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MIT Sloan School Working Paper 5032-13

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M.EOS: How General Management Matters

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General Management is the disciplined art of creating a collective performance superior to that which would naturally occur. I propose this definition because it brings the relation between management and performance to the fore. It tells us why management matters, not just what management is. General management matters because it creates value by augmenting collective performance relative to what such performance would be otherwise, i.e., in the absence of general management.

Common definitions of [general] management¹ tend to refer to the content of the job, as in Webster's "to be in charge of running a business", or the popular "to get work done through others", or Drucker's classic "setting objectives, organizing, motivating and communicating, measuring and developing people". Such definitions bring about a theory of Management as a theory about what managers do.² I propose that *Management be a theory about collective performance in the presence of the manager*. We need therefore to understand what determines collective performance and how management impacts it.

This paper describes a conceptual model, M.EOS, with such purpose. "EOS" models the collective performance as the interaction between environment, organization and strategy. And "M" (the [general] manager) improves collective performance by purposefully intervening to shift EOS.

Management is like steering, not like setting a course; construction, not architecture; surgery, not medicine³. Management is an *art*, explicit and tacit, rational and emotional, synthetic, involving the drive of our mind as well as the energy of our body. However, management is a *disciplined art*. Managerial interventions need to be: 1) purposeful and systematic; 2) based on principles and disciplinary knowledge, such as mathematics, design, engineering, economics, sociology, anthropology, psychology, and political science; 3) applied with rigorous methods of experimenting and learning, and 4) practiced with a meticulous language – the most evident feature of discipline. But, like any art form, management does not afford granted success. The complex dynamic nature of collective performance makes it computationally intractable and subject to absolute uncertainty, namely in an open society within a global world.

General management involves the distinctive ability of understanding a company's performance in a business and the realization of how such performance can be

¹ In this paper, the expressions "management" and "manager" alone are to be read as "general management" and "general manager" (or CEO).

² The equivalent would be to have Physics as a theory of what physicists do. A similar argument was made about Design (Hooker, 2003).

³ The word "management", quite remarkably, comes from "manus", the Latin for "hand" and originally meant to handle and control a horse, "manège" in French – that is, as I would put it, to make a horse do what it would not naturally do.

improved. General managers may of course spot a "great business" or formulate a "best strategy" or design the "right organization". But that is not the point: the point is a superior performance. Indeed, in the real world, there is no such thing as a great strategy, only a *great performance* – or not. We need to further our understanding on what determines the performance of a company.

That company performance depends on the company's environment, strategy and organization is well established. However, the emphasis has been on a particular sequential view of such dependence. Consider, for example, Roberts proposition in his significant book "The Modern Firm" (Roberts, 2007): "[The] most fundamental responsibility of the general manager [is] to craft a strategy and create an organization through which that strategy can be successfully implemented in the economic, political, legal, regulatory, social, and technological environment in which the firm operates." My proposition is different: The most fundamental responsibility of the general manager is to improve company performance, not to craft a successful strategy. Indeed, the general manager may shape the organization in such a way that it is the organization *itself* that crafts the successful strategy in the environment in which the company operates. And the general manager may change the environment in which the company operates. We need a more elaborate view of the interdependence among performance factors and of the role of the general manager in handling such factors.

This paper aims at shedding some light on how general management matters. It sketches the foundation of a theory of management. But the paper is to be directly useful for those that are or aspire to be general managers, namely to the students of Management.

Company performance

The collective performance we are interested in is the performance of a company⁴. The performance of the company is a non-additive transformation of the individual efforts invested by the individuals who work in the company (Thompson, 1967; Alchiam & Demsetz, 1972; Conner and Prahalad, 1996). The question must be if the actual collective performance with a manager is higher or not than would be *natural* (i.e., without the manager).

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⁴ I use the expression "company" to mean a "business unit" and "corporation" to mean a set of business units. The case of a corporation is noteworthy in that its general manager (the corporate CEO or equivalent) manages a group of other general managers. The "business" of the corporate unit is the performance of those who manage business units.

Human beings are *social* beings and it is therefore in our nature to act together. It is extremely rare that individuals choose to live their lives in isolation from other human beings. Acting together is even more natural, so to speak, when those involved see that their acting together produces an output that is superior to that which they could produce acting alone. And, for the same token, the company ceases to exist voluntarily if the value of its performance is inferior to that which would derive from separate individual performances.

So, if a group of people can naturally work together and have jointly the necessary specialist skills not just to produce a widget, but to produce it better as they would if working separately, why the need for a *general manager* who will not contribute *directly* to the production of the widget? The answer must lie in the ability of the general manager to make the group perform *together* better than they would otherwise.

If that is the case, then the expertise that the general manager adds to the group is that of collective performance (in the making of widgets). *The job of general manager is* not that of a generalist (as the name may suggest), let alone a "jack of all trades", but rather *that of a highly specialized individual, knowledgeable of how individuals work together for some collective production and capable of intervening to improve such collective performance. The expertise of a general manager necessarily includes the uncommon knowledge of how individuals perform collectively <i>and* of how to improve such collective performance in the case of widgets – that is, to know "the business", the "domain" of the company. There is no such thing as the generic general manager: being a capable general manager in one business does not imply being a capable manager is any business. The job of general manager is therefore doubly specialized.

The common notion that general managers exist to manage functional managers (production, sales, finance, and so on) is incomplete in the sense that the contributions of functional units do not constitute externally *separable* collective performances. Or, put otherwise, the performance of a functional unit is *internal* (i.e., organizationally inseparable) and therefore dependent on the general manager. A competent functional manager may well be inapt as general manager exactly because the competence of a functional manager exists is subject to the competence of a general manager. One can only know if one can be a general manager by being a general manager.

