20 Rethinking Managerial Control in the Contemporary Context

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> *"The goal of management control systems is to implement organizational strategies. Organizations that are able to efficiently meet their strategic objectives are the best performers in the long run."*
>
> Robert Newton Anthony

Summary

Classical managerial control theories mostly focus on performance indicators, like the number of pieces produced. More recent theories focus on behavior control. All theories are specialized in controlling a specific unit of the firm, i.e., the employee, the team, or a subsystem. Therefore, agency theory-based control and system-based control have their limits. In this chapter, we advocate for a more holistic approach that takes into account the culture of the firm but also of the geographic region studied. Indigenous research is presented as a possible way to improve managerial control and harmonize western and eastern countries' views on managerial control (we take several examples from North America, Europe, and China). We also propose a general guideline for conducting indigenous research on managerial control. Finally, we raise some concerns about the risk of using control to spread specific ideologies in firms that

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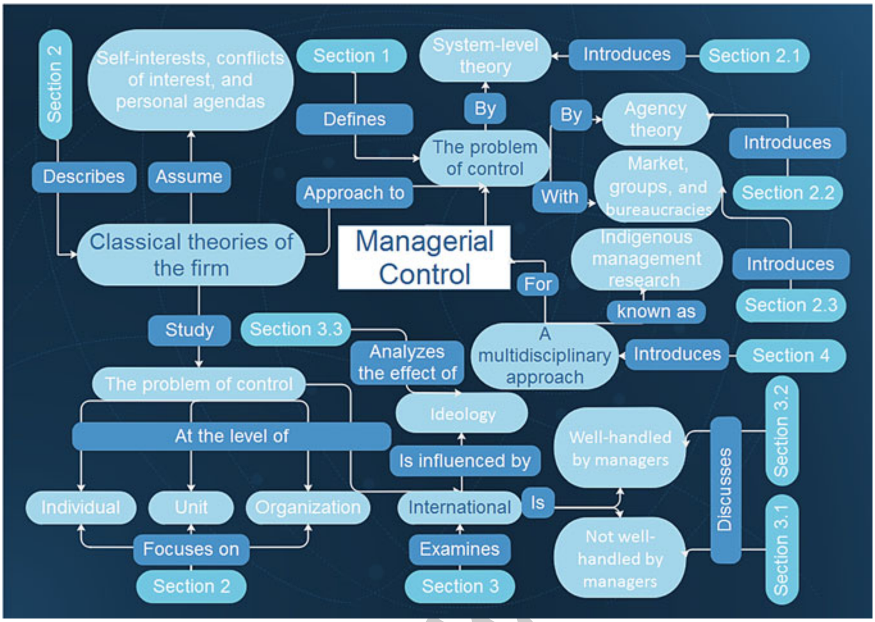
N. Rezaei (ed.), *Integrated Science*, Integrated Science 1,
https://doi.org/10.1007/978-3-030-65273-9_20



The concept map of the chapter

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1 Introduction

Managerial control theories can be traced back to the first writers of management. In one of the first textbooks about management, Fayol listed control and planning, organization, staffing, and leadership as one of the manager's functions [1]. Today, the focus on organizational control has become a large part of management science and economics, commonly used in the subfields of finance, accounting, management information systems, organizational theory, and, more recently, innovation and creativity management [2]. AQ1

In modern theories of the firm, managerial control is defined as the main mechanism for strategic implementation. It is also a way to exercise management power and organizational, political influence. More recently, managerial control started to include cultural and philosophical perspectives, building a riverbed for ideological approaches.

This chapter addresses those issues in the following sections. The first part highlights some of the standard theories of managerial control and their links with classical theories of the firms. The second part investigates some cultural, philosophical, and ideological approaches of managerial control. The last part of the chapter calls for the development of indigenous research in managerial control to overcome limitations to the actual global, standardized view.

2 Classical Theories of the Firm and Managerial Control

In her famous book on organization theory, Hatch introduces control by quoting Tannenbaum [3, 4]. This author highlighted that classical theories of the firm often base their control view on much older works. Thereby theories of the firm authors show limited attention given to controlling (for most of them).

