

CEO should be a generalist or specialist? Empirical foundations for leadership research

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Abstract

Chief Executive Officer is the senior most leader in charge of managing an organization. This paper reviews peer-reviewed empirical studies on Chief Executive Officers, and extends the empirical arguments to Generalist and Specialist Chief Executive Officers explicitly, and in the process conceptualizes three schools of thought: Technical, Managerial and Intrapreneurial. These empirical arguments have been contrasted with dependent, independent, moderating and mediating variables from the leadership literature. Additionally, the empirical studies have been matched with two broad and three narrow leadership domains, to provide insight for further research in the area of corporate leadership. This paper indicates that Generalist Chief Executive Officers and Specialist Chief Executive Officers have different standpoints for different reasons.

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1. Introduction

The position of a CEO is critically important to an organization (Stojanovic-Aleksic, 2016). It is important to further advance studies on it as CEO is responsible for the overall success of a business entity and for making top-level managerial decisions (Goodall, 2012; Aivazian, Lai and Rahaman, 2013). Also, CEO is the one who holds the ultimate authority in making final decisions (Buyl et al., 2011). This leaves a huge impact on business culture and performance. In terms of existing literature on CEO and their characteristics, there are multiple studies focussing on different areas. This paper is interested in exploring the generalist-specialist side of it, as they both possess different strength areas and challenges. It is also important to study the distinction between generalist and specialist as it is becoming increasingly valuable to know ‘a little bit about a lot’. The writer Carter Phipps, author of 2012’s *Evolutionaries* reflects that tomorrow’s society will be data rich and meaning poor, which can easily be witnessed now. Does this imply that generalists will thrive in immediate future? It is worth pondering that rise in specialists in all areas—business, biology, science, math, history, psychology—has left us with tremendous content but how valuable is that content without context. Context, as per Carter’s view is with those who have breadth of knowledge- the generalists. In other argument, Tetlock et al. (2007) also calls for the rise of generalist. Tetlock studied 284 professional forecasters over a period of 20 plus years to establish whether experts or non-experts make more accurate predictions in their areas of expertise. After collecting more than 80,000 forecasts, the professor concluded that when seeking accurate predictions, non-experts seemed more reasonable. However, sizable researchers including Goodall (2012) also believe that specialists will command the future as knowledge experts, particularly with a view, that Knowledge Management will be a dominant strength for future organizations. As there are both merit and demerit points for both generalists and specialists, the objective of this paper is to study existing generalist and specialist CEO literature, and identify its impact on leadership research.

In this paper, we have focussed on the role of Chief Executives Officers (CEOs) whilst categorizing them in two genres- Generalist Chief Executive Officer (G-CEO) and Specialist Chief Executive Officer (S-CEO). This paper is divided into two sections: First section introduces the Literature review with few empirical arguments that have gained significance in the literature on G-CEOs and S-CEOs, and second section adds to the relevance of these empirical studies from the leadership perspective.

2. Literature review on generalist CEO versus specialist CEO

We have analysed a broad range of empirical studies on G-CEOs and S-CEOs in an evolutionary and more importantly, chronological manner. For reader clarity, three basic schools of thought have been identified: Technical, Managerial and Intrapreneurial. The first school of thought ‘Technical’ was led by empirical studies from Robert Katz in 1955. Later, Kirkpatrick and Locke (1991) contributed greatly to it. It is being called as Technical as Robert first identified technical skills as one of the skill segments for the CEO and then Kirkpatrick & Locke advanced it to a larger level of CEO technical competence. The second school of thought ‘Managerial’ was led by empirical studies from Ferreira et al. (2012). The studies under this school of thought on the contrary argued that even S-CEOs want themselves to be rebranded as Generalists, hence the term Managerial. Finally the most recent literature can be better understood by classifying it as the third school of thought ‘Intrapreneurial’ with major contributions from the empirical studies of Custódio et al. (2012) and Gounopoulos and Pham (2017). It is being classified as Intreprenurial for two reasons: i) the empirical study by Custodio in 2012 extended the study of Ferrerira of 2012 and revealed a more generalist viewpoint of CEO competence, and ii) the empirical study by Gounopoulos & Pham asserted CEOs to take direct responsibility for the entire company as the owner/intrapreneur.

2.1. Technical school of thought

This school of thought starts with the study of Katz (1955). Robert, social psychologist by profession shares the idea of relationship between managerial skills and organization hierarchy levels. The author illustrates three kinds of administrative skills. The first skill ‘Conceptual’ is concentrated at top management, whereas third skill ‘Technical’ is more applicable for first line management. The second skill ‘Human’ is broadly relevant for all three levels of management. This model is shown in Figure 1.