In order to further understand how general management matters, we need a model to describe a company's performance.

Introducing EOS

The performance of a company is the outcome of the complex dynamic interaction between its environment (E), its organization (O) and its strategy (S)⁵. The underlying proposition is that a company's performance depends on "where" it is (E), what the company "is" (O), what the company "does" (S), and on how these three interrelated elements change over time.

Models of company performance based on E, S or O have been around for quite some time in a simplistic sequential version that I will refer to as E-S-O6: E determines S; then S determines O, (then O "executes" S) to determine performance. Company performance "begins" with the Environment: the market (what customers want or need), the industry (the "forces" of competition), available resources, regulations, and so on. The analysis of the Environment, sometimes limited to "industry analysis" or "market analysis", will let one "formulate" the best Strategy. Then it is a matter of "implementation" or "execution", for which one designs the "right" Organization ("structure follows strategy"). More often than not, the "best" Strategy is simply that which brings the highest returns to shareholders (that is, the collective performance that matters is a financial performance). Given that it is the stock market that prices the company, one can indeed state that it is the Environment that ultimately determines the performance of the company. So, company performance not only begins with the Environment, it ends there too. Hence the popular belief that the key question that the general manager must address is "What business are we in?", which is tantamount to choosing an Environment – for all else should flow from that choice, E-S-O dixit.

Several models or instruments used by innumerable managers and consultants around the world are based on E-S-O or a variation of the sequence. The "five forces", which emphasizes E-S, is probably the most popular; the "SWOT analysis" (Andrews, 1971), in which O is implicitly part antecedent of S; the "7Ss", developed at McKinsey in the late 70s (Waterman et al, 1980), which explicitly details O to be an organization design instrument, much like the "STAR" (Galbraith, 1995) or the "PARC" (Roberts, 2007). Models such as the "7Ss" and the "STAR" describe the relation between S and O but do *not* include E. They are not models of company performance but rather models of the company itself. They are subsidiary tools that aim at assisting a general manager in developing the "right" O after the choice of the "best" S.

⁵ The acronym EOS is quite a fortunate coincidence given that Eos is the goddess of dawn.

⁶ The most prominent foundation of E-S-O was the SCP paradigm of Industrial Economics, made popular in the business world by Porter (1980). This shaped the E-S relation. The work of Chandler (1962) was instrumental in shaping the S-O relation.

A major limitation of E-S-O is that it misses the *direct effect of E over O* – an effect that becomes quite visible in a multinational company ⁷. The possible inconsistencies between the putative "right" O, given S, and the E in which the O will exist are also not considered. However, an Environment is as much a "force field" for S as it is a "force field" for O. Local history, local culture and local institutions have a profound impact on O (see, for example, Redding, 2005, and Schneider and Barsoux, 1997).

The local E will impact the *natural* way of performing together there. IKEA exhibits a flat, egalitarian organization, in which subordinates often question superiors and tangible symbols of power are rare. No CEO in search of the "right" organization for IKEA's strategy designed such features. Such organizational features emerged as a growing group of Swedes was building IKEA in Sweden. IKEA is, in this respect, naturally Swedish. Even if Ingvar Kamprad had intervened to design such organizations features, it would have been the Swede in him doing it⁸. Indeed, the "corporate culture" of local companies is, by and large, a representation of local (national) culture.

Following E-S-O, in a given E at time t, the choice of the "best" S (be it \mathbf{s}^*) would determine O to be \mathbf{o}^* for best fit and optimal company performance. If \mathbf{o}^* is not natural in E – for example, certain features of \mathbf{o}^* do not fit the institutional and cultural traits of E at time t – the execution of \mathbf{s}^* would either turn out a different O, say \mathbf{o}^* , or added costs would be incurred in building \mathbf{o}^* (e.g., added training required to make individuals in E behave differently than is customary there). In both cases, what this means is that the company's performance will be lower and \mathbf{s}^* is no longer the best S. The "best" S could be \mathbf{s}^* , the strategy that fits the natural O in E. This is the mutual interaction of E, S, and O. Finding an optimal performance cannot be achieved without the *simultaneous* consideration of the three elements of performance, not a sequential one.

Furthermore, startups apart, the company will have a pre-existing organization, be it $\mathbf{o}^{\mathbf{o}}$. If the "best S" (derived from E) at time t is $\mathbf{s}^{\mathbf{*}}$ and the "right" O is $\mathbf{o}^{\mathbf{*}}$ (derived from $\mathbf{s}^{\mathbf{*}}$ in E at time t), there will be the need to change $\mathbf{o}^{\mathbf{o}}$ into $\mathbf{o}^{\mathbf{*}}$. The added cost of such organizational change may be high enough so that the execution of $\mathbf{s}^{\mathbf{*}}$ will no longer provide an optimal performance while another S, $\mathbf{s}^{\mathbf{*}}$, will exhibit a superior

same way in Sweden, in the US or in China.