> *"Organization implies control. A social organization is an ordered arrangement of individual human interactions. Control processes help circumscribe idiosyncratic behaviours and keep them conformant to the rational plan of the organization. Organizations require a certain amount of conformity as well as the integration of diverse activities. It is the function of control to bring about conformance to organizational requirements and achievement of the ultimate purposes of the organization. The coordination and order created out of the diverse interests and potentially diffuse behaviours of members is largely a function of control."*
>
> *Tannenbaum, 1968: 3*

Theories of the firm incorporated managerial control based on the assumption that different individuals have different reasons for participating in organizations. Therefore, firms face the problem of ensuring conflicts of interest, personal agendas, and self-interest. Since the organization is composed of individuals with different interests, the manager must exercise control. Managerial control theory focuses on mechanisms for controlling behaviors to ensure that self-interest is minimized.

This part of the chapter will introduce three control theories of organizations linked to three theories of the firm. Control concepts can be applied at the individual, unit, or organizational level, and are often applied to all three levels. More recent theories take a "big-picture approach" when older theories are more focused on a specific level.

The first theory presented involves performance evaluation and feedback. This method shares many characteristics with the description of the firm as a complex system [5]. The second theory, called agency theory, is rooted in economics and accounting [6]. This theory of the firm focuses on controlling based on contracts designed to govern employees to serve organizational owners (such as shareholders) rather than their own interests. The third type of theories compares the market and bureaucracy, groups, and clans as alternative forms of organizational control, and raises the issue of using culture as a control mechanism.

Layout: T1 Color Book ID: 499505_1_En Book ISBN: 978-3-030-65272-2
Chapter No.: 20 Date: 27-2-2021 Time: 2:16 pm Page: 4/19

2.1 A System-Level Approach to Control

In this approach, the firm is depicted as a set of subsystems. The current state of each system is compared to the desired state, and any differences between the two will trigger adjustments. Organizational control processes aim to identify the difference between the current level and the expected level and trigger adjustments when a difference is found. In this approach of the firm, organizational control processes are a part of the strategy implementation.

The environment provides contextual elements that impact the development and execution of the strategy globally at the firm level and each strategy for respectively each subsystem. Strategy-related goals are run through the entire hierarchy until each organization member understands its role in the overall strategic plan. Then, individual-level goals defined in the context of unit and organization-level goals begin as activities that will cause the organization to achieve the desired output, of course, provided that the strategy and goals have been fully considered and clearly communicated.

Strategies and goals are only used to direct the organization in a specific direction. Actions that occur throughout the organization will implement and realize the strategy. Therefore, strategists rely on members of other organizations to act in ways that produce strategic goals (rather than pursue their own interests). To ensure that these actions take place, management personnel have established a control system to monitor and adjust the process of implementing the strategy. In this view, the control system is consistent with the organizational target system, supporting and encouraging individuals and units to develop in the direction of strategic definition.

The challenge for the managers of each subsystem is to focus the attention of the employees and to make clear links between goals and actions. This is particularly difficult in an unstable environment, known as the “VUCA” context where each subsystem can react differently due to high volatility, uncertainty, complexity, and ambiguity [7]. Setting goals or standards of acceptable behavior related to goals is the first step in developing control systems in such situations. The next step is for measuring and monitoring compliance with goals and standards and providing feedback. The feedback is based on the comparison between the actual performance and the standard set and is communicated to trigger adjustment when a deviation occurs. This requires two things. First, it depends on an understanding of the technology used by those constrained by the control system. Second, the organizational goals must be specific to the task to be controlled. If these two conditions are not met, the definition of task control will be unclear, the control system will be hindered by ambiguity, and employees and managers will lack a clear focus [8]. Once the goals and tasks are defined in the whole system level, goals or standards can be set to encourage activities to achieve the goals for each subsystem. Two methods can be used for this: control outputs and/or behavior control.