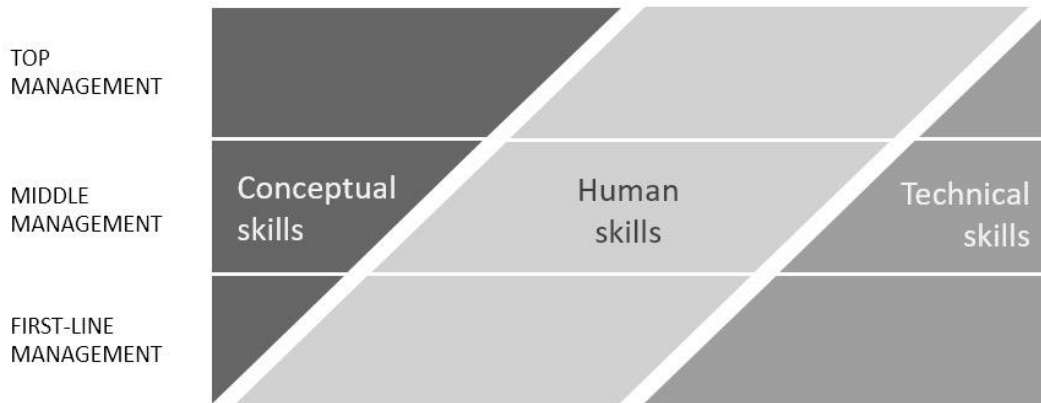


Figure 1. Skills of an effective administrator (Source: Katz, 1955)

Lau (1983) accelerates this model as four categories for managerial skills: Human Skills, Conceptual Skills, Political Skills, and Technical Skills. The author further asserts that functional area of a manager rather than hierarchy level better signifies the skills that one should possess. It also explains that general managers require more human skills, finance and accounting more conceptual skills, sales and marketing more political skills, production and engineering more technical skills respectively. This is contrary to Nealey and Fiedler (1968) whose belief was that management theory does not ponder much between hierarchy and functional areas of management. The authors Nealey and Fiedler further explain that taking successors from bottom level yield a great success indicator to higher level as well- as if one is successful at one level, and he or she can be reasonably promoted to the next level.

Translating similar thoughts to the level of CEO, Toney (1994) illustrates that the CEO in all domains need to have two basic attributes: First, CEOs should have profitability goal. Second, CEOs should have profit making skills. The two are similar but different as the first talks about the vision, and the later refers to its execution. The author further mentions that we have seen CEOs who have goal or focus for profits, yet they are not able to earn money in profit. This holds also true even when they have technical know-how and business knowledge. Alternatively, there are also people who don't know much about specifics of that particular business, yet they know how to generate a profit. It also infers that there are traits that have implications on the performance of CEO, including intelligence and integrity, experience and education.

In the favour of S-CEO, Kirkpatrick and Locke (1991) comment that their interactions have enabled them to associate CEOs technical competence and knowledge to his or her effectiveness as a leader. Contrary to that, multiple studies have shown that many CEOs succeed at profit making for their business due to their individual strategic planning skill which are generalist in nature (Snow and Hrebiniak, 1980; Toney, 1994; Walker, 2013). Such CEOs have better ability to deal and counter with external environments and adverse events. However, the argument by Kirkpatrick and Locke gained prominence overall and led to the emergence of the technical domain at the C-Suite level, which helps us understand the Technical school of

thought in the literature.

2.2. Managerial school of thought

Progressing further, the empirical studies slanted towards a broader role of CEO. Researchers in CEO turnover literature find that firm performance is a measure to evaluate CEO's efficacy (Brown and Sarma, 2007). The major study under this school of thought was from Ishak et al. (2012), which reflected that a CEO is seen as a mastermind of a business. This can be easily understood as each and every action of CEO has certain implication for the business reputation and performance. Also, this leaves a big mark on the strategies that will be deployed in the business.