⁷ In the Porterian world of "positioning", company performance is compared (explicitly) within an industry and (implicitly) within a country or a "global market" taken to be uniform across countries. This means that explaining performance heterogeneity is done within one E (at a given time) and therefore the direct impact of E on O is *not* observable. The E-S-O model will turn the same O for a given S, irrespective of E. Put otherwise, following E-S-O, a given business strategy is "executed" the

⁸ The general manager is also shaped by its original E. Ingvar Kamprad is an exemplar of the cultural landscape of Småland (Sweden) in the mid 20th century as Steve Jobs is an exemplar of California (US) in the late 20th century.

performance if it requires a less costly organizational change. The interaction of E, O, and S brings path-dependency into company performance. Put otherwise: the performance we can achieve tomorrow is partly shaped by the performance of yesterday – something that E-S-O and its universal solutions miss. History matters for collective performance.

The explicit interrelation between E and O shows up in Miller (1981) and the link between S and O in the so-called "configurations theory" which depend on the given E (Miller, 1986). Miller further argues that of the many possible combinations of E, S, and O given to the general manager of a company, only a small set is feasible. Of this limited set of viable "configurations", only a very small subset will exhibit high performance⁹.

Other academic contributions as well as testimonial evidence by practitioners have exposed the limitations of the sequential E-S-O model. The notion of S as "realized strategy" (Mintzberg, 1987) reinforces the impact of E on S through the "emergent strategy" component, but also shows that the shaping of S is a process, not one choice. This implies that O acts as a mediator between E and S (hence my choice of the order in the acronym EOS). Bower (1970) pioneered the view that strategy making is a *process* and that in large companies such resource allocation process (the shaping of S) was a political, bottom-up process dependent on certain features of the O (the "structural context", as Bower called it), chosen by the top general manager or CEO (unfortunately dubbed "architect"). In other words, the general manager shapes the O and then the "O", not the CEO, finds the best S in in a given E. The CEO will, of course, authorize S.

Miles and Snow (1978) present a typology binding Strategy and Organization in a parallel fashion. The "prospectors", "analyzers", "defenders", and "reactors" are sets of S and O with different performance in a given Environment. This is tantamount to changing E-S-O into E-(OS).

In a similar vein, Milgrom and Roberts (1995) reveal that S and O are mutually dependent by showing that features of S and O are complementary – that is, certain choices in Strategy are valuable only in the presence of certain features of Organization, and vice-versa, in the sense that the more of one, the more attractive the other. This implies that a general manager cannot design a superior performance piecemeal from benchmarks (picking the "best" features of each). No given strategy will produce a superior performance by itself. It depends on O. But choices on O cannot be made absent choices of S – and both are dependent on E.

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⁹ An equivalent view is based on the application of Kaufmann's N-K model (from biology) and shows company performance as a "rugged landscape".

Such view is later developed by Roberts (2007): "[The] problem of finding alignment among the environment in which the firm operates, its strategy, and its organizational design is not one that can be solved once and for all. Rather, it involves an on-going process of adjustment as the environment changes, as the strategy develops, and as the organization evolves." Interestingly enough, Roberts' model still reveals E as an antecedent to S and O. The E-S-O sequence is still there, reducing the management problem to a design problem. However, Roberts recognizes that such design problem "cannot be solved once and for all". Each time E changes, there is a need to re-design S and O in order to keep the alignment that produces maximum performance.

Such model of company performance captures the process nature of management but the dynamics remain essentially exogenous. It is a welcome addition to a Porterian view that dismisses O and it is grounded on the complementariness between S and O. It is a superior model of performance, but it is still a sophisticated form of E-S-O (see Figure 1). It misses the impact of S on E, of O on E and, surely, that of O on S. It recognizes the effect of time but not path dependency.

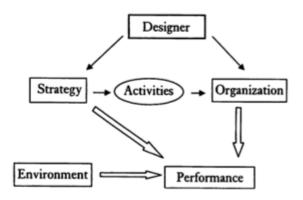


Figure 1: A model of company performance (Source: Roberts, 2007)

In order to observe the nuances of the mutual interaction in EOS, consider the case of IKEA. Its business Strategy (S) is made of a certain offering of furniture and accessories for the home and office and a unique business model, often referred to as the "IKEA way", which includes designing furniture (of a particular minimalist style and in a particular approach, the "flat-pack"), outsourcing its production, marketing it via advertising and a catalogue, retailing it in large self-service stores with a particular layout, and letting the customers transport it and install it at their homes or offices. The value propositions of such S are manifest, namely to its customers and to its owner, and have made IKEA very successful over decades. In principle, such S could have been an initial choice consequent from its original E (the furniture market/industry in Sweden after WWII). But it was *not*.

In fact, the initial S of IKEA was quite different. There was no flat-pack design, no IKEA store, no catalogue, no advertising, no transport or assembly by the customer – but there was already the proposition of value for money and a lower price relative to its competitors, a treasured choice by IKEA's founder. It took about fifteen years (yes, more than a decade) for IKEA to build its own "way". Many elements of the "final" S did not come from the founder (and general manager of the company for over three decades), but rather "from" the organization, namely through innovative actions by subordinates (designers, store managers, and so on) and certain interactions with the E (exchanges with lead customers, reactions by local competitors, relations with foreign suppliers, and so on).

It is a well-established fact that IKEA's offerings and business model (its S) changed the market and industry of furniture in Sweden (its original E). Changes in the E occurred, for example, in customers' tastes and perception of value, in the intensity of competition, or in the number, size, and technologies of furniture makers. All evidence suggests that IKEA also had a noticeable impact on Sweden itself, be it on its economy or its image around the world.

In other words: a chosen initial E gives shape to an initial S (through the intervention of the founder) and an initial O (largely shaped by E, as we have also shown above); such O then interacts with E, and reveal beneficial changes in S which may lead to changes in O; S and O will have some impact on E; this will repeat itself until S and O and E (may) converge to a demonstrated stable state for a while. Then E may exhibit some exogenous change and the search for a superior performance will start again with changes in S and O.