Output control focuses on the results of task activities and depends on the measurement of these results. Output control can be developed at the individual or subsystem level. It is a simple piece counting system. In such a piece-rate system, employees are paid for the number of products they produce in a given time. Of course, depending on the firm's aim, or the sector of activity, such counting measures need to be adapted, but the overall logic remains the same. Quality can also be the focus of output control. Calculating the number of defects for a single product will be an example of a single level output metric focused on quality. When applied to a subsystem, the output is defined as the collective result of the work of the set of individuals, for example, the number of products assembled by all members of the subsystem.

When it is not easy to measure output at any level or in any subsystem, for example, in teaching (output is new learning) or customer service (output is customer satisfaction), behavioral control can often be used. Behavioral control depends on knowing which behaviors will produce the required level of performance. An example is the use of behavioral indicators (such as proven knowledge or enthusiasm for the subject) to evaluate teaching. When such indicators are known, behavior control can be performed. However, when it comes to teaching, output measures and behavior measures have their own limits [9, 10].

There are many problems that frustrate the design and implementation of performance evaluation systems, among which the most important is ambiguity. Ambiguity makes certain organizational activities extremely difficult to measure behavior or output metrics. Creativity and innovation are examples. As we all know, the output here is difficult to measure because it takes a long time to identify ideas, innovative solutions, or designs [11]. Behavior is also difficult to identify because the definition of appropriate behavior changes with each new customer, product, problem, or situation. However, years of research have made some progress in controlling creativity and innovation, and its emergence is generally regarded as an inspirational problem [12].

In situations where it is difficult to define the output being ambiguous about appropriate behavior, uncertainty may cause managers to use the control system inappropriately. That is, the uncertainty that cannot control output or behavior can ironically lead to stronger expectations for these controls [13]. For example, in an R&D laboratory, everyone generally admits that the time spent in the laboratory is not more important than the lack of observable inspiration or creativity. However, time in the laboratory can be used to evaluate performance, as this is the only objective indicator available [14]. The result of this approach is an overemphasis on what really matters. By emphasizing all aspects of work behavior, the control system can control all aspects of work behavior, and the control system may impair the required performance [15].

Another problem with performance evaluation systems is that they are prone to negative reactions among people under control. For example, there is an intention to find a way to meet the needs of the system. The control subject can achieve this goal by focusing only on the measured content and ignoring the underlying goals of the system. No set of measures can capture all aspects of strategy and goals equally well. If measures become the focus of activities, other aspects of performance will also be affected [16].

Unit-level control usually depends on converting unit goals into financial goals like budgets [17, 18]. It determines the number of resources that the unit will use to carry out its work. The budget allows managers to know what resources will be available to achieve the set goals in a given period and to monitor the performance of the budget period by comparing actual costs with budget costs. In many organizations, statistical reports tailored to the performance of a particular unit are used to provide feedback on this information to the unit, which then makes self-adjustment. The report focuses on information such as output, quality control data, and other unit-level results.

2.2 Control in Agency Theory

In agency theory, the organization's control issues are viewed from the perspective of the organization owner (investor) and external stakeholders (such as underwriters, creditors, and potential investors). The relationship between the owner (called the principal) and the manager (called the agent) is the core issue of the theory [19].

Managers are called agents to indicate that they should act for the client's interests when acting on behalf of the client, not for their own benefit. The agency problem involves the risk that the agency will serve its own interests rather than those of the principal. Agency theory focuses on the way of controlling the self-service behavior of the agency to ensure the protection of the principal's interests. Although agency theorists explain agency problems based on the relationship between company owners and managers who hire them to act on their behalf, the theory can be generalized to the relationship between lower-level management and its subordinates [9].

In agency theory, the issue of the divergence of interests is resolved through the conclusion of a contract, so that the agent's own interests are consistent with those of the principal. The contract stipulates measures and promises rewards so that agents will serve their own interests when meeting contract requirements. This is done by providing rewards that the agent considers desirable, and building these rewards based on activities that serve the interests of the principal. Therefore, the issue of the divergence of interests between the principal and the agent is dealt through a contract, and the principal delegates the work to their agent through the contract at the agreed price [20]. The principal and the agent sign the contract to act on their behalf because they cannot or do not want to be present all the time to protect their own interests. However, because no one was present, the agents who were unwilling to perform their duties in a completely responsible manner were willing to accept opportunism. In other words, the agency theory assumes that it is not always possible to rely on the agent to fulfill the agreement. They may avoid performing duties, work, and responsibilities. In agency theory, this dilemma is explained based on information [21].

