustling business economy, or business as usual, by and large, even amidst the global financial or economic crisis, which is said to be an outcome of bad financial business behaviour or 'un-business-like' business executives behaviour. On the whole, the economic and business picture that emerges is a healthy one, thanks to the new economic and business ideology of globalisation (Schiller, 1997). In respect of excellence also business should imbibe the new business spirit, that of reaching out to global public, and evoking popular faith, trust and appreciation of performance.

Not long ago, the world was divided into capitalist, socialist and mixed economy camps, or was tri-polar, with the second and third camps not able to measure up to the capitalist camp in economic prosperity and economic performance. The camps, or blocs, it is well known, were symbolised by the USA-EU, Russia-China and India, respectively. The phoenix-like rise of Japan and Germany from the devastation of World War II was by acknowledged capitalist path, so also the post-war prosperity of the USA and Western Europe. What of China threatened tiny Taiwan? Or Hong Kong, again under the spectre of China, experimenting with communes and all that? The ASEAN, a world economic and trade bloc to reckon with. And, it is well known UAE in some 44 years of its founding attracting worldwide attention. These success stories had the 'demonstration effect' on the rest of the underdeveloped world, the demographic giants of which are China and India which too had to fall in line. The rise of China in the last 38 years of its economic liberalisation (1978) to be a world economic power with continuously clocking a 10% plus rate of economic growth is too well known to be recounted here. The result of economic liberalisation of India of the last 25 years (1991–2016) is a New Indian Economy of a heightened economic growth of 8%–9%, from the previous one of 3%–5% (Ahmed, 2009, 2013). It is an economy of greatly expanding business horizons (FICCI, 2010). In continuation of economic liberalisation, the Government of India has plans for FDI in more and more sectors of the economy, including retail trade, India with 1.25 billion people is a good test case of economic and business liberalisation. The new economy is expected to be of excellent type and of optimum economic performance, with contribution towards social good and welfare, as they may have a century long run.

Recently, it is the free market economy and globalisation that has been seen to best deliver goods and promote equity among nations (*The Economist*, 2001). There are, no doubt the critics of the new economic and business order of free enterprise and globalised business and it is for the Business to meet the criticism of its new order of unfettered and hyper competition (Kotler and Keller, 2011) which may be seen to have a number of failed businesses at any given time (Held et al., 2005). It is for business to rise up to the occasion and set an example in good management and excellence. It is the world at large which is the new business stage. It must lead in research and development (R&D), human resource management (HRM), customer relations management (CRM) and environmental concerns, among other things, poverty reduction and social welfare through the bottom of the pyramid marketing. With these, BE then becomes a means of measuring customers', employers' and shareholders' satisfaction simultaneously within an organisation.

Now, it is perceived that for many companies, to remain leaders in a dynamic and unpredictable marketplace, it is necessary to achieve BE in four key areas of enterprise. They need to:

- 1 maximise stakeholder value
- 2 achieve process excellence
- 3 improve organisational learning
- 4 delight the customer (Kanji, 2002; Miguel, 2008).

The new business order of many challenges and global opportunities and weighty responsibilities is distinguished by many characteristics of its own (Paul, 2010), which are the fields of Business and Excellence. Prior to the calamitous 2008, there was a feel good factor all-around, with a shining business world marked by a number of encouraging factors. These factors can be categorised along the line of social, legal, environmental, economic, political, and technological (Amponsah, 2015). The categorisation is tabularised for the factors in Table 3.

Table 3 Classification of factors within then new business economy

<i>Social</i>	<i>Legal</i>	<i>Environmental</i>	<i>Economical</i>	<i>Political</i>	<i>Technological</i>
Poverty focus	Deregulation	Environmental concerns	International finance	Branding	Innovation
Discounts	Global competition	Global competition	Internationalism	Brand ambassadors	Information technology
Gifts	Consumer financing	Buyer markets	Globalisation	Celebrity marketing	Nano technology
Multi-quality products	Product improvement	Emerging economies	MNCs	Excellence	E-marketing
Package sales	Consumer financing	Research and development	Foreign direct investment	Multimedia Advertising	Online trade
Festival offers/special sales	Consumer financing	BOP concerns	Market segmentation	Mass marketing	Business process outsourcing

Source: Author's self-developed table

It is an interesting thing to investigate or know as to where does excellence stand in this multi-faceted and complex business situation. The concept of excellence needs to be worked out in the context of the new business order got accentuated by a new international trade order throwing open the domestic markets to foreign exports or free imports. If anything, excellence is more important in respect of international trade and business, the area of business being vast and the degree of competition more intense. The degree of competition is $(N - 1)$, 'N' standing for the number of trading nations and '1' for first class competitors. The problem too of BE gets accounted with the freedom of trade or free trade order. For, international business customers are more demanding and discerning, especially from the developed countries which are the principal destination of world exports. Thus, a word or two in reference to the new WTO international trade order and also about global financial and economic crisis that appear(s) to reinforce or double and triple the case for BE, marking out its dimensions and reinterpretations. In the new

business situation, businesses are expected to be models of excellence. There is a new international trade order for BE to consider. Thus, all over the business world one is met with the incredibility of Excellence, to stand the internal and external winds of competitions.