A similar view of dynamic interplay is implicit in Teece et al (1997), who presented three interrelated factors of competitive advantage: "process", "position" and "path". Processes (in O), including learning and transformation, position (in S) and path (i.e. the history of O and S), shape performance in a given E that changes over time. Superior performance in a dynamic E calls for incremental changes to OS ("learning") or for a new OS altogether ("transformation").

Some interactions in EOS imply changes *of* E. For example, the choice of outsourcing the manufacturing of furniture (an element of S) coupled with a reaction by the furniture cartel in Sweden (an element of E) to IKEA's low prices (another element of S) by imposing a manufacturing embargo on IEKA, led IKEA to source from Poland and to establish close ties with its suppliers there. This means that an element *in* E at a point in time (the competitors' reaction in Sweden) led to changes in S (offshoring and establishing partnerships with suppliers) and a change in O (namely a new structure and new skills) and a change *of* E itself. Such change is not a change of a given E (say, "Sweden"), but rather the move to a different E (say,

"Sweden *and* Poland"), showing that the manager can have some direct control over E.

The basic elements of the current "IKEA way", both in strategy and organization, have been the same for some four decades, though incremental changes in S and O continue all the time (such as home delivery services, for example) partly because IKEA's geographic footprint has not ceased to grow – a change *of* E – and partly because of changes *in* E – some exogenous, like an ageing population or changes in income per household, and some influenced by IKEA's S and O, like the growth of copycats or the re-structuring of local furniture industries around the world.

Finally, the company is an open system and will have an effect *on* E. Again, such impact is not present in E-O-S. What a company offers to the market will impact the perceived value of customers, the expectations of shareholders, the behavior of competitors and regulators, and so on. That is, S influences E too. Apple, Ford, IBM, IKEA and Swatch are dated exemplars. Likewise with O: some locally new features of an organization, say a particular governance structure, "forced ranking", or high powered incentives, may in time diffuse through E and even become a norm there. GM, GE, and Goldman Sachs are dated exemplars here. The impact of S or O on E is readily noticeable if the company is a "game changer", i.e. disrupts its market or industry. A given S or O may even impact a wider environment. Some companies carved their name in stone by authoring an effect well beyond their industries. Interestingly, three auto companies – Ford, GM and Toyota – belong to such rare category.

The EOS model

A company's performance is a never-ending process involving its E, O, and S concomitantly. Figure 2 captures the EOS model *at time* t.

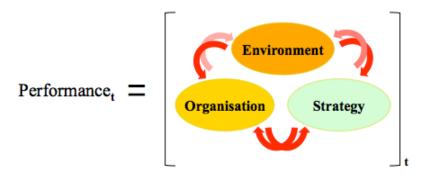


Figure 2: The EOS model of company performance

EOS is a model of company *performance*, not of the company itself. The separation between the environment (E) and the company ("OS") is largely conventional, given the *open* nature of companies. Each element of EOS impacts the other two elements and the whole, company performance. There are three features of such impact that are noteworthy. First, the impact is *non-linear*: a small change in one element may have a large impact on the overall performance (a feature of complex systems). Second, it is *asymmetric* – for example, the impact of E on S is different, and generally higher, than that of S on E. Third, it is a *dynamic* interaction: one element impacts another element which will then (not simultaneously) impact the first. Indeed the feedback effect can be mediated by the other element (for example, E impacts O, which impacts S, which impacts E). This is why the model shows two different lines with single arrows between elements (as opposed to one line with two arrows).

There is another relevant feature of EOS for the dynamics of company performance. Each element (E, O, and S) exhibits a different *rate of change* (or derivative) over time. This is valid for each element's natural change over time (the "life-cycle" argument) and for its artificial change in response to managerial interventions. E, O, and S are not equally malleable in time. What I mean is that superior performance is not purposefully determined by seeking the consonance or fit between E, S and O *at a given* point in time, but by exploiting the inexorable and uneven dynamic interaction between E, S, and O. For example, a change in O at time t will produce a change in S later on (say at time $t+2\Delta t$), even if either O or S are changed in the meantime at $t+\Delta t$. Company performance is therefore path-dependent in complex ways. Put differently: history matters a great deal. There is no tabula rasa in company performance.

Furthermore, EOS exhibits *non-malleability*. What this means is that a general manager cannot have any combination or configuration of elements in E, S, and O that one could imagine and wish. Only some combinations are feasible, as the various elements of EOS are *real* – they exist and interact beyond our will – and their interactions are non-linear and contextual – that is, how two elements interact depends not just on themselves but also on other elements around them (see, for example, Porter and Siggelkow, 2008). Put differently, non-malleability implies that some choices of, say, incentive systems are incoherent with certain choices of performance metrics or may be dysfunctional at certain levels of performance, or that some choices of business model are unfeasible with some choices of organization structure.

Enter the General Manager: M.EOS

I have presented EOS as the model of company performance. Such presentation was done without the separate consideration of the general manager. After all, the general manager is part of O (say, Ingmar Kamprad was undoubtedly a member of IKEA's organization and so was Steve Jobs of Apple's). Furthermore, obviously but importantly, the general manager is *also* a part of E (say, both Kamprad and Jobs were also shareholders of their companies).