The ability of the principal to know whether his agent is evading depends on the information available to the principal. A situation of complete information indicates that the principal knows whether their agent is right. When possible, direct observation can provide complete information, but it takes much time, so that the client may wish to operate the organization personally. Also, because management involves many unobservable aspects, direct observation may not be possible. Incomplete information means that agents may or may not be caught, so they will face the temptation to minimize efforts [22].

From the perspective of agency theory, the question of whether to choose behavior or result control is a cost issue related to collecting the required information. This information needs to minimize the agent's chance of evasion. Behavioral control requires the use of additional management to perform such activities, or the development of information systems (such as cost accounting, budgeting, and formal reporting). Without conventional technology, management and information systems will be more difficult to develop and more expensive to use [23].

As behavioral control becomes less feasible, output control becomes more attractive. When it is easy to measure the output (for example, the number of shipments), the cost of output control is the lowest, but if it is difficult to measure the output (for example, morale and quality are as important as the production quantity), the attractiveness of the output control will be reduced. When an organization faces an uncertain future, output also becomes problematic. In other words, agents only partially determine the results of their organization, technology, and environment, and are also partially responsible. Because the control of results keeps agents accountable for unforeseen circumstances, results measurement forces them to assume some related risks.

Several authors suggest that organizations can adopt multiple control strategies [2, 24]:

- The first is to design a simple routine job so that behavior can be easily observed and rewarded;
- The second control strategy is to design a more complex and interesting job and invest in information systems (such as budget systems, audits, or other management) to gain knowledge about behaviors and reward them based on those specific actions;
- The third option is to design more complicated and interesting work, but use simpler evaluation schemes (for example, profitability or income) and reward based on the evaluation results. In this strategy, risk rewards replace measures and precise job design; and
- The fourth option no longer emphasizes performance evaluation but is based on more holistic indicators. This is the idea of selection, training, and socialization as an alternative to agency-based control systems. Organization theorist, William Ouchi, described this idea.

The following section turns to this approach, championed by Ouchi, where economic and financial indicators become less important, and other forms of control emerge.

2.3 Controls with Markets, Groups, and Bureaucracies

For Ouchi [25], the problem of control can be expressed as "*the problem of achieving cooperation between individuals who have some different goals*." He pointed out three different sources of control in an organization to solve this problem: markets, bureaucracies, and clans (or groups). Table 1 summarizes his views.

Market control is carried out through the competition. When an organization participates in the free market, prices and profits can be used to evaluate and control its performance. In competition, price is regarded as an indicator of economic performance because it is assumed that the comparison of price and profit between a group of competitors in a free market can assess their relative efficiency.

For example, those organizations with the lowest cost can afford the lowest price, so they can compete most effectively. Similarly, organizations that consistently provide products or services of higher value (e.g., higher quality and more practicality) than their competitors may charge additional fees. Both of these conditions contribute to the organization's income. In either case, the performance of the organization will be reflected in the prices that its products or services receive on the market, which, in turn, will affect its revenue and profits. In this way, the market controls the organization because low profits force the organization to improve or suffer consequences [26].

By establishing a profit center, market control can also be used at the unit level, within a department of a multi-sector organization. This form of market control simulates the market within the organization by allowing units to conduct economic transactions. For example, this situation occurs when one department sells its products to another department. In this internal market, transfer prices allow the accounting system to calculate unit profits in the same way as the entire organization. This is noted in some cases by allowing the department to purchase inputs from external suppliers at prices where internal prices are not competitive, or to sell products to external customers when these customers offer better prices than internal customers, and so competition rules come into play [27]. When departments in an organization operate as profit centers, senior management can compare the performance of each department like shareholders. Then, top management attempts to invest in its various departments to maximize the return of the total portfolio of the business operated by the organization. In this way, organizations can use the market to control their departments, which are competing for the highest level of profits [28].

