

# MAPPING ORGANIZATIONAL DETERMINANTS OF WORK PERFORMANCE MAPEO DE LOS DETERMINANTES ORGANIZATIVOS DEL RENDIMIENTO LABORAL

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#### Abstract

The purpose of the present research was to identify and assess key organizational factors affecting work performance via Gilbert's Behavioral Engineering Model (BEM). Therefore, a self-made scale considering BEM's dimensions was developed and tested. Data were gathered from the 1st of April to end of May 2023, using a randomly stratified sample of 297 Mexican companies of Sonora State. The final questionnaire - named ADOPTproved adequate psychometric properties to assess eight organizational factors of human performance proposed. ADOPT liability and validity are shown in the light of commented literature and data on present organizational effectiveness and corporate longevity. Main results indicate a global alpha scale liability of .92 being Task Support, knowledge/Competences, and Context most valued predictors of organizational effectiveness, followed by Aims/Objectives and Feedback factors. It was also confirmed that both contextual (environmental level) and behaviour (individual level) type of supports are equally important in predicting work performance. Evidence indicates that organizational performance management in SMEs is highly achieved on a long-term basis by attending these key factors in a specific loop, i.e. contextualising, system maintenance (feedback), and empowering. This sequence support personnel assessments as essential for empowering decision-making processes.

**Keywords:** Gilbert's BEM, work performance, EFA, organizational effectiveness, corporate longevity.

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#### Resumen

El propósito de la presente investigación fue identificar y evaluar factores organizacionales clave que afectan el desempeño laboral a través del Modelo de Ingeniería del Comportamiento (BEM) de Gilbert. Para ello, se diseñó una escala de elaboración propia considerando las dimensiones presentes en dicho modelo para su evaluación. Los datos se recogieron desde el 1 de abril hasta finales de mayo de 2023 a través de una muestra estratificada aleatoriamente de 297 empresas mexicanas del Estado de Sonora. El cuestionario final, denominado ADOPT, demostró propiedades psicométricas adecuadas para evaluar los ocho factores organizacionales del desempeño humano propuestos. La fiabilidad v validez de ADOPT se demuestra considerando su relación con el rendimiento organizacional y la longevidad corporativa. Los resultados principales indican una fiabilidad global de .92 (alpha), siendo Apoyo a las Tareas, Conocimiento/Competencias y Contexto los predictores más valorados de la eficacia organizacional, seguidos de la definición de Metas/ Objetivos y la Realimentación (feedback). Se confirmó que tanto el tipo de apoyo contextual (nivel ambiental) como el conductual (nivel individual) son iqualmente importantes para predecir el desempeño laboral. La evidencia indica que la gestión del desempeño organizacional en las PYMES se logra a largo plazo si se atienden estos factores claves en el orden exacto de (1) contextualización, (2) mantenimiento del sistema (retroalimentación) y (3), empoderamiento. Esta secuencia respalda la importancia del uso de las evaluaciones del personal previo a su empoderamiento.

**Palabras claves:** Modelo de ingeniería del comportamiento (BEM), desempeño laboral, AFE, efectividad organizacional, longevidad empresarial.

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## 1. INTRODUCTION

The most stressing concern of contemporary managers relates to the development, consolidation, or at least maintenance of their businesses. One way to guarantee a business development is through the correct and efficient use of organizational resources to achieve its goals (Brethower et al., 2021). Organizational performance management is the process of making sure that a company uses resources properly in the pursuit of its goals. Companies rely on various resources that allow the achievement of positive or negative outcomes, being workforce a key element in the process (Pinto, 2010; Brethower et al., 2021; Wallace & Addison, 2023). Studies on organizational performance management are essential in HR management as they serve as the basis on how to excel in human motivation and satisfaction. As stated by Quintero. Africano and Faría (2008), organizational performance influences factors such as climate that impact final human work outcomes, i.e., individual work or team performance. Despite the fast environmental changes of contemporary organizations, the existence of a well-designed organizational performance management is an asset to their maintenance and progress. As indicated by Chrisman et al. (2018), governance of both goals and resources are key determinants in SME identity and heterogeneity. With the activation of organizational performance policies, an organization can map and trace the effects of its workplace relationships onto organizational performance.