2.3 *The NTO*

Over three score years ago, representatives from 23 countries signed the General Agreement on Tariffs and Trade (GATT). Participating nations included the dominant powers of the time (the USA and UK), countries whose stardom in world trade would surface only at the end of the century (Brazil, China, and India), and others whose role in the world economy would rapidly diminish in subsequent years (Burma, Cuba, Lebanon, Syria, and Southern Rhodesia, now Zimbabwe). Six members of the European Union (Belgium, the Czech Republic, France, Luxembourg, the Netherlands, and the UK) were among the original signatories. Due to historical accident, or more precisely the unwillingness of the US Congress to ratify the Charter for an International Trade Organization, the GATT served as the foundation for world trade rules until superseded by the establishment of the WTO in January 1995. The GATT draftsmen drew heavily on precedents from the US Reciprocal Trade Agreements Act of 1934 as well as the experience of the British imperial preferences. By design and by participation, the GATT had a distinct transatlantic orientation – though at the onset the *primus inter pares* (first among equals) was the USA; the dominant economic and military power in the Western world.

The first decade of the GATT could be called the age of US enlightened self-interest. Half of the eight multilateral trade rounds under the GATT took place during this first decade and primarily produced substantial reductions in US tariffs. For example, the first GATT Round in Geneva (1947) resulted in US commitments to cut its industrial tariffs by 26% and arguably helped kick start the economic recovery from the devastation of the Second World War. US trade liberalisation, in conjunction with generous amounts of development assistance through the Marshall Plan and other programs, provided an ‘economic stimulus package’ to help rebuild the war-torn economies of Western Europe and thereby ensure a stable economic base for democratic governance and a reliable buffer against Soviet expansionism. Indeed, these foreign policy and security interests were key drivers of US unilateral liberalisation during the first decade of the post-war period.

The evolution of free trade appears to have reached its pinnacle with the establishment of the WTO, in 1995 after eight years of hard bargaining from 1986 to 1994 at the 8th GATT Round at Punta Del, Uruguay – the Uruguay Round.

The NTO then surfaced with tenants based on a number of agreements ranging from quantity restrictions (QRs) to Regional Trade Blocs (RTB) which were at that time to be under the auspices of the WTO (Kruger, 1998). The result of the NTO is a vibrant, dynamic international trade flows among the countries. It is not the time to take a stock of the WTO and the new world trade order. It encouraged of innovations, investments, new technologies, trade in services, fair, product quality and prohibitive of unfair trade practices, under-pricing, dumping, trade out, sourcing, etc. (Rezaie, 2010). This presumably became another or a new demand for BE.

However, this first principle or agreement of the NTO or international business faced some challenges and the major focus of QRs and custom bars or barriers – the two

principal devices of restrictive trade that set at naught the advantages of international trade based on the principle of comparative advantages or costs – evaporated so fast. As said, it is a more challenging job to operate in the international trade arena with international trade taking different aspects of competitions.

As a result of the challenges faced by the underlying principles of the NTO, countries were forced bond themselves into different trade blocs as escape routes. The economic and dynamics of trade between these blocks is yet to be worked out clearly. Then the upsurge in international trade following the policies of liberalisation and countries are found exerting themselves for increasing participation and greater share in international trade which is extended to services too. Exports-oriented economies are known to be high profile, high growth and technologically forward and innovative economies. International business, in response has become more competitive. It is too well known how, for example, Boeing and Airbus compete with each other for the sale of their aircrafts. Even in the latest BPO business there is intense competition between, say, India and China. In textiles, to take another example, Bangladesh is proving itself more competitive than India, the ancient and most renowned land of textiles or clothing of many varieties, such as Khadi, hand spun clothing. In tea, once India had almost world monopoly but no more, the country is facing a good deal of competition from its southern neighbours like Sri Lanka. The USA is known to have lost to Japan in automobiles. There is growing health consciousness to international business, not to say of political, ethical, environmental, technological, legal and labour factors. There is also a clash between democracy and totalitarianism in international business. Human rights violation also counts. Business, especially big-big ones, wave to navigate through all these which call for debt leadership which evokes national faith and trust.