Market control strategies are effective only when an organization or unit produces products or services that can be defined and priced. Competition makes the price meaningful. Without competition, the price cannot indicate internal efficiency because it cannot be compared with other firms or units [29]. If there is no competition and there is no market, prices will usually expand as in other monopoly situations. When neither there is a competition, nor it is possible to simulate competition effectively, another control mechanism must be found. When markets fail, organizations often turn to bureaucracy.

Table 1 Principal characteristics of control by markets, bureaucracies or clans [3, 25]

Source	Mechanism	Assumptions	Forms	Examples	Focus
Market	Price/profit	Competition/economic exchange	Output control	Output schedules/budgets	Results
Bureaucracy	Rules/surveillances	Legitimate authority/hierarchy	Behavioral control	Auditing/direct supervision	Actions
Clan	Commitment/socialization	Established tradition/trust	Ceremonial or symbolic control	Training/indoctrination/certification	Values/attitudes

Bureaucracy relies on a combination of rules, procedures, documentation, and surveillance to achieve control [30]. The focus of the bureaucracy is the standardization of behavior. Bureaucracy is not a unit that rewards in response to market forces, but rewards individuals for observing established rules and regulations. Bureaucracy depends on the existence of a legal authority level for managing bureaucracy. In the bureaucratic control system, the basic control mechanism involves the close supervision and guidance of subordinates to their superiors. Rules usually describe the process to be completed or the output and quality standards to be achieved [31]. Supervisors and managers assess the degree of compliance with rules and procedures. The difference between the rules and the pricing mechanism of the market control system is that prices involve comparing the value of the output generated by individual buyers or sellers, while rules are more or less arbitrary standards [32].

The pricing mechanism does not require intervention, and according to the rules, managers must set standards, observe performance, and evaluate it to determine whether performance is satisfactory. This management function is expensive. Therefore, market control is more effective than bureaucratic control. However, because many organizations cannot meet price conditions, bureaucracy provides an important and widely used alternative. Similarly, when it is difficult to monitor due to limited knowledge of the behavior that produces output, the form of controlled behavior is not applicable [33]. If the results are difficult to identify or appear infrequently, the output control will also be invalid. In this case, rational means of control through the market or bureaucracy will not succeed, and organizations must rely on their social system to limit the dispersion of goals and chaos. In that situation, a clan approach may be the solution (Table 2).

Cultural values, norms, and expectations provide the main control mechanism for organizations that use clan control. Such a system requires socialization. Once employees have socialized, they have internal control because they are committed to the organization's goals and practices [34].

Clan control depends on an implicit understanding of the values and beliefs that guide the behavior of its members. This internal understanding helps guide and coordinate the activities of the organization. The organization's norms and values define the limits of appropriate behavior, and there are reasons to sanction any behavior that is not suitable in the system. For those members who often have to sacrifice some or all of their own interests to become members of the clan society, this also represents a high degree of commitment to the system [35].

Table 2 When to measure behavior when to measure outcomes [3, 25]

		Knowledge of the transformation process	
		Perfect	Imperfect
Ability to measure outputs	High	Behavior or outcome control	Outcome control
	Low	Behavior control	Clan control

Organizations with a large number of professionals are especially a model of clan control because professionals are highly socialized about their professional norms and expectations, and their professional commitment and attention to professional reputation help control their behavior. However, professional commitment may run counter to the interests of the organization, and when doing so, most professionals will give up the interests of the organization to be loyal to their professional interests [36]. Once this is done, the personal value will guide employees to do as expected and desired by the organization without the costs associated with bureaucratic control mechanisms, so monitoring will largely be unnecessary. However, the potentially harmful effects of such control strategies, such as increasing the potential for collective thinking (i.e., unable to challenge each other's ideas and eventually embarked on an unstable path) and limited innovation, need to be considered [37].

All organizations will have social and information systems, but their degree of dependence and development on these systems will vary with the type of control system they prefer to implement. Using organizational culture becomes a strong control system when clans or groups have aligned the interests. The culture of the firm becomes a control mechanism pushing sometimes much more than simple work control. In those situations, some firms may be vectors of ideology with the help of their control mechanism.