Continuing with the discussion on managerial insights, Goodall (2012) raises some very good questions. The author questions: Should a business require a manager who understands core business? Should a manager have depth on industry sector? Or alternatively should managers be general in terms of skills with no detailing of business core required? Or should managers be somewhere in between these two ends? Till date, these questions have not been sufficiently answered in the empirical sense in the management literature, particularly on the level of CEOs. These arguments confused the two concepts of a generalist and a specialist. Goodall (2012) goes a bit further in the study on the S-CEOs calling them as expert managers who have three basic qualities: i) Inherent Knowledge- this is downright basic business understanding that may come from experience, education or in the mix of two as on-the-job training ii) Industry Experience- this indicates how long they have been in the relevant industry sector exercising their core knowledge and iii) Leadership Capabilities- this being the overall characteristic set that a person may or may not have as a habit or attitude. The research paper also hints on to the premise that expert leaders can be successful and if they do- it will be primarily due to their knowledge based strategy and ability of being a standard bearer- both of these concepts will be narrated and challenged again later in this literature review. Next, Goodall (2012) coins the phrase 'Theory of Expert Leadership'. The concept is based on the premise that businesses run better when managed by individuals who understand business core knowledge better.

However, the predecessor writings by Frydman and Jenter (2010) have been on other side of argument, that G-CEOs are gaining momentum in organizations. There are two kinds of individuals; one having deeper expertise in smaller number of areas, and others having less deep expertise in relatively larger number of areas. Ferreira et al. (2012) refers this to as "generalist-ness". These authors narrate two basic ideas (a) broader expertise is required when the firm is more complex, faces more market unpredictability and is more prone to technological changes, and (b) firms with many levels and hierarchies require broader level of executives. The authors also illustrate that one dimension of individual cannot be correlated with multiple dimensions of business. Amidst, Ferreira et al. (2012) states that more MBAs head large business organizations than those from any other educational streams. The reason being that MBA is a generalist degree, it encompasses many functional domains like Human Resources, Marketing, Finance and Supply Chain. Later these individuals with MBAs when head functions possess related understanding of other areas as well, and they appreciate the ideas being floated cross functionally as well. These disciplines can be even wider, with MBA subjects touching Economics, Psychology, Arts and so on. From the same perspective, the industries according to Ferreira could be dissected into narrow and wide industries. The narrow lines being steels industry, pharmaceutical industry and the like.

Here an interesting phenomenon quoted by Ferreira et al. (2012) reveals that specialists like scientists and engineers on advancing in their organizations face the challenge of repackaging themselves as generalists. On the education front, they do so by taking management diploma courses or executive education programs at business schools. The

objective is to make the transition from specialist to generalist smooth. Having said that, the business of large organizations requires a mix of specialists and generalists. Ferreira et al. (2012) uses an example of a multinational energy company which will everyday require specialists like drilling engineer, hedging trader and geology expert and will equally require generalists who can manage people at different levels within these functions. By this time, the prevalent understanding in the literature was that CEOs are better general managers, and hence we have dubbed this as Managerial school of thought.

2.3. Intrapreneurial school of thought

The significant contribution in this school of thought was first made by Custódio et al. (2012), illustrating through an index and quoted examples the need of a good mix for CEOs with more CEO generalization intended. Examples of G-CEOs include Robert S. Miller Jr. who served as CEO of Delphi (2005-2007), Gerald Grinstein who served as CEO of Delta Air Lines (2004-2007), and Ivan Seidenberg who served as CEO of Verizon Communications (2003-2011). Generalists CEOs index is above the 90th percentile. Also the author quotes examples of S-CEOs: Michael Dell who is the founder and CEO of Dell, John Mackey who is the founder and CEO of Whole Foods Market, Robert Selander who served as CEO of Mastercard, and James Skinner who served as CEO of McDonald. Per se, these four specialists have spent their entire careers in a one company or industry. Certainly, S-CEOs have index below the 10th percentile.

Interestingly, for the first time, a research section comments on the compensation of generalists and specialists. Custódio et al. (2012) leads to the thought that G-CEOs are paid more than Specialists CEOs. The premium in compensation has been foreseen by defining a new measure of being generality of human capital. This new measure is formed on five factors: past positions, companies served, industries catered to, CEO experience and conglomerate experience. This development leads to a concrete ground for justification of G-CEOs. Moreover, this study appears as a relevant evidence on industry-general skills versus company-specific skills, also drawing weight to the fact that G-CEOs earn more. Murphy and Zábajník (2004) made a point foreseeing that general skills will gain more acceptability in market than the specialist ones, particularly with reference to a CEO. This premise became obvious in the Intrapreneurial school of thought. The drawback of firm specific talent as highlighted in the research is that specialist executive cannot move easily and hence fears little bargaining and negotiating power in the market. Also an interesting perspective is that when hiring G-CEOs, preference is given to more outside hires than internal candidates. This gives advantage of bigger talent pool for prospective CEOs for organizations. In this process, cost of firm-specific capital is lost. In turn, this also shows that Outside CEOs will gain better compensation benefits.