The results, among other things, of the NTO, it could be assumed to be a case of an export drive, which calls for a free globalised trade order. Winning in foreign markets is more difficult than winning in the domestic market, where in also, of course, there are different brands of a commodity hotly competing with one another. The case for free trade rests on a number of foundations, the most important of which is growth and welfare – the twin principles of modern day societies.

2.4 The economic and financial crises of 2008 and its impact on BE

The economic and financial crisis which started in September 2008 with the collapse of Lehman Brothers, wreaked havoc in financial markets in the USA and across the world with its origins in an asset price bubble that interacted both with new kinds of financial innovations that masked risk, with companies that failed to follow their own risk management procedures, and with regulators and supervisors that failed to restrain excessive taking (Baily et al., 2008).

The economic and financial crisis, said to be of the proportions of the Great Depression of the 1930s, invaded not only the US but also European Governments and those of the developing economies (Dullien et al., 2010). In the European Union, for example, gross domestic product (GDP) declined by 4.2% in 2009 and the employment growth rate was –2.1%. The unemployment rates have increased to 10.0% and 10.7% in 2011 and 2012 respectively with the lowest un-employment rates accounted in Austria (4.3%), Germany and Luxembourg (5.3% in both countries), the Netherlands (5.8%), and

the highest levels in Greece (26.8%) and Spain (26.1%) (Education, Audiovisual and Culture Executive Agency, 2012).

The Standard & Poor's (S&P) strike down the credit rating of the USA and Japan from 3-As to 2-AA+, and of the European majors France and Italy also (*Economic & Political Weekly*, 2012).

The World Economic Forum (WEF) in its 2012 report drew a bleak economic and business picture of the world (World Economic Forum Report, 2012). The US Government had to pull back the collapse of its big banks such as CitiBank of America, J.P. Morgan, Morgan Stanley by big 'bailouts' as the financial majors were thought to be 'too big to fail' (*Economic & Political Weekly*, 2012). In the absence of such a countercyclical responses, the slump could have been much stronger (Dullien et al., 2010).

Year-after-year, the WEF, a global think-tank given to global peace & prosperity, environmental protection, engages political, business, academic and other leaders of society in collaborative efforts to shape global, regional and industry agendas, by outlining challenges facing and likely to face the world, together with other stakeholders, propose solutions and actions, always in the spirit of global citizenship. In the same spirit, businesses, it seems, have to act as bridges between government and the people at large (Ahmed, 1999). Whether good or bad times, the standards of BE should be upheld and it is upholding excellence which is sure to pull business out of the troubled times as the recent crisis noted above.

The crisis, however, has brought into light lessons in business and management, especially the big businesses, into disrepute as the main cause of the crisis because of their unethical practices reflected in what may be bland as 'being greedy' through the payment of fat salaries, fabulous bonuses, many perks and high lifestyles, which is by now a familiar story (Ahmed, 2012). Even micro-finance institution (MFIs) intended for the poor are found indulging in profiteering and had business practices driving the poor to desperation and ruin and sometimes suicides. First, business has to come out of what we will call 'Business Disreputation'.

Undoubtedly, the economic crisis has affected both large and small and medium sized enterprises (SMEs) as it made business opportunities less certain. As a result, business firms have suffered a significant decrease in demand and revenues, staff lay-offs, stressful working environments and reluctance to invest in long-term activities (Kash and Darling, 1998; Archibugi et al., 2013). However, SMEs are more vulnerable in difficult economic times than large enterprises for many reasons. First of all, they cannot undertake downsizing activities as they are already small. Furthermore, they lack sufficient capital to finance their investments, they have a lower or no credit rating and they are less diversified in their economic activities (OECD, 2009).

The criticism of big business and their managements are well known to have come from President Barack Obama to the Nobel Laureate Prof. Paul Krugman and others. The popular anger against business barons is well known to have spilled into the streets in the form of popular agitation and attempted occupation of Wall Street, the symbol of American or world capitalism. In this context, it seems, business should take a new form and spell excellence from new and different angles. Excellence should rescue business from its many problems at home and abroad and in both depression and prosperity, excellence which appears to be the catch –word of the present times to make things go to their farthest limits of efficiency and productivity, through new ways of doing things as

an abstract term or concept and difficult to measure (*Economic & Political Weekly*, 2011). There is almost a revolt against big business.

The global economic crisis such as the 2008 is seen as crisis of confidence and trust in business leadership and popular anger against the dominant business practitioners. Within this crises, the only survival will be BE, which means clamouring for perfection, or what may be termed 'excelletics' – the beauty of flowers'. As postulated by Sharma and Talwar (2007) and Dahlggaard et al. (2013b), "as one approaches perfection in one work, one approaches excellence". Research indicates the influence of organisational culture cannot be ruled out and are becoming more and more important for organisations in the pursuit of quality and excellence. Excellence is most allied with business, mostly as quality (Crosby, 1979), and is held quite dynamic (Peters and Waterman, 1982; Dahlggaard and Dahlggaard, 2005; Dahlggaard et al., 2013a).