The fact that the general manager is part of E is readily noticed in the case of multinational companies. Even today, a CEO with a passport that does not coincide with the company's country of origin is a rarity. One's own nation matters more than we usually like to admit in the context of business. In an extraordinary moment, Jeff Immelt wrote in page 8 of GE's Annual Report 2008 (quite a year for E): "I have also learned something about my country. I run a global company, but I am a citizen of the U.S." The remainder of the paragraph shows how his national allegiance has a bearing in his choices as the general manager of GE: "To this end, we [Americans] need an educational system that inspires hard work, discipline, and creative thinking. The ability to innovate must be valued again. We must discover new technologies and develop a productive manufacturing base. Our trade deficit is a sign of real weakness and we must reduce our debt to the world. GE will always invest to win globally, but this should include a preeminent position in a strong U.S."

I wonder how many non-American managers of GE *share* the value of a "strong US" with their (American) general manager, specifically in a period of global crisis. This is not a moral judgment. I am just stating that it is normal (indeed, *natural*) for an American to wish for a strong US as it is normal for a non-American not to share such a superordinate goal. Prompting one's nation advantage (one's own E) may not foster a superior collective performance in a corporation where so many general managers do not share the same E at the individual level. This goes to the point that managers are also part of E. The normative point is that general managers need to take such belonging into account in order to raise their awareness of their *natural* inclinations as they pursue, after all, a collective performance superior to that which would be natural.

Less obviously, the general manager is also part of S (yes, the company's strategy). Steve Jobs is not just part of Apple, he became part of what Apple delivers to the market. During a number of years, partly through and after Nissan's revival, Carlos Ghosn was treated like a folk hero in Japan. More generally, the general manager is a "symbol" of the company (Mintzberg, 1973), and in this sense the CEO is part of a company's offerings. This may be more or less visible, more or less intense, but it is conceptually there anyway.

The M.EOS model

The general manager is therefore part and parcel of EOS, like other managers and staff of the company. But what makes the general manager distinct is the inherent faculty to directly influence each and all of those three elements in pursuit of a collective performance superior to the performance *in the absence of* a general manager. What reveals general management is the ability to shape E, O and S.

This is why the general manager has to be unequivocally present in the model of a collective performance that is artificial, i.e. *managed* and therefore shaped by visible hands. A managerial intervention is like a sculptor's. The sculptor shapes a piece of stone to create an artificial form deemed aesthetically superior. So does the manager, not by designing some optimal form on a piece of paper but by carving an ever-changing performance deemed superior. *A managed company performance is therefore M.EOS, with M standing for the general manager* (see figure 3).



Figure 3: The M.EOS model of company performance at time t

Note that in the above representation of M.EOS, the arrows from M show that while M shapes E, O, or S it is also part of (influenced by) E, O, and S. The interaction here is simultaneous. The size of the arrows depicting managerial intervention is larger to represent the faculty of M to effectively impact the very entities that influence M. This is why a general manager has to hold knowledge about such entities (and how they mutually interact) and knowledge about how such entities affect such knowledge about themselves – a sort of metacognition, of knowing about knowing about collective performance. I propose that it is such metacognition that allows M to break free from EOS while being part of EOS.

The "general manager" (M) may be one person (the CEO) or more than one person: for example, SAP currently has two co-CEOs; Unilever, in the past, had a trio of

"CEOs". In many cases, namely of diversified multinational corporations, the ability to effectively shape the overall collective performance is beyond the capacity of any single individual and is held, de facto, by a top management team (or TMT) – though one individual may symbolically hold the title of CEO.

M.EOS is a complex dynamic system with four first-tier performance elements or factors: the company's environment, its organization, its strategy, and the general manager. Superior performance will correspond to a state of dynamic harmony between E, O, and S, created by M.

Managerial interventions are cumulative events in a process: which elements of EOS are modified by M matter and the sequence and timing of such modifications matter as well. This is a critical insight as we established that EOS is not instantaneous: an exogenous change in E, for example, and the resulting effect on S and O take time. Likewise with managerial interventions: Though performance can be measured at time t, it cannot be managed instantly at time t. Put differently: performance at time t is shaped by the integral of managerial interventions at time t, t- Δt , t- $\Delta \Delta t$, ... t- $n\Delta t$ – i.e. before t. A particular managerial intervention will have an *impact-time* (the time it takes for it to impact company performance) and a *lasting-effect* (the sticky effect of the intervention on E or S or O after impact-time). This is why management succession is a crucial moment. When a new CEO takes over it may well it that a predecessor's interventions will impact performance for quite some time – for the good and for the bad. This is another reason to carefully study the history of M.EOS, both the formative period (to learn about the universal core of EOS) and the recent years (to learn about the more recent managerial interventions), when starting as a general manager of an existing company.

The aim of managerial intervention is to create a superior collective performance. his means shifting EOS from one state (EOS)_L to a superior state (EOS)_H. Such performance shift is not instantaneous. It is a process in itself and it takes time. Managerial interventions are orderly and controlled acts that make up a process of performance shift (not strategy change, not organization change, not environment change, but rather all of the above as a whole). As Mintzberg noted, managerial work is never ending (Mintzberg, 1973). Even after turning around a company, there is no moment when the general manager can feel the pleasure of relaxing and saying "It's done" – simply because management is never finished. The pleasure of management lies in a deep feeling that one has created something artificial that is at least momentarily superior to what would be natural, but that special moment is not the gateway to a deserved rest. The dynamics of EOS show why.

EOS is not static. There is no "equilibrium" that keeps company performance constant over time. On the contrary: EOS is *always* shifting, and naturally so (that is, without the intervention of the general manager of the company). The gradient of

change may be small, sometimes hard to notice. But it may turn high, even catastrophic.