Organizational performance management can be defined from two different but complementary points of view: effectiveness and efficiency (Malacara-Castillo, Sandoval & Becerra, 2013). While the effectiveness definition understands organizational performance management as the level of achievement of planned objectives in each hierarchical level (mapping), the efficiency point of view underlines the relationship between organizational achievements and proper use of resources (tracing). While the mapping stage underlines where to go at the start, the tracing stage monitors the best route to take, all of which are embedded in continuous loops of management revisions and adjustments. A role or a mission accomplished is a final performance (state) that depends upon the act of performing (process) in a 'map' that is commonly defined or guided by customers (Brethower, 2007; Muchinsky, 2007; Bernárdez, 2009; Chen & Lin, 2018; Rosellini & Bank, 2021). In this sense, Brethower understands organizational performance management as a pending gap between timely set achievements (ideal context) and what is actually being done (real context) at any level. So as to be efficient, organizations should manage their workflows and labour contexts to guarantee excelling efforts and outcomes by means of positive staff job motivation and satisfaction. However, organizational performance is a complex, multidimensional term in which internal and external organizational factors intertwine under the company's environment (Cruz, Rojas & Rivero-Villar, 2012).

The organizational performance policy design of a company must provide a working environment free of low productivity, labour absenteeism, lack of training, among others, all which impact on organizational commitment and performance (Pershing, 2006; Rothwell, Hohne & King, 2007; Irlbeck, 2008). In this line, the *human performance technology (HPT)* is an area to research procedures to assess organizational needs and to develop tools to help employees to increase their productivity (Woodley, 2005; Pershing, 2006). HPT feeds managerial duties in adopting highly designed organizations that best suit individual and group needs for better performance under the consideration of contextual constraints of workloads and workflows (Irlbeck, 2008; Kang, 2012). In line with the HPT, many organizational models of organizational performance have been proposed since the 1950s that have progressively increased their number of variables (Day, 1997; Pershing, 2006; Irlbeck, 2008). Models of organizational improvements are highly complex as they involve interdisciplinary theoretical and practical approaches such as systemic theory, experimental psychology or theories of management and organizations (Bernárdez, 2006; Brethower et al., 2021; Fu et al., 2023). Thus, evidence seems to indicate no single approach nor factor to be better than the next one. For instance, in the apex of programed instruction - a research-based system that helps learners work successfully- Gilbert and Harless showed cases in which a carefully designed set of instructions did not improve work/organizational performances (see Pershing, 2006). They ended up stating that training is just one of the vital factors predicting human performance.

Literature revision points out a host of human factors influencing performance, such as abilities, skills, needs, knowledge, perception, etc. that interact with work and the nature of the job to yield performance outcomes (Queipo & Useche, 2002). According to Gilbert (1978), all performance factors are equally important and must be present for performance to occur. In general, most of them coincide in using predictable variables of organizational performance early defined by him in the Behavior Engineering Model (BEM).

### 1.1. Literature revision

Thomas Gilbert - known as `the father of performance technology'- initially identified key elements in six areas that increase organizational performance taking into account variables of both the work environment and the employee (Gilbert, 1978, 2007). The *work environment* is required to inform about specific data, resources, and incentives, while knowledge, individual capacities, and motives are considered in the case of *employees* (see *Figure 1*). Gilbert developed the BEM tool with the belief that the greatest barrier to the so-called *worthy performance* - characterized by a person's exemplary behavior and accomplishments- comes from a lack of information and support by management rather than an individual's lack of desire to perform well (Gilbert, 1978, 2007).

By stressing external factors of individual performance that depend upon the organizational system, the BEM model can be used as an aprioristic tool to better design organizations for the improvement of work performance. External factors may exert a crucial positive impact on both individuals and workteams because they assure the adequate feedback bases to coherently adjust their efforts and thus obtaining higher awards aligned with higher accurate performance (Crossman, 2010; Colquitt et al., 2012).