3 Methodology

Briefly, the methodology adopted for the study first, seeks to draw the contours of the new business environment which is global and highly cognitive and marked by the rise of consumer power, wherein consumer sovereignty that appears to be a reality with great consumption options. Within this contest, in the global and competitive environment the focus should be on assessing what gives maximum consumer satisfaction or the economist's utility.

Secondly, it should be noted that the new business environment was struck, as if by a bolt from the blue, by the financial crisis of global variety, emanating from the USA, in 2008, signalled by the fall of the financial giant Lehman Bros of more than 150-year standing, the waves of which are still being felt across the globe, giving rise to anti-business sentiments and changing business priorities and the meaning of many a business concept, including the most eminent Excellence. Consequently, an approach of redefining excellence may seem excellence in consumer bonding. Whatever it may be, there seems a new light and new dimensions as to BE. In the light of new business standards the businessman concept of excellence is given a new interpretation and extension. BE, for instance, has ethical and environmental dimensions. It does not mean a high profile business, but a high value one. So therefore, it is crucial to investigate with a new lenses, knowing that the world of business appears to be an altogether different world, from what it was once, both internally and externally, not many years ago or past the 20th century. It appears to move, among other things, on computer and internet technologies which appear to have compressed the world into as small a device as a 3G/4G mobile phones. It is a globalised and competitive business world which is on display all over the world, including the ancient and rising Arab World, which is rising economic block owing to expanding oil.

Thirdly, it requires establishing linkages between the new economy's great recession of 2008 and the loss of confidence, faith, and trust in business leadership and the needed for leadership enhancement, which, however, should not make the system reckless and completely self-centred.

We adapt the grounded theory (GT) for the study as a result of its potency to provide an understanding and explanation of human behaviour through inductive reasoning processes (Elliott and Lazenbatt, 2005). The GT is also used because of its emphasis on

the utilisation of a variety of data sources that are grounded in particular contexts. We justify the GT as an appropriate method for this study as it generates theory that can be used as a precursor for further investigation of the phenomenon and related issues. As already indicated, the Central Question for the study is; what is society's view of BE today? That provides ground to use the GT involving, simultaneous collection and analysis of data, creation of analytic codes and categories developed from data and not by pre-existing conceptualisations (theoretical sensitivity), discovery of basic social processes in the data, inductive construction of abstract categories, theoretical sampling to refine categories, writing analytical memos as the stage between coding and writing, the integration of categories into a theoretical framework Charmaz (1995, 2002).

3.1 *Proposing a new global dimension model for BE*

Given the foregoing discussions of BE in literature, one may ask, what really underpin the concept of BE? A satisfactory answer to the question would be to pretty to surely go closely to redefining what BE is in our contemporary times, taking cognisance of what the world has witnessed. However, there is not one but many reasons for BE, namely, national and international sharply competitive business environment and the need for building up faith, trust, confidence and public goodwill regarding business badly hit by the global financial, economic and business crisis of the 2008 vintage.

From the literature review above, it is unfortunate but true that business, especially big business has come to be associated with fraud and 'greed' self-centredness, extravagance, wasteful expenditure, high lifestyles and other negative 'non-business-like' or 'un-business-like' features, resulting in anti-business popular feeling which is quite damaging to the image of business and business interests, whether big or small. This anti-business feeling appears to be sweeping across the USA and Europe (*Economic & Political Weekly*, 2011), and it seems to be hitting the governments across the USA and Europe for doing nothing in the matter of business misadventures and in fact condoning them in the form of 'bail outs' running into billions of dollars putting public or governments to great imbalances and deficits and bankruptcies and sovereign credit rate cuttings. Of all, business reputation and public standing appears to call for rescue, rehabilitation and refurbishing. Happily, this anti-business and government and central bank wave appears to be conspicuous by its absence in some countries such as the UAE, of good business management and good governance, making the standing out ASEAN exception amidst the global business turmoil.

Any attempt to redefine BE will call for addressing some imperatives and most importantly to factor in the issues of business ethical conduct.

Of all, businesses in the new economic and trade order of international trade and the crisis surrounding it and otherwise excellence as their operating creed must focus on efficiency, productivity, innovation and a sustainable economic and business order (Ahmed, 2013). Between good, bad indifferent and excellent with the quality of excellence or virtue or order, excellent is always a winner in any walk of life or activity (*The Hindu Journey*, 2012), not to say of business with specially business leaders said to be at the back of the present day global economic, financial and business crisis and the 10% rate of American unemployment (Krugman, 2012, 2013). It pays businesses to have excellence in their day-to-day operation. Excellent is to be superior, first-rate and of top order and of best performance.