There is a unique perspective to general skills. They are easily tradeable or comparable within firms (Koo, 2013). In fact, Koo (2013) and Custódio et al. (2012) both studies suggest that general human capital is getting more important for firm performance. This also has angle of economies moving slow and companies resorting to cost reduction drives. G-CEOs coming from another company bring external knowledge and experience that is valuable to a greater number of companies, and hence can help them in innovation. Hence, innovations can be more expected from generalist leaders and firms need to duly invest and take leverage of that, as was in part first quoted by Murphy and Zábajník (2004). With second attempt after 2012, Custódio and Metzger (2013) work gave evidence that leadership style and corporate performance can be correlated in analysis. Their study also illustrates the concept of CEO heterogeneity. To recall previous studies, Malmendier and Tate (2005) studied education, Kaplan et al. (2012) studied personal characteristics, and Wortman and Wood (2011) studied personal traits.

Aivazian et al. (2013) argue that generalist skills have gained more importance than specialist skills. The underlying thought being an increase in number of MBA CEOs and decline

in CEO retention resulting in riskier firm-specific skills. Findings by Guay et al. (2014) are still open but pertinent on CEO adaptability. The authors assert that CEO can specialize in a few areas (like mergers and acquisitions, expansions, retrenchment) and the leadership style will be influenced accordingly. It also depends on how CEO's past work experience has been in terms of business cycles. For instance, CEOs who have worked more in recessionary time outplay firms in the areas of cost reduction strategies and plans. But they equally fail when a firm needs massive growth and expansion. The catch is that the firms retain the CEOs who meet the business conditions being faced by the business currently. This implies dynamic business conditions and dynamically changing CEOs. Also this would imply 'at given point in time' recruitments even on the CEO level (Kim, 2013). On the contrary, though CEOs specialize in some areas, they have better understanding of other areas due to their broader perspective being at the top management position. This explains that CEOs can adapt to different situations, and can address needs of the time.

Considering the most recent studies on the subject of CEOs and Firm Performance, Guoli, Sterling (2017) paper reveals how strategic performance of firms gets positively affected by CEO's human capital characteristics. The author also signifies the role of CEO incentives in the process. Earlier, Tosi and Greckhamer (2004) criticised that CEOs possessing more power take more decision making liberty. This implies that such CEOs overrule Boards in certain cases, and by virtue of their power, yield the firm to more performance variability on both sides. Here the term 'Intrapreneurship' fits like a gem, a term first coined by Gifford and Elizabeth in 1978 blending the words 'inside' and 'entrepreneur'. The existing and the most recent contributions in the literature assert that CEOs are directly responsible for the overall internal and external state of the firm, hence the school of thought is Intrapreneurial and the empirical studies under this school can be understood by visualizing the role of CEO as an 'Intrapreneur-in-action'.

3. Leadership perspective on CEO

CEO wisdom has changed dramatically in the last 20 years (Muller, 2018). With emergent leadership theories gaining the forefront and classical leadership theories equally getting a remake, we would like to connect the G-CEO and S-CEO empirical studies to advance leadership research. Chemers (2000, p. 27) quotes that leadership is "a process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task". This connotation clearly suggests that leadership literature owns a great deal from social psychology. Through this review article, we are aiming to motivate management researchers to explore more dominant paradigms on G-CEOs and S-CEOs through the existing and novel leadership frameworks.

The study on leadership has been evolving since long with management researchers, paying keen attention to development of workplace structures (Swim, 2017). Also, professional and practitioner business research journals have increased their intensity of research by taking multidisciplinary approaches on the topic (Yukl, 1989). However, the integration of the leadership research theories amongst has been a challenge. Parry (1998) argues that the historical overview of leadership and management research is full of short and medium term trends and fads. In the present study, authors have attempted to fuse the empirical studies already existent on G-CEO and S-CEO with certain leadership domains. To take a start, we have sorted common findings and streams of cognition across theoretical perspectives on CEO literature. This is significant and needed as there are multiple facets of leadership, and the simplest approach to build on it is to find the commonalities.