Many models on organizational performance have supported and/or expanded these factors. For instance, Roger Chevalier updated Gilbert's model noticing that environmental factors are the starting point for analysis because they pose the greatest barriers to exemplary organizational performance (Chevalier, 2003). Although somehow implicit in BEM model, Chevalier proposed to include enough time for the action or decision to be made, safe work conditions, opportunity to succeed and develop careers (i.e., positive environment), proper place to use and share knowledge, and relevant recruitment techniques. Thus, we can improve performance by addressing the information present in the work environment by communicating clear expectations, providing the necessary guides to do the work, and giving timely, behaviorally specific feedback.

| Type of support                   | Information | Instrumentation | Motivation |  |
|-----------------------------------|-------------|-----------------|------------|--|
| Environmental support             | Data        | Resources       | Incentives |  |
| Person's repertory of<br>behavior | Knowledge   | Capacity        | Motives    |  |

| Figure 1. Theoretical | approach in ( | Gilbert BEM | (Gilbert, 1978). |
|-----------------------|---------------|-------------|------------------|
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Source: Adapted from Gilbert (1978)

In a replicated survey made by Bernárdez in 2003, participants were asked to estimate the predictive value of seven different performance factors in a percentage scale. The classification resulted in clear standards (27%), feedback (25.3%), task support (12.1%), incentives (11.3%), knowledge and competences (10.5%), individual abilities (7.5%), and context (6.3%) (Bernárdez, 2005). The same results were found in a national US military study in 2003, with clear standards and feedback (35%) as primary factors explaining performance errors followed by tools and resources (30%), and skills and knowledge (12%) (see Piersol & Paris, 2007).

In 2006, Mager and Pipe's flow chart model was thought to avoid cost effectiveness in solving organizational performance problems and including seven decision-making steps concerning resources, skills, data, tools, feedback, and behavior contingencies (rewards and punishments) (Mager & Pipe, 2006). Following Gilbert's model, a qualitative and longitudinal study was conducted with 30 companies to validate certain steps in the development of organizational performance: (1) performance analysis, (2) performance causes, (3) selection, design and development of an organizational intervention program, (4) intervention, accomplishment, and change, and (5) final evaluation (Kang, 2012). The study stated that performance causes (second step) were mainly covered by most companies (20 cases) using data, information, and feedback, while knowledge and skills were used in 13 cases and consequences, incentives and rewards in only 8 cases. It seems that environmental support factors appear to be more relevant than person's repertory of behavior factors in assuring outstanding organizational performances. On average, environmental predictive factors of organizational performance outlined in literature nearly triple those referring to the individual's predictive factors (3 versus 1.3) and are considered in 46.4% of cases compare to 21.1% (Table 1).

 
 Table 1. Percentage weights of organizational performance predictive factors (in brackets, number of predictive factors)

|                                   | Bernárdez,<br>2005 | Piersol &<br>Paris, 2007 | Kang, 2012 | Average    |
|-----------------------------------|--------------------|--------------------------|------------|------------|
| Environmental supports            | 13.9 (5)           | 32.5 (2)                 | 93 (2)     | 46.4 (3)   |
| Person´s repertory of<br>behavior | 8.7 (2)            | 12 (1)                   | 43 (1)     | 21.2 (1.3) |

#### Source: own elaboration

Many other recent papers have also studied BEM dimensions on different organizational outcomes such as communication (Crossman, 2010), barriers to technology (King, 2013), turnover (Shaheen, 2016), employee retention (Silva et al. 2019), and business performance and innovation (Farida & Setiawan, 2022), but few of them have provided precise weights on each of the six dimensions nor distinguished between the two types of support.