The new economic and business order should breed the culture of excellence for the businesses, to best satisfy their customers' needs and span out across the markets. It is on the levels of excellence the performance of business vary. A new dimension of BE is extending business products and services to the bottom of the eco-pyramid populations and alleviate their poverty. Excellence in sum is being of top class or first rate.

The business of businesses being making profit, they cannot succeed in their mission without being of top-class or first rate. Being mediocre is incurring losses or being uneconomical. It is conferring maximum utility.

The parameter outline above calls for the measurement of BE. What therefore is the measure of BE? Efficiency is maximum productivity – comparing what is actually to be produced or performed with what can be achieved with the same consumption of factors of production (money, time, labour, etc.). It is an important factor in determination of productivity.

Excellence is standing taking business forward through innovation, creativity and expansion. Excellence is optimisation – the maximisation of output and minimisation of costs exhausting returns to scale. It is dynamic equilibrium situation, a standard micro-economic business prescription (Samuelson and Nordhaus, 2009). Thus, excellence is an old business principle.

At any given time, there are good and so badly performing business firms, depending upon their degrees of excellence. Excellence also stands for demand and supply or market equilibrium ($D \sim S$) and maximum consumer satisfaction or utility (Max. U), or value-for-money or even more value-for-money. It stands for excellent customer relationship management – (CRM). Thus, traditionally, BE is excellence in production, costs, sales, returns and profits or optimisation. The concept, however, in the context of new business concerns, has new dimensions and interpretations or needs extension. The extension looking at what has plagued the world business in recent past demands an element of ethical practices with any model closer to perfection. The conduct of business ethics – issues relating policies and practices regarding potentially controversial issues, such as corporate governance, insider trading, bribery, discrimination, corporate social responsibility and fiduciary responsibilities. Business ethics should no longer be left in the hands of corporation to follow, it should be guided by law in addition to providing the basic framework that businesses may choose to follow in order to gain public acceptance. Based on considerations of the issues above, we propose a conceptual model consisting of

$$C = \text{Cost}; R = \text{Revenue}; Z = \text{Optimisation}; Q = \text{Output}.$$

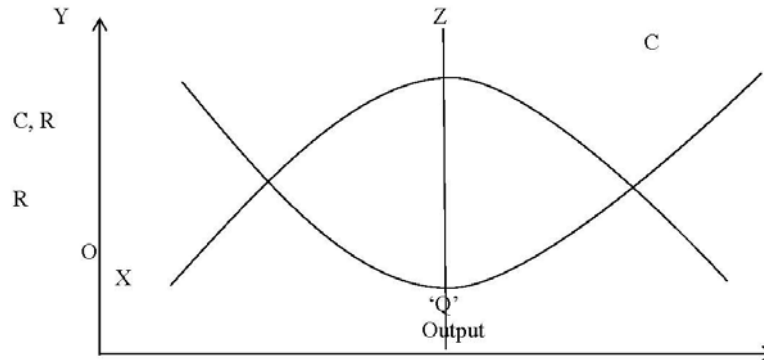
A contingent variable then will then be E-Ethics.

Accordingly, we develop Figure 1 to represent BE when firms produce and supply goods at least cost, which gives consumers value for their money.

For the model to be established, the process will call for justification of measurements, accomplishment of reliability and internal consistency. The structural equation modelling and the partial least squares (PLS) techniques will be deployed. The approach will call for the use of quantitative research method with scale measurements for cost, revenue and ethics.

From Figure 1, to be able to operate in excellence, firms need to produce and supply goods at least cost, which give consumers value for their money. The curves follow parabolic functions, therefore:

$$f(y) = ax^2 + bx - c$$

Figure 1 New BE model

Notes: C = cost, R = revenue, Z = optimum point, 'OQ' = output.

The cost curve will follow the normal parabolic curve (upwards) and hence:

$$f(y) = ax^2 - bx - c$$

where

x, y are factors

a, b, c are integers.

Similarly, the revenue will follow the downward parabolic curve in which we have

$$f(y) = -ax^2 - bx - c$$

where

x, y are factors

a, b, c are integers.

3.2 *New dimensions of excellence*

BE particularly in the context of mismanagement, poverty, environmental degradation, ethical concerns, bad business practices, etc., calls for, new interpretation and giving new dimensions in addition to the already stated standard BE in terms of all the business parameters. It is a troubled world from the concerns of which businesses cannot keep themselves aloof, and immune. They cannot just think of themselves but also others and the society and the general public at large. Then there is the bottom of the pyramid population to be addressed and made a business concern by the late Prof. C.K. Prahalad (Pralhad and Hammond, 2002) revolutionising the business theory and management science. BE, especially in the context of yet developing countries like India, does not connote high-rise and posh business premises, high-profile marketing, lavish executive salaries and high lifestyles, etc. But, unfortunately, these new dimensions of BE have yet to make their entry into business calculations. BE seeming to be soloist or one-

dimensional or purely profit centric, not even performance centric. The new economic and business environment is expected to result in an economic/business culture of excellence, which is of environment, and social concerns and responsibility, good management, and customer relations, to the environmental poverty alleviation and, ethical and human consideration, and innovation to make good, stable, dynamic and people-centric business.