Suppose the company reached high performance (EOS)_H at time t, and then management rests. What will happen the next day? Several things are possible: a startup comes up with a substitute of the company product; a university lab comes up with a new technology that lowers the cost of production; a new law opens a new use of the product; and so on. All these are changes in E, and will immediately affect the performance of the company or the expectations about its future performance. It is clear that the company must change 0 or S in order to keep a high performance. If some companies can get away with effectively controlling E (through market power, not to speak of collusion or corruption), managers may rest for a bit. But in an open society, most environmental changes are welcomed and can't be prevented by successful companies – on the contrary, a company's success will invite copying by incumbents or motivate new entrants and substitutes: it follows that general managers can't rest there.

Three other changes affect company performance, all natural, continuous and unavoidable. Even if nothing else changes as time goes by, the O will change: the individuals that compose O will be older and more experienced. The performance impact is not obvious: more experience may imply higher efficiency, but aging may imply lower productivity. Such change in "people" may bring about further changes in O, such as a more conservative "mindset" as retirement approaches (equivalent to a higher discount rate on the future), or a different effect of "incentives" (for example, the significance of money changes with age). Such changes in O might cause a change in S (for example, reducing the resources allocated to R&D).

The second continuous change occurs in E: the amount of physical resources diminishes by the day. Such unsustainability will cause changes in S over time, such as the use of alternative raw materials or new production technologies. Indeed, after some threshold, the public opinion about the usage of certain raw materials may cause a reduction in the value perceived by customers and a lower willingness-to-pay for the product or a search for substitutes. The third continuous change also occurs in E and relates directly with customer value: existing customers and users get more and more accustomed to the product's benefits with time. As the product loses its newness and users get to use it efficiently, customers will expect new product features or a lower price. Again, this calls for a change in S.

The *natural* dynamics of E and O require managerial intervention or the company performance will decrease over time. This is why managerial work is never ending, even in the absence of purposeful change in E caused by others, such as competitors or government. This is also why management is *always* about proactive change, about intervening to shape reality artificially – and why a categorical distinction between "management" and "leadership" (such as in Kotter, 1995) is at odds with

reality¹⁰. There is no such thing as routine performance. General managers must constantly change their company strategy and organization ... just to keep performance constant!¹¹ If the continuous changes in O and E may go unnoticed due to a very low gradient, their cumulative effect will eventually be noticed, albeit too late (the "frog in warming water" syndrome). Missing the need for EOS change in due course is unbecoming to a general manager.

Detailing M.EOS

In order for the M.EOS model to be useful in practice, it is necessary to detail each of the three major elements of EOS that M may modify separately or concurrently. Each of the three first-tier elements, E, O, and S, is a complex system on its own, made of a number of second-tier elements (or sub-elements) that also interact with each other in a non-linear fashion: EOS is a hierarchic system (Simon, 1962), in which there are interactions among first-tier elements (or subsystems) and interactions within each first-tier element – i.e., *between* E, O, and S, and *within* E, O, or S. The second tier of EOS will reveal the options *directly* available to the general manager intervening to improve company performance.

E: Environment

"E" can be described as a *business environment* made of Customers, Shareholders, Partners, Suppliers, Government, and a local milieu or Society. This is not a list of abstract, generic entities. The E of a company is the actual environment *of* the company in a given business at a given time. "Customers" are the specific customers or market of the company at that given time; shareholders are the actual owners of the company then; and so on. Managerial intervention can directly choose or change E (and therefore, in due course, the performance of the company). A large number of theories or models relate the business environment and company performance, from the "five forces" (Porter, 1980) to "resource dependency" (Pfeffer and Salancik, 1978).

The *local environment* has a number of attributes that condition the expectations, needs, and behavior of each and all stakeholders and ultimately what is physically

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¹⁰ The notion that "managers" handle routine while "leaders" handle change is likely to arise from the sequential E-S-O together with an "equilibrium" view of the world. With the E in equilibrium, the "best" S and the "right" O remain constant. Teaching "equilibrium" and the "design" views fosters the belief that higher company performance either comes from growing scale and market power or from "creative destruction" and innovation. This perpetuates the (useless) discussions around "large" vs. "small" companies and "administrators" vs. "leaders" vs. "entrepreneurs" which have not brought progress to our knowledge about Management.

¹¹ The "E" source of this never-ending variation in performance is often referred to as the "Red Queen" condition that Ansoff mentioned long ago (Ansoff, 1957).

and socially *natural* there. Such attributes can be conveniently described as the "PITCH" of E (Santos, forthcoming), made of a particular *Physical* nature (a "geography", including its demographics and physical resources); an *Institutional* setting (economic, legal, political, educational, and so on); a *Technological* background; a national or local *Culture*; and, of course, *History* – as time and dynamics are of the essence here. A multinational company exists in multiple local environments at the same time. A diversified corporation exists is multiple business environments at the same time. The original E of the company has a lasting impact on the company's performance (Porter, 1990; Doz, Santos, and Williamson, 2001). There is plenty of evidence showing that when an economy grows or a market emerges, for example, even inefficient companies exhibit high performance (Wernerfelt and Montgomery, 1986), i.e. high performance may be *natural* in a given E.

General managers can change E in two ways, one directly and one indirectly. Managers can *directly* "move" the company to a different E by adding or removing one or more elements that make up their E (say, starting or ending a strategic alliance), or by adding or removing a location of the company (as when a company internationalizes and enters new markets). And managers can *indirectly* alter the existing elements of their E by impacting the behavior of elements of E: for example, an advertising campaign affects consumers' preferences; or lobbying deeds that alter government regulations; or still with a new business plan that changes the investors' perception of the company (say, from being a "value stock" to being a "growth stock"), which may even lead to a sale of shares by several incumbent shareholders and bring about new shareholders.