## 1.2. Gilbert BEM revisited

Gilbert's BEM and related literature was revisited in an attempt to include contemporary and agreed predictive factors in a new instrument (*Figure 2*). Considering the theoretical structure of the BEM, we understand the definition and design of an organizational performance management in three separate but linked longitudinal steps. The first two steps are inside the so-called *mapping loop* that oversees settling bases of the performance strategic program of the company and includes contextualizing (step 1) and empowering the staff (step 2). The *tracing loop* includes step 3 referring to the maintenance of the system and would also affect previous step 2 when the performance program is activated and constantly revised. Although this division is quite theoretical, the mapping loop must be perceived as a business-related and rather stable process in comparison with the tracing loop, which is highly dynamic and unpredictable.

| Type of support        | Step1<br>Contextualising<br>organizational<br>performance | Step 2<br>Empowering<br>participants | Step 3<br>System<br>maintenance | Organizational<br>performance<br>outcomes<br>(examples) |  |
|------------------------|---|--------------------------------------|---------------------------------|---|--|
| Environmental<br>level | -Context<br>-Aims and<br>objectives<br>-Task support      | -Work processes                      | -Sanctions<br>-Incentives       | -Corporate<br>longevity<br>-Overall                     |  |
| Individual level       |   | -Knowledge/<br>Competences           | -Feedback                       | performance   |  |

Figure 2. Theoretical process of organizational performance management

The scientific literature screening on organizational performance management and models of organizational performance factors that predict and assess organizational performance outcomes have frequently given greater support to the environmental level rather the individual one (Bernárdez, 2005; Mager & Pipe, 2006; Brethower, 2007; Piersol & Paris, 2007; Del Castillo & Vargas, 2009; Crossman, 2010; Kang, 2012; Chrisman et al., 2013, 2018; Rosellini & Bank, 2021). Despite the level distinction, most of HPT performance models analyze employees in a general sense, i.e., viewing the average person with no specific individual psychological characteristics (needs, traits, habits, etc.) (see Irlbeck, 2008).

Once the organization functions towards its targets, the individual levels get ahead by adjusting the system and retrieving new information to improve initial performance policies. However, individual behavior at this level is perceived again as an effect of the macro-system with no singularities being considered. As stated by Rummler and Brache (1995), "if you pit a good performer against a bad system, the system will win almost every time" (op. cit., 1995, p. 13). Within the BEM framework, our literature revision (*see* Hersey & Chevalier, 2006; Bernárdez, 2005, 2009; Del Castillo & Vargas, 2009) lead us to finally rename and expand up to eight different factors or areas of organizational performance, each of them theoretically defined as it follows:

• *F1. Aims and objectives:* Includes the collection of actions made by an organization to clearly state task contents and standards of behaviors in relation to what we expect from employees.

- *F2. Feedback:* Involves any organizational procedure to inform employees on how they are performing.
- F3. Task support: Organizational set of actions to guarantee sufficient task and job resources to perform work properly.
- *F4. Incentives:* Involves the existence and presentation of any coherent, honest, and fair reward system for employees.
- *F5. Knowledge/Competences:* Includes actions to assure that employees know how to do their task especially in relation to the requested competences.
- *F6. Context:* It defines any positive organizational environment with the required job facilities (e.g., risk prevention policy) and mission-aligned culture values (e.g., total quality management).
- *F7. Sanctions:* It refers to those regulated actions that eliminate or diminish deviation behaviors by means of negative consequences.
- *F8. Work processes:* It involves the existence of clear protocols in the development of tasks with the correct allocation of staff roles and duties.

Firstly, we have included *Aims, Task support,* and *Context* factors in Step 1, an initial process labeled as 'contextualizing', where its design and development would serve structural bases for organizational performance policies and strategies relatively stable in time. Secondly, *Work processes* and *Knowledge/Competences* factors are clustered in Step 2, labeled as 'empowering participants', because the company manages employees with specific assigned role, duty, and training that would increase their initial power bases (Wyer & Mason, 1999). Finally, *Feedback, Sanctions,* and *Incentives* factors are timed at Step 3, named as 'system maintenance', due to their function of controlling and adapting employees' behavior by means of contingencies and communications. From a managerial point of view, the individual level of organizational performance policy gains relevance only at Steps 2 and 3 when the system is active and employees have 'personalized' it – i.e., act on it- although it will affect Step 1 in a continuous looping process.

A correct organizational performance management contributes to both organizational and individuals benefits normally in a long-term basis. From a managerial point of view, the model could include final consequences of the systems that refer to the organizational effectiveness (OE). OE can be defined in a broad sense and may refer to individual or team learnings, financial profits or even environmental impact, not to mention multi-level influences between them.