3 International Settings, Ideologies, and Control

Several authors proposed the clan control hypothesis because culture influences behavior through norms, values, expectations, and beliefs. Managers can control behavior by controlling these aspects of culture [38]. We can identify two groups: those who do not believe that culture can be controlled and those who believe managers can effectively control culture.

3.1 Managers Cannot Reinforce Control with Organizational Culture

Cultural conceptualization often describes the organization as a homogenous entity. When this kind of homogeneity is observed, it is often found at the top management level. After many promotions, the managers who fully support the firm's business tend to be part of the culture. Therefore, if culture is the controlling force, its clearest application is at a higher level rather than a lower level. Senior managers are controlled by the firm culture, but the ability of senior management to use culture to control subordinate members is questionable. Simply because lower-level employees do not have the seniority, history, and background necessary to understand the firm culture completely and to identify with it personally, therefore, it is the culture that controls management, not the other way around [39].

3.2 Managers Can Reinforce Control with Organizational Culture

Many other researchers believe that managers can influence the values and beliefs shared by the members of the organization and control their behavior accordingly [38]. These theorists did not question the assumption that clan control is possible but attacked it on moral and ideological grounds.

Ideology is a system of thought that allows one group to rule over another. Cultural domination refers to the process of engineering consensus by developing a system that conveys and supports ideological beliefs. It is this well-designed consensus that raises false awareness and forms the focus of intense criticism of cultural change programs, total quality management, business process reengineering, and other popular management initiatives that use participatory rhetoric to gain worker support [40]. For instance, family control is depicted as an ideology designed to support the hegemony of managers coming from the same family. Non-managers accepted and practiced this ideology, so they fell into a false consciousness and gave up their own interests to pursue the interests of the family. Some researchers interpret those organizations as neo-Marxism.

The standardization and coordination process helps routinize work activities to be consistent with the organization's strategy and goals. However, when managers neglect the need for autonomy, organizations suffer from a lack of innovation [41–43].

3.3 Interaction of Ideology and Control

Recently, the concept of ideology has been grabbed by organizational scholars and applied to management practice. Some researchers see ideology as a negative approach to control. In contrast, others see the positive aspects of ideology; ideology is a medium by which people make history a conscious actor, whether in an organization or within a country [44]. In this sense, ideology should be regarded as an important tool for change, rather than an obstacle like the traditional definition.

In an ideological organization, participation depends on a sense of identity (for example, the positioning of a leader by a loyal follower). Members maintain participation in ideological organizations because they believe in the organization's purpose, feel personal satisfaction, and enjoy increased self-esteem due to participation.

The control itself is an ideology. In other words, one of the ways to maintain hegemony in an organization is to support the dominance of top management through a control structure. Therefore, the belief that control is essential to the success of an organization gives powerful people the right to dominate. This belief can be described as an ideology-control ideology. Reinterpreting all organizational theories from an ideological perspective is one of the important topics put forward by postmodern organizational theorists.

4 What Response Can Indigenous Research Methods Give to Those Challenges?

The question of reviewing managerial control theories and reconceptualizing management control models has fostered intense debate in recent years. Several scholars have pointed out that the common body of knowledge on managerial control currently available so far has not managed to embrace the complexity of managerial control systems [45, 46]. Also, Otley [46] noted that managerial control theory has long been criticized for its undefined theoretical foundations, particularly regarding rationality being a fundamental concept in managerial control theory. One of the main criticisms of traditional managerial control theory is its incapacity to provide a holistic, unified, and consistent model that embeds contradictions so that they can be an integral part of the model itself instead of being a limitation of the model itself. There is evidence in recent literature that the traditional view on managerial control, based on a scientific perspective, would need to be confronted against a more holistic and human-based view.

Despite many publications related to the *Contingency Theory of Performance Management Systems*, the literature in management accounting has implicitly focused on a deterministic and objective understanding of control systems instead of acknowledging their complex and holistic nature. Studies remain compartmented, in particular, because the disciplines of organizational behavior, psychology, and social sciences, in general, may lack the level of practicality required in management disciplines like accounting.