S: Strategy

If E signifies *where* the company is, the S signifies what the company *does*. The elements of S are: *product*, a good, a service, or a combination thereof; *position*, which implicitly specifies the product's application or value proposition for a particular set of customers; *business model*, which includes the set of activities that the company undertakes, the *technologies* it uses, as well as the linkages with partners and suppliers upstream and downstream¹²; and *resource allocation*, which determines how capital and labor are distributed across activities.

The Strategy in EOS is neither a dream nor a plan. It is what the company actually does – not what the company should do or wish it did. The S is the *realized strategy*,

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¹² For more on business models and the distinction between business strategy and business model see Santos, Spector, and Van der Heyden (2009).

not the intended one¹³. It is the actual *pattern* of behavior by the particular company in its business (Mintzberg, 1987), not the plan or entrepreneurial insight calling for such pattern.

0: Organization

The O in EOS signifies what the company *is*. There is no generally accepted representation of which elements constitute the "organization" of a company. The "7Ss" (Waterman et al, 1980) include one depiction of O as made of: "staff", "shared values" (originally, "superordinate goals"), "style", "skills", "structure", and "systems". The "STAR" (Galbraith, 1985) includes another model for O: "people", "structure", "processes", and "rewards"¹⁴. Such models are not that different. For example, "People" in the STAR can be seen as equivalent to "staff, skills and style" in the 7Ss. The expression and significance of "processes" was not yet common in the business and management literatures in the late 70's, and processes don't start with "s" anyway, but one may take "processes" as somewhat parallel to "systems" (for example, one speaks of "information systems", the other of "information processes"). Another model of "organization" is the PARC (Roberts, 2007) with "people", "architecture", "routines", and "culture". Again, PARC is not that different from the two models above: "architecture" is parallel to "structure" and "routines" to "processes".

Here I propose a different (but again, not that different) set of elements as constituents of O: "people", "managerial mindset", "structure", "processes", "performance metrics" and "incentives". This particular set is founded on my observation and study of management and company performance and therefore includes those elements of O that general managers modify to shape O *directly* (O is also indirectly affected by managerial interventions in E or S).

Any organization is made of individuals, so *People* is a necessary element of O. Implicit in "People" are a number of *individual level* attributes or qualities, such as nationality, gender, age, education, experience, skills, work style, empathy, and so on. The "Managerial Mindset" refers to the mental models and frames of reference shared by the top general manager (CEO) and the management team, as well as the set of shared values that specifically shape how the managers evaluate the performance of the company and the performance around the company. The "purpose" or "mission" of the company, its "vision", and its "goals" are also subelements of the "managerial mindset" and express the common dreams of the

¹³ This is why I prefer to use the expression "Conduct" instead of Strategy. However, the latter is now entrenched in business language.

¹⁴ The "7Ss" and the "STAR" are models of "OS": "Strategy" is the seventh S in "7Ss" and the fifth point of the "STAR".

management team. Company language is crucial here. *The "managerial mindset"* determines what is right, good, and beautiful for the company – and therefore guides the managers in their choices.

Then there is the organization *Structure*, the system of relations among those that make up the organization. Organizational structuring is the sum total of the ways in which an organization divides and coordinates its People into distinct tasks (Mintzberg, 1983). The Structure specifies the horizontal differentiation in the organization (the role of each individual or position) and the vertical differentiation (the level of authority or decision rights of each position), as well as the integration (coordination and control) in the organization (Lawrence and Lorsch, 1967; Mintzberg, 1983). The linkages among the differentiated positions, internal and external, constitute the structural elements of integration and reveal the interdependencies (pooled, sequential, reciprocal) among them (Thompson, 1967). The actual organization can be described as comprising a formal structure (the "org chart") and an informal one (the "network"), as each shapes individual performance and group performance differently.

Role and power traditionally constitute the two dimensions of organization structure. There are two more dimensions that need be considered: *information* and *location*. The "geographical structure" and physical settings of the organization are sub-elements of the O's structure. An organization can be single site or multi-site, be located in a single country or be a multinational, with a definite impact on collective performance, for example, by affecting communication or the ability to collaborate across physical units. And then there is the access to information: who knows what, when. This "information structure" is particularly relevant when an organization is split among distant locations around the world. In a small organization that fits in one open office the asymmetry of information will be very small and is difficult to manage anyway; in a large, multi-site, multinational company such asymmetry is likely to be large (even in the age of the internet) and is amenable to managerial interventions (namely in the age of the internet).

Organizations work through individual and group decisions and actions that follow certain patterns over time, i.e. *Processes*. Specific examples include decision-making processes, resource allocation processes (budgeting, headcount and capex), conflict resolution, communicating (information sharing), operating, innovating (new product development, business development), and people development. Organizational processes comprise coordination and control of collective action, organizational learning (or first-order change) and transformation (second-order change). Learning and transformation processes aim at patterned change *by* the organization itself (that is, without the singular intervention of the general manager).

Processes are key to integration. I want to highlight that a "process" is a *structure in time*, a chronological layout. But time is invisible to us – we can only see the present (and its gone) – which makes informal processes very problematic (namely in dispersed settings with local environments with different cultural meanings of time). The need for effective processes brings about formalization, or "bureaucracy", as is also called. The degree of process formality (schedules, agendas, procedures, and so on) is quite impactful, namely for sequential and for pooled interdependencies – and is counter-cultural (that is, not natural) in many societies. The effectiveness of management is readily visible in such environments.