*Corporate longevity* (CL) is another common variable to evaluate organizational performance plans. Although the topic is highly debatable, increases in performance may foster stronger group affiliation within an organization and this leads to lower turnover and therefore enables organizational continuity, which is associated with retention of knowledge (Senge, 1990; Chermack et al., 2006; Burt & Chermack, 2008; De Geus, 1988, 2002).

For any business to sustain itself, it must be continuous, stable and durable (Pawlowski, 2000). As indicated by De Geus (2002), performance is a critical element that contributes to organizational longevity. Long-lived companies are good examples of learning units of work with high levels of environmental adaptability to frequent changes. According to Swanson (2007), corporate longevity is a good predictor of organizational innovation and advancement, especially in terms of financial investment innovations. Others did not find any relationship between organizational longevity and performance in terms of organizational learning, organizational identity or innovation (Cefis & Marsili, 2005; Weitzman & Chermack, 2013; Weitzman, 2014). Overall, organizational effectiveness and corporate longevity will be used as outcome variables in the present study

The adequate organizational performance factor design should be in accordance with the type of business and context nature of the company. In this sense, contingent analyses based on environmental factors can provide useful information to ponder specific performance factors in the detriment of others that will also enable the construction of contingent profiles for organizational performance improvements. Likewise, it might be practical to implement a questionnaire that could positively assess organizational performance management above individual's performance and in the ambitious and forecast attitude of Gilbert's model. Both assessment instruments proposed by Gilbert (1978, 2007), and Hersey and Chevalier (2006) used open-ended questions to promote conversation and thus, making impossible the detection of quantitative criteria for adequate organizational performance management.

Thus, the present study aims at developing a new organizational performance management questionnaire, which focus on the BEM and further literature revisions, thereby making a concise quantitative instrument to assure basic designs of organizational performance. In the following paragraphs, the development of the so-called ADOPT (*Assured Design of Organizational Performance Test*) instrument and the examination of its psychometric properties are presented (for the items see Appendix 1, in Spanish).

## 2. METHOD

## 2.1. Procedure

Small and medium-sized enterprises (SMEs) – i.e. up to 250 employees in industry and 100 in commercial or service companies (*Diario Oficial de la Federación*, 2019)- of Ciudad Obregón city at Sonora Mexican State were considered for this study. Through the National Institute of Statistics and Geography (INEGI), a list of 1,409 active companies was obtained. Given this population and considering a 95% confidence interval and 5% error, a sample of 302 companies was needed. As companies belonged to the commercial, industrial and service sectors, a stratified random sampling was considered with 500 SMEs.

Thus, formal official letters through corporate emails invited companies from three different economic sectors: service (n=242, 48.4%), commercial (n=140, 28%), and industrial (n=118, 23.6%) companies. Three reminders were sent fortnightly in a 6-week period of data gathering. Response rate was 60.4% and yielded a final sample of 297 companies from the service (n=109, 36.7%), commercial (n=97, 32.6%), and industrial (n=88, 29.6%) sectors. Thus, the final maximum sample error is 5.1%. Targeted founders, directors or business owners answered the proposed questionnaire that did not mention the specific purpose of the study in any case. While our sample only includes SMEs, Gilbert's model is mainly a performance diagnostic tool adaptable to any workplace environment (Hersey & Chevalier, 2006; Crossman, 2010).

### ADOPT instrument

Despite the long-term theoretical support, little efforts have been made to made up an instrument to assess organizations under Gilbert BEM. The PROBE (i.e. PROfiling BEhavior Model) qualitative instrument initially developed by Gilbert included open ended confirmation and directional questions. However, many of those questions – addressed to employees but to evaluative the organizational 6 dimensions of BEM's environmental supports and behaviors (*see* Figure 1)- are rather complex, general, and dichotomous and may condition affirmative answers. In addition, dimensions were assessed with uneven number of questions ranging from 1 to 8.