In fact, the drive towards liberalisation, globalisation and privatisation and the free trade order is a drive towards BE, in the sense of good, economical, profitable, sustainable, democratic, innovative popular businesses that would enhance human as well as environmental welfare, world peace and well-being.

Overall the most important of the new BE dimensions in the light of 'Wall Street' movement is big corporation leadership evoking public trust and confidence of their interest being safe in the hands of leadership. For the crisis of 2008 is well known and widely felt to be a leadership crisis-business and regulatory (Ahmed, 2012, 2014).

4 Conclusions and recommendations

What has emerged from this study is a model of BE that account for the prevailing social-economic circumstances of our contemporary world. BE is characterised some key layers. At the practice level, we consider BE as involving self-assessment to identify improvement opportunities, areas of strength and to determine ideas for future organisation growth. BE heavily relies on the type of strategies, techniques and tools for measuring and assessing the performance of businesses. Consequently, identifying the best practice that account for and encompasses the social-economic and political order eventually providing an avenue to compete and excel in the global market place. The practical ramifications of producing this new BEM include providing organisations with a set of internally generated performance measures which can be determined by contextual element and negotiation (MacLeod and Baxter, 2001), providing a method of self-assessment, self-awareness and measurement that can deliver improved performance [Oakland, (1999), p.30], and identifying areas that managers should focus on for performance improvement (Leonard and McAdam, 2002). As a result, the evidence of mounting the excellence approach improves business performance (Evans and Jack, 2003; Hendricks and Singhal, 1997; Porter and Tanner, 2004).

Thus, there is a need to give a new interpretation to the concept of BE and give it new dimensions in the context of the 21st century new competitive economic and trade order, appearing to be driven towards, BE. BE stands for top-ranking or excellent business performance and presentation.

Traditionally, it refers to optimum production, minimisation of costs and making economic or competitive profits. But, in the context of poverty, environmental degradations and destruction in the emerging economies like India. UAE and others also, and in the context of the global financial crisis 2008 and the great recession, BE, and above all, calls for excellent business leaders and leadership of environmental, ethical, human values and concerns and good business practices.

In the study it is shown that the existing BEM for managers is deficient of ethical inputs with resultant applications that focus on profitably leaving a leeway to organisations to operate at the expense of the public and other stakeholders. Hence, the

need to incorporate into the existing model a relational operator that will account for the intangible aspect of ethics. The need for such a resultant shift will help managers at the global business arena not only to emphasize in profitability, quality training and development but other elements that will provide conceptual framework for over-viewing the organisation and as a tool for senior management' to perceive the application of excellent related initiatives in the organisation.