Table 1. Fusing leadership domains with empirical studies

Leadership Domains		Empirical Studies (References)
Broad Classifications on CEO Generalization/Specialization	CEO vs. The Organization	Smith and White 1987 Toney 1994 Watts 2001 Wood and Vilkinas 2005 Margerison 2007 Suzuki 2007 Nadkarni and Herrmann 2010 Ishak et al. 2012 Aivazian et al. 2013 Custódio and Metzger 2013 Mishra 2014 He 2014 Balsmeier and Buchwald 2014 Zandi et al. 2015 Liu et al. 2016 Gounopoulos and Pham 2017
	CEO vs. Top Management Teams	Kotter 1982 Lau 1983 Jackson and Bantel 1989 Hunt and Boal 1990 Pitcher and Smith 2001 Cannella et al. 2008 Buyl et al. 2011 Custódio and Metzger 2013 Mishra 2014 Li 2016 Charles Williams, Pao-Lien Chen 2016 Sonja Sperber 2016
Narrow Classifications on CEO Generalization/Specialization	Successions	Deepak and Guthrie 1994 Smith and White 1987 Naveen et al. 2006
	Change	Nathan 2012 Watts 2001 Lakshman 2007
	Compensation	Brockman et al. 2016 Liu et al. 2016 Datta 2014 Lee 2005 Prasad 2009

We started with conceptualising the applicable broad and narrow leadership domains. From the broad perspective, the empirical studies on G-CEOs and S-CEOs connect to the leadership theme in two ways: i) CEO vs. The Organization and ii) CEO vs. Top Management Teams. In crafting this review paper, we discovered that the literature review on G-CEO and S-CEO has been discussed in majority cases by comparing it with organizational parameters, next in some studies by matching it with characteristics of executives below the level of CEO (including Directors and direct reportees of CEO) (Custódio and Metzger, 2013; Mishra, 2014; Zandi *et al.*, 2015). Hence, it seems reasonable to identify these two as the broad classifications on CEO Generalization/Specialisation. Taking an example of Year 2016 alone, these two broad domains can be clearly witnessed: Brockman et al. (2016) mentions that role of CEO is significant for firm performance, and in the particular study, 57 percent possess generalist skills and 43 percent possess specialist skills. Next, Li (2016) study compares CEOs and Top Management Teams

(TMTs), and encapsulates that CEO and TMT experience are positively correlated, but have different effect on G-CEOs and S-CEOs.

On the narrow leadership domains, we have been successful in conceptualizing three constructs based on their frequent discussion in the literature: Successions, Change and Compensation. On CEO ‘Successions’, the study by Balsmeier and Buchwald (2014) emphasizes on the different patterns of successions in terms of practice, and reiterates the concern of corporate boards on CEO successions. Carrying forward, the study by Nathan (2012) is vocal in explaining the second leadership domain of ‘Change’, as it compares technology change adoptions into domain insiders and domain outsiders. The third narrow leadership domain of ‘Compensation’ is clearly elucidated by Custódio et al. (2012), claiming that G-CEOs earn 19 percent higher compensation than S-CEOs. Table 1 gives a tabular summary to larger pool of empirical studies/references that apply to the selected leadership domains.

4. Conclusion

As can be seen through the three schools of thought and five narrow leadership domains, G-CEOs’ and S-CEOs’ empirical studies have their individual standpoints. It is reasonable to summarize that today’s businesses require a good mix of both, generalists and specialists. We need the S-CEOs to solve very specific problems and tasks, and at the same time we need G-CEOs to look at the big picture of business intrinsically and extrinsically. Specialists thrive in a more predictable environment, doing the same thing again. On the contrary, generalists thrive more in unpredictable environments as they are more resilient in support changing environments. The future of work requires both G-CEOs and S-CEOs. This inference is also based on the nature’s context: nature proves that a mix of specialists (e.g. aardvarks) and generalists (e.g. bears) is crucial for creating healthy and balanced ecosystems. Another example is of koala bear (it can survive in limited conditions only with eucalyptus in diet and trees in environment) and mice (it does not require any specific conditions to survive). For sure, each ecosystem needs generalists who constantly gather information, which can then be disseminated to the specialists. Taking this research paper as the stepping stone, we are optimistic that more management researches will be motivated to advance leadership development studies on the various strata of G-CEOs and S-CEOs. Based on our findings, the future research can develop and test a model for executive leadership based on the two broad and three narrow classifications of G-CEOs and S-CEOs. Secondly, the cultural perspective on G-CEOs and S-CEOs can be explored further, as different cultures follow different norms, values and practices, which can generate valuable insights for leadership research.

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