Two more elements of Organization are due. One is *Performance* Metrics, the set of indicators, used to measure the individual, unit, and organisation level performance. We refer to the actual indicators in place, not the ones formally designed to be in place. Such indicators can be systematic or ad-hoc, quantitative or qualitative. The metrics can be internally or externally benchmarked. The final element of O is the set of rewards or *Incentives*. This element comprises the instruments of recognition, retribution, and motivation of managers and other employees for their own performance: the salaries and equivalent; the bonus systems and other special rewards; and the career and promotion rules. Incentives can be intrinsic or extrinsic.

In summary, we can conceive of Organization as made of People, Managerial Mindset, Structure, Processes, Performance Metrics, and Incentives (see Figure 4). Any intervention on each will cause a direct change in O. As mentioned throughout, the O here is the *actual* organization of the company at a certain point in time, not a design.

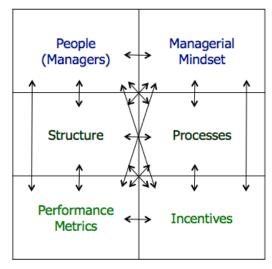


Figure 4: The make-up of Organization

The picture in Figure 4 separates a left and a right side for one reason: the three elements on the right side are particularly determinant for *integration*, be it for cooperation (incentives), for coordination and control (processes), and for both (managerial mindset) – and integration is paramount for multinational companies in a global world and for diversified companies. The multiple arrows show that all the elements are mutually related.

What about "culture"?

There is no company or corporate "culture" in the model of 0 that I presented above. There is, however, an element that I called "managerial mindset" and which is very close to the original notion of "organizational culture" (Schein, 1985). From a managerial intervention point of view, it is better to consider a shared "managerial mindset" than a "corporate culture". "Culture" is not a lever of management, managerial mindset is. It is easier to observe and assess. Does Google have a culture? The question is challenging because a "culture" is directly unobservable and can only be inferred from revealed shared beliefs and values or by some habitual artifacts and customary behaviors. All these observations need to be done across company sites and over relatively long periods of time. Many artifacts and behaviors that might constitute the visible fragment of a "culture" can be observed in a company. Google exhibits a peculiar decor, colorful artifacts, open offices, entertainment spaces, time for autonomous work, informal codes for dressing, and so on. But a set of artifacts or a "climate" is not "culture". It is much more feasible, namely for the managers of Google, to understand if and how they - as individuals share certain principles, beliefs, and values about the world, about the business, about the company, and about management. Such mid-level of "culture" (as Schein models it) is what I chose to highlight as "managerial mindset". It is almost impossible to manage a "culture"; it is relatively easy to manage a shared mindset. It starts with selection.

The detailed M.EOS model

Figure 5 depicts M-EOS with the second-tier elements of E, O, and S described above.

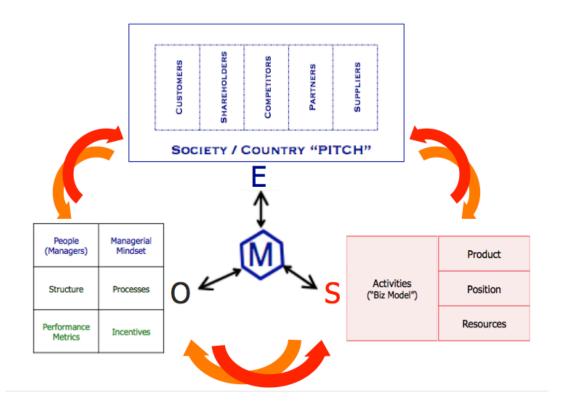


Figure 5: The M.EOS with detailed E, O, and S

Conclusion

General managers change the course of company performance, EOS, by intervening to alter one or several elements of such performance. The manager has a large number of routes to use, be it within E or O or S. However, such options interact in a complex dynamic fashion and an intervention may prove incoherent with other interventions. High performance comes from a harmonious EOS but, as the manager intervenes to shape E, O, and S, there is no way of knowing in advance which is the superior configuration. As the poet said: "caminante, no hay camino / se hace camino al andar" 15.

The E-S-O sequence looks more appealing. The manager becomes a "designer". Managerial choices in E-S-O sound rational, predictable, and universal – not emotional, not subjective, not contextually biased. The E-S-O is, alas, a very crude and simplistic view of company performance. It misses the dynamic features of company performance. It misses the separate effect of E on O. It misses the

 $^{^{15}}$ Wanderer, there is no road / the road is made by walking (in Antonio Machado's "Proverbios y Cantares")

complementarity of O and S. It misses the effect of O on S. The E-S-O misses too much.

M.EOS is not tempting. We know much less about how S and O shape E than vice versa. We know much less about how E shapes O than about how E shapes S. We know little about how to predict complementarities between S and O. We can't fully understand emergence, let alone predict it. But we know that when general managers purposefully intervene to improve performance, they do it by combining disciplinary knowledge with managerial experience, with reason and emotion, with "Mens et Manus", with certitude and with experiments, coping with uncertainty and benefiting from serendipity while maintaining order and efficiency. It is amazing to be a general manager and have the ability to make others perform better together and feel better individually because of a higher collective achievement. But that is a formidable undertaking. Humility in general management is not a virtue, but rather the only rational attitude facing the mission of creating a collective performance superior to that which would naturally occur.

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