Latter attempts by Chevalier (2006) and Hersey and Chevalier (2006), yielded a new 42-item PROBE quantitative instrument based on a revised Gilbert BEM. However, the purpose of this new PROBE version is to determine how the six dimensions – i.e. Information, resources, incentives, knowledge and skills, capacity, and motives- impact on the employee's perception of motivation and therefore do not address an overall assessment of the company's HPT –i.e organizational system design towards performance-. In contrast to the aforementioned PROBE instruments, ADOPT is targeted to managers or alike with a managerial focus aim to assess organizational HR policies and the optimal loop for organizational performance equally based on Gilbert BEM.

For ADOPT questionnaire, between 30 and 40 items were finally expected to be obtained out of the 103 items initially proposed, thus covering at least 79.2% (103/120) of the recommended triple-ratio per factor indicated by Anstey (Anstey, 1966). Up to six new factors could have been considered in the case of some items with 'double entries', but they were re-redacted to try to exhaust all proposed factors and make them exclusive. Potential factors referred to organizational characteristics of total quality management, systemic vision, resources administration, benefits, individual capacity, and staff measuring/follow up. The native Spanish-speaker and author of this paper served as unique judge in two temporal moments to properly reformulate and include each item into the correct factor. Composition of items took into consideration the forecast perspective defined in Steps 1 to 3 of the organizational performance management by only using future (mapping) or past (tracing) verbs tenses accordingly. Coincident indexes between judgements for item-step allocations varied from .69 to .82, while final decisions were reached after revision based on Gilbert descriptions of model factors. All items that had to be answered using a 5-point Likert scale were once randomized and grammatically presented in positive terms.

The rest of the scales used in this study referred to *Corporate Longevity (CL)* of the company (in number of years) and to *Organizational Effectiveness (OE)*. Measure of the OE was obtained by answering the recent models-based organizational effectiveness 40item scale of Nwanzu and Uhiara in which four models are considered to its composition: goal attainment, system resources, internal processes, and stakeholder's approaches (Nwanzu & Uhiara, 2018). In their study, a test-retest reliability coefficient of .73 was obtained and the whole scale proved to have a Cronbach's Alpha of .96. For example, some of the items were "The desired level of output is always attained", "Needed manpower is always acquired", "Employees attitude to work is always encouraging" or "Needs and expectations of the customers are often met". While the ADOPT scale is aimed at mapping and tracing organizational performance management, the OE scale reflects the overall outcome of such process and thus, it will be used as a criterion for external validity.

An additional set of questions to collect respondents' sociodemographic information (gender, work experience and level of education) and aspects of the Company (size and gender composition) was also used.

### 2.2. Sample

*Table 2* shows the simple characteristics for this study. Nearly 70% (n=207) of the respondents were male. The mean experience of the sample was 11.69 (SD=10.0) while 61.6% (n=183) of the sample had work experience of less than 10 years. Most of respondents hold a university degree (80.4%, n=239) and most of them were managing a small-sized company (75.7%, n=222). Furthermore, the mean average of corporate longevity was 20.4 years (SD=17.0) with the vast majority of companies having lived for 30 years or less (83.8%, n=249). Finally, only 12.1% of the companies had balanced presence of male and female employees. In summary, most common respondent in the study was a novel male manager, with university studies, in a gendered small-sized company with less than 30 years of history.

| Characteristic<br>N=297   | %            |
|---|--------------|
| Manager´s gender  |              |
| • Male  | 69.7         |
| • Female  | 30.3         |
| Manager's work experience (in years)  |              |
| • 1-10<br>• 11-20   | 61.6<br>19.8 |
| • 21-30   | 19.0         |
| • 31-40   | 3.7          |
| • 41-50   | 1.3          |
| Manager's level of education  | 0.4          |
| <ul><li>Educational level (10 years)</li><li>High School (12 years)</li></ul> | 8.1<br>11.4  |
| Tertiary Education (16 years)   | 80.5         |
| Company size  |              |
| 6-20 employees  | 75.7         |
| • 21-100 employees  | 25.2         |
| Corporate longevity (in years)  |              |
| • 1-10  | 34           |
| • 11-20   | 30           |
| • 21-30   | 19.9         |
| • 31-40   | 6.0          |
| • 41-50   | 4.0          |
| • 51-60   | 1.0          |
| • 61-70   | 4.0          |
| • 71-80   | .3           |
| • 100   | .7           |
| Company gender composition  |              |
| Male organization   | 34.9         |
| Balanced organization   | 12.1         |
| Female organization   | 35           |

| Table | 2. | Sample | characteristics |
|-------|----|--------|-----------------|
|-------|----|--------|-----------------|