4.1 Indigenous Management Research

Would alternative research methods, like Indigenous Management Research (IMR), be able to path the way towards a more multidisciplinary approach and holistic view of managerial control systems? How could those methods help embrace alternative paradigmatic assumptions so as to rethink managerial control systems in the contemporary global context? By facilitating the emergence of new theories, IMR helps to respond to increasing complexity [47].

Advocates of IMR argue that suitable methodologies are necessary to create new knowledge where existing theories cannot provide a suitable response to a particular problem or phenomenon. Leung argued that IMR could contribute to the development of universal theories. However, experts insist that IMR should be able to follow some principles in order to achieve this role [48]. In particular, IMR should address the need for the complementarity of qualitative and quantitative methods to help develop and validate new concepts from empirical research and should adopt a multi-level perspective to develop an understanding of the new phenomena [49]. Jing and Ven emphasize the unique attribute of indigenous research to reflect the uniqueness of local constructs and contexts [47]. Li et al. (2012) stated that IMR must bring a local (*emic*) perspective as opposed to a foreign

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(*etic*) point of view and should refrain from building universal principles or knowledge [50]. IMR also requires a relationship between scholars and practitioners involving negotiation and collaboration in a learning community, promoted by supporters of Engaged Scholarship. Van de Ven defines Engaged Scholarship as "*a participative form of research for obtaining the views of key stakeholders to understand a complex problem in its particular context*", then doing research "*more penetrating and insightful*" [47, 51]. He argued that emic inquiry can be as objective and valid as etic research and provided several examples of engaged indigenous research works to support his views.

IMR builds its foundation on qualitative research methods, whose methods and procedures have been the subject of numerous publications in the late eighties and nineties. Eisenhardt proposed a process of building theory from case study research and argued that empirical inductive qualitative research is an especially appropriate approach in new topic areas, where the resultant theory is "*often novel, testable, and empirically valid*" [52]. In this perspective, investigators in theory-building case study research should formulate a research problem and possibly specify some potentially important variables, with some reference to existent literature. Quantitative methods can be used as a research method only when concepts have reached a certain level of maturity.

Indigenous Knowledge is often defined as the opposite of scientific knowledge, still contributing to scientific, theory-based knowledge by allowing to form new scientific knowledge. Some authors emphasized the distinctive role of theory in qualitative research as relating to the expression of a subjective reality more than the clarification of an objective one [53]. According to Tsui, it is necessary to distinguish between various sources of knowledge depending on their relevance to the context and understand how they complement each other [54].

Indigenous methods of management research have been advocated to reduce western-centric theories of management. Western centric theories are based on a values system adapted to western societies. Therefore those approaches (or even philosophies) gave actionable solutions to the phenomenon studied [48]. Meyer declared that "*more management research should be able to make major contributions, for instance, by explaining context-specific variables and effects and by drawing on traditional Asian thought in developing new theories*" [55]. Holtbrüggge argued that management theories are not adequately reflected by traditional Western and called for more context-specific research for drawing on indigenous thought to ensure that new theories who better fit to emerging markets [56]. Tsui argued for the need for high-quality indigenous research in building the body of global management knowledge, using influential studies on management in the Chinese context [54]. In his view, both context-specific research and context-embedded research are needed in international management knowledge and should comprise three types of models: context-free, context-bounded, and context-specific. A multi-level approach is required in building global management knowledge by combining several sources of management knowledge with various degrees of contextualization, including context-specific indigenous management knowledge. IMR would then play a critical role in building global management knowledge.

4.2 What Is Indigenous Management Research?

Eisenhardt [52] indicates that "*building theory from case studies is a research strategy that involves using one or more cases to create theoretical constructs, proposition and/or midrange theory form case-based, empirical evidence*." She also stresses the unique characteristic of theory building from cases: "(…) *emphasis is in developing constructs, measures, and testable theoretical propositions makes inductive research consistent with the emphasis on testable theory within mainstream deductive research*." She notes the importance of creating theoretical constructs from empirical evidence and argues that investigators in theory-building case study research should possibly specify some potentially important variables, whether derived from existent literature or from practical concerns.