References

- Ahmed, G. (1999) 'Government and business stakeholding in the new millennium', *Proceedings of the International Business Conference on Business Issues for the New Millennium*, pp.333–334, Texas A&M University & Society for Advancement of Management, Las Vegas, USA.
- Ahmed, G. (2009) 'India's new growth rate', *Indian Development Review: International Journal of Development Economics*, Vol. 7, Nos. 1/2, pp.159–163.
- Ahmed, G. (2012) 'The new regulatory concerns and regulatory management', *China-USA Business Review*, Vol. 11, No. 9, pp.1205–1212.
- Ahmed, G. (2013) 'The new global trade order and retail trade & marketing', *The Journal of Business and Retail Management Research*, Vol. 7, No. 2, pp.1–12.
- Ahmed, G. (2014) 'Human (H) factor in emerging country stable economic development', *International Journal of Human Potential Development*, Vol. 3, No. 1, pp.14–19.
- Amponsah, C.T. (2015) 'An integrated approach for prioritizing road projects for implementation using AHP', *Journal for International Business and Entrepreneurship Development*, Vol. 8, No. 2, pp.128–143.
- Archibugi, D., Filippetti, A. and Frenz, M. (2013) 'Economic crisis and innovation: is destruction prevailing over accumulation?', *Research Policy*, Vol. 42, No. 2, pp.303–314.
- Baily, M.N., Robert, E.L. and Matthew, S.J. (2008) *Origins of the Financial Crisis*, Sage Publications, London.
- Brookings (2008) *Fixing Finance Series*, Paper 3 [online] http://www.brookings.edu/~media/research/files/papers/2008/11/origin%20crisis%20baily%20litan/11_origins_crisis_baily_litan.pdf (accessed 11 January 2016).
- Calingo, L.M.R. (2002) 'National quality and business excellence awards: mapping the field and prospects for Asia', *Report of the Symposium on Quality and Business Excellence Awards*, Asian Productivity Organization, Fiji, pp.3–23.
- Charmaz, K. (1995) 'Grounded theory', in Smith, J. et al. (Eds.): *Rethinking Methods in Psychology*, pp.27–49, Sage Publications, London.
- Charmaz, K. (2002) 'Grounded theory: methodology and theory construction', in Smelser, N.J. and Baltes, P.B. (Eds.): *International Encyclopedia of the Social and Behavioral Sciences*, pp.6396–6399, Pergamon, Amsterdam.
- Crosby, P. (1979) *Quality is Free*, McGraw-Hill, NY.
- Dahlgaard, J.J. and Dahlgaard, S.M.P. (2005) 'In search of excellence-past, present and future', Paper presented at the *International Conference on Quality (ICOQ'05)*, 13–16 September, Tokyo.
- Dahlgaard, S.M.P., Chen, C., Jang, J. and Dahlgaard, J.J. (2013a) 'Diagonising and prognosticating the quality movement – a review on the 25 years quality literature (1987–2011)', *Total Quality Management and Business Excellence*, Vol. 24, Nos. 1–2, pp.1–18.
- Dahlgaard-Park, S.M. and Dahlgaard, J.J. (2007) 'In search of excellence-past, present and future', in Schnauber, H. (Ed.): *Kreativ und Konsequent*, Hanser Verlag, München, Wien.

- Dahlgarrd, J.J., Chen, C., Jang, J., Banegas, L.A. and Dahlgaard, S.M.P. (2013b) 'Business excellence models: limitations, reflections and further development', *Total Quality Management & Business Excellence*, Vol. 24, Nos. 1–2, pp.1–18.
- Dullien, S., Kotte, D.J., Marquez, A. and Priewe, J. (2010) *The Financial and Economic Crisis of 2008–2009 and Developing Countries*, United Nation Publication, Geneva.
- Economic & Political Weekly* (2011) 'No longer unchallenged', Editorial Wall Street, Vol. 46, No. 43, pp.8–9.
- Economic & Political Weekly* (2012) 'The post modern times', Editorial Finance, Vol. 47, No. 4, pp.8–9.
- Education, Audiovisual and Culture Executive Agency (2012) *Key Data on Education in Europe 2012*, EACEA P9 Eurydice, doi:10.2797/77414.
- Elliott, N. and Lazenbatt, A. (2005) 'How to recognise a 'quality' grounded theory research study', *Australian Journal of Advanced Nursing*, Vol. 22, No. 3, pp.48–52.
- Evans, J.R. and Jack, E.P. (2003) 'Validating key results linkages in the Baldrige performance excellence model', *Quality Management Journal*, Vol. 10, No. 2, pp.7–24.
- Federation of Indian Chambers of Commerce and Industry (FICCI) (2010) *Current State of Indian Economy*, New Delhi.
- Friedman, T. (2012) 'So much fun: so irrelevant', *The New York Times*.
- Gunasekaran, A. (2008) 'Business excellence in 21st century organisations', *International Journal of Business Excellence*, Vol. 1, Nos. 1/2, pp.1–8.
- Harrington Jr., J.E. (2006) 'How do cartels operate?', *Foundations and Trends in Microeconomics*, Vol. 2, No. 1, pp.1–108.
- Held, D., McGrew, A., Goldblatt, D. and Perraton, J. (2009) *Global Transformations: Politics, Economic & Culture*, Stanford University.
- Hendricks, K.B. and Singhal, V.R. (1997) 'Does implementing an effective TQM program actually improve operating performance? Empirical evidence from firms that have won quality awards', *Management Science*, Vol. 43, No. 9, pp.1258–1274.
- Heras-Saizarbitoria, I., Marimon, F. and Casadesus, M. (2012) 'An empirical study of the relationships within the categories of the EFQM model', *Total Quality Management & Business Excellence*, Vol. 23, No. 5, pp.523–540, Stanford Press, 2009, California & Blackwell Publishers Ltd., Oxford.
- Kanji, G. (2002) 'Measuring business excellence', *Routledge Advances in Management & Business Studies*, Routledge Publishers.
- Kash, T.J. and Darling, J.R. (1998) 'Crisis management: prevention, diagnosis and intervention', *Leadership & Organization Development Journal*, Vol. 19, No. 4, pp.179–186.
- Kotler, P. and Keller, K. (2011) *Marketing Management*, pp.2–3, Prentice Hall, NY.
- Kruger, A. (1998) *The WTO as an International Organization*, Oxford University Press, New Delhi.
- Krugman, P. (2012) *The Return of Depression Economics and the Crisis of 2008*, WW Norton & Co.
- Krugman, P. (2013) *End This Depression Now*, Princeton University, NY.
- Kume, H. (2002) 'The challenges of Indian industry', *CII 10th Quality Summit Proceedings*, New Delhi.
- Leonard, D. and McAdam, R. (2002) 'The role of the business excellence model in operational and strategic decision making', *Management Decision*, Vol. 40, No. 1, pp.17–25.
- MacLeod, A. and Baxter, L. (2001) 'The contribution of business excellence models in restoring failed improvement initiatives', *European Management Journal*, Vol. 19, No. 4, pp.392–403, 10.1016/S0263-2373(01)00042-1.

- Maier, A., Moultrie, J. and Clarkson, P.J. (2008) 'A review of maturity grid based approaches to assessing organizational capabilities', *Academy of Management Annual Meeting: Theme – The Questions We Ask*, 2008-8-8 to 2008-8-13, Anaheim, California, USA.
- Mamudi, S.L. (2008) 'Folds with record \$613 billion debt', *Market Watch*, 15 September 2008 [online] <http://www.marketwatch.com/news/story/lehman-folds-613-billion-debt/story.aspx?guid={2FE5AC05-597A-4E71-A2D5-9B9FCC290520}> (accessed 4 September 2009).
- Manna, R., Adebajob, D., Laosirihongthong, T. and Punnakitikashemd, P. (2011) 'Awareness and impact of business excellence in Asia', *Total Quality Management*, Vol. 22, No. 11, pp.1237–1258.
- Miguel, P.A.C. (2008) 'Business excellence through a world-class organisational structure: experience from the Baldrige National Quality Program', *International Journal of Business Excellence*, Vol. 1, Nos. 1/2, pp.175–192.
- Oakland, J. (1999) 'Winning performance through business excellence', *Credit Control*, Vol. 20, No. 7, pp.23–31.
- Organisation for Economic Co-operation and Development (OECD) (2009) *2009 Annual Report*, The Public Affairs Division, Public Affairs and Communications Directorate, OECD Publishing, Washington DC.
- Paul, J. (2010) *Business Environment*, Tata McGraw-Hill, New Delhi.
- Peters, T.J. and Waterman Jr., R.H. (1982) *In Search of Excellence – Lessons from American Best-Run Companies*, Harper & Row, NY.
- Porter, L.J. and Tanner, S.J. (2004) *Assessing Business Excellence*, Elsevier, Butterworth Heinemann, Oxford.
- Prahalad, C.K. and Hammond, A. (2002) 'Serving the world's poor, profitability', *Harvard Business Review*, Vol. 80, No. 9, pp.48–57.
- Rajan, R. (2010) *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, Princeton University Press, NY.
- Rezaie, M.J.K. (2010) 'Quality principles deployment to achieve strategic results', *International Journal of Business Excellence*, Vol. 3, No. 2, pp.226–259.
- Rosemann, M. and de Bruin, T. (2005) 'Towards a business process management maturity model', *Proceedings of the 13th European Conference on Information Systems*, Regensburg, May 2005.
- Samuelson, P. and Nordhaus, W. (2009) *Economics*, McGraw-Hill, London.
- Schiller, B. (1997) *The Economy Today*, McGraw-Hill, New York.
- Sharma, A.K. and Talwar, B. (2007) 'Evolution of 'universal business excellence model incorporating Vedic philosophy'', *Measuring Business Excellence*, Vol. 11, No. 3, pp.4–20.
- Smith, A. (1776) *The Wealth of Nations*, Simon & Brown, Reprint 2012, Chicago.
- Stiglitz, J. (1997) *Principles of Macro Economics*, W.W. Norton & Company, New York.
- Talwar, B. (2008) *Evolution of 'Universal Business Excellence Model' Incorporating Vedic Philosophy*, PhD Thesis, Indian Institute of Technology, Roorkee.
- Taticchi, P., Tonelli, F. and Cagnazzo, L. (2010) 'Performance measurement and management: a literature review and a research agenda', *Measuring Business Excellence*, Vol. 14, No. 1, pp.4–18.
- The Economist* (2001) 'Globalization and its critics', 4 October, pp.3–5.
- The Hindu Journey* (2012) 'In pursuit of excellence', 2 January, p.17.
- UNECE (2004) *National Quality Award Schemes* [online] <http://www.unece.org/indust/sme/Qnational-award.html>.
- Union of Japanese Scientists and Engineers (1951) *History of the Deming Prize* [online] https://www.juse.or.jp/deming_en/award/01.html
- World Economic Forum Report (2012) *Global Risk*, Geneva.