IMR can be defined as "*the study of a unique local phenomenon or a unique element of any local phenomenon from a local perspective to explore its local relevance, and, if possible, its global relevance as well*" [50]. Those authors also explained the role of IMR in relation to Western theories: "*A study that examines a local phenomenon entirely with a modified or expanded Western theory informed by a local perspective, it may qualify as indigenous because the research contributes to theory development by adoption of a local perspective*." They noted that, however, *"a study that examines a local phenomenon from the perspective of Western theories or constructs cannot qualify as indigenous (…)*" and proposed a typology of IMR based on the nature of the local phenomenon and the source of theoretical perspective, as well as an integrative framework of IMR.

According to the current literature, IMR has the following main characteristics as compared to other qualitative research methods:

- The importance of integration of both positivism and constructivism in the approach;
- The focus on context is essential because context-specific research allows "*to ground the phenomenon up close and in sufficient detail to capture its unique essence, and theory*";
- Once the indigenous construct elaborated, adapted quantitative measures should be produced to allow empirical research; and
- The relationship between the researcher and the participants in conducting indigenous research projects must be restated, arguing that researchers are most likely to be able to advance current theory and practice through active Engaged Scholarship.

4.3 IMR in Managerial Control Theory Today

Several authors noticed that Ancient Chinese theories of control might provide a good example of the potential contributions of IMR in the field of managerial control. The researchers in [58] have provided evidence of practices of managerial

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Table 3 Research toward indigenous management

Project phase	Outcomes	Research methods
1. Theory grounding (mostly qualitative) - content-based	• Making use of field notes to record the impressions occurring in the observed phenomena • Crafting instruments and protocols for multiple data collection • Developing a theoretical model based on a priori constructs • Creating data structure	• Empirical, inductive • Multiple data collection methods • Qualitative data (surveys, group observations, and focus group session) • Quantitative data (quasi-experimental methods) • Triangulation of evidence
2. Theory testing (mostly quantitative)	• Analysis of mediation or moderation • Developing hypotheses on core relations of the theory of peripheral elements or context • Finding behavioral patterns • Elicitation of individual preferences	• Scenario-based experiments and/or classroom experiments (computer-based) • Statistical methods
3. Theory-building (mostly qualitative) process-based	• Analyzing within-case data • Searching for cross-case patterns in order to shape hypotheses • Building internal validity, raising the theoretical level, and sharpening construct definitions • Sharpening generalizability, improving construct definition	• Multiple data collection • Within-case analysis • Triangulation of data • Cross-case pattern search using divergent techniques • Iterative tabulation of evidence for each construct

control compared to Western theories, by using ethnographic methods, more than grounded research, and through extensive content analysis and triangulation.

IMR might still be, however, in its infancy in the field of managerial control. Some may argue that this may be the result of excessive compartmentalization in management disciplines towards accounting but also due to an excessive focus on quantitative research in accounting research.

Table 3 provides an example of the different steps that could apply when investigating managerial control concepts under the IMR methodology, based on some recent research works conducted at the University of Strasbourg (BETA Laboratory) by a group of researchers involved in managerial control. AQ2

5 Conclusion

This chapter reviewed some of the classical managerial control approaches and their links with theories of the firm. We conclude this chapter by proposing a more holistic approach based on local philosophies or ideologies that fit better firms depending on their organizational culture. Many researchers pinpointed that western and eastern cultural differences in management should be overcome or combined to obtain a more balanced approach to managerial control.

Core Messages

- Agency-based control theory cannot be applied in an uncertain world where innovation and creativity are key.
- Many managerial control approaches are mixed with hierarchical control, market control, and clan/group control.
- The temptation to use organizational culture or even national culture to reinforce control is high in many countries.
- Several researchers claim that control must be adapted to local climate and culture, giving rise to indigenous research.
- The general design of indigenous research is close to classical methodology.
- Indigenous researchers give much more importance to small signs and weak signals, like researchers in complexity frameworks.

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Layout: T1 Color Book ID: 499505_1_En Book ISBN: 978-3-030-65272-2
Chapter No.: 20 Date: 27-2-2021 Time: 2:16 pm Page: 20/19

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