Source: Own elaboration

## 3. RESULTS

### 3.1. Factor analysis

In the first step, obtained data was analyzed using exploratory factor analysis (EFA) to determine the inner factorial structure of the items and to identify low-load items to be dropped. Principal components analysis with Varimax orthogonal rotation was used as it is independent of distributional assumptions and thus, less likely to produce improper solutions and produces factors that are uncorrelated (Fabrigar et al., 1999). From the initial total scale, 61.2% of low-load items were eliminated while the rest were re-examined and recoded if necessary. *Table 3* shows the resulting factorial structure for the 40 items for the total sample, 5 items per theoretical dimension.

|   | Factors |     |     |   |   |   |   | ] |               |
|---|---------|-----|-----|---|---|---|---|---|---------------|
| Retained items  | 1       | 2   | 3   | 4 | 5 | 6 | 7 | 8 | Communalities |
| El directivo fija los objetivos y son<br>comunicados a la mayor parte del<br>personal de la organización      | .71     |     |     |   |   |   |   |   | .79           |
| Los objetivos generales de la empre-<br>sa están por escrito  | .69     |     |     |   |   |   |   |   | .73           |
| Se promueve el cambio por medio de procesos para toda la organización   | .68     |     |     |   |   |   |   |   | .69           |
| La información obtenida por la<br>empresa se utiliza para tomar<br>decisiones                                 | .72     |     |     |   |   |   |   |   | .80           |
| Los objetivos fijados en la empresa<br>son alcanzables  | .69     |     |     |   |   |   |   |   | .76           |
| Los empleados progresivamente me-<br>joran el desempeño con la realimen-<br>tación recibida                   |         | .80 |     |   |   |   |   |   | .79           |
| La realimentación es relevante en<br>contenidos   |         | .79 |     |   |   |   |   |   | .79           |
| La realimentación proporcionada a<br>los empleados resulta suficiente para<br>mejorar el desempeño individual |         | .80 |     |   |   |   |   |   | .80           |
| La realimentación a los trabajadores<br>es oportuna en el tiempo  |         | .79 |     |   |   |   |   |   | .82           |
| La realimentación es particular para<br>cada puesto o cargo   |         | .80 |     |   |   |   |   |   | .79           |
| En la organización se trabaja en<br>equipo y se mantiene la comunica-<br>ción entre áreas                     |         |     | .62 |   |   |   |   |   | .73           |
| Los empleados saben cuándo y<br>porqué actuar   |         |     | .62 |   |   |   |   |   | .79           |
| Los empleados tienen el tiempo ne-<br>cesario para llevar a cabo su trabajo                                   |         |     | .69 |   |   |   |   |   | .74           |
| La empresa conoce las normas o<br>leyes que debe cumplir  |         |     | .60 |   |   |   |   |   | .73           |

#### Table 3. Exploratory factor analysis of the proposed ADOPT instrument

|  | Factors |   |     |     |     |     |     | ] |               |
|--|---------|---|-----|-----|-----|-----|-----|---|---------------|
| Retained items   | 1       | 2 | 3   | 4   | 5   | 6   | 7   | 8 | Communalities |
| Los recursos proporcionados son<br>claros y relevantes para apoyar el<br>desempeño de los empleados      |         |   | .63 |     |     |     |     |   | .69           |
| En la empresa existe un programa de incentivos   |         |   |     | .88 |     |     |     |   | .88           |
| Los incentivos son efectivos para<br>modificar el desempeño  |         |   |     | .89 |     |     |     |   | .89           |
| Los incentivos están alineados con<br>los objetivos de la organización                                   |         |   |     | .89 |     |     |     |   | .89           |
| Los incentivos son relevantes en<br>contenidos   |         |   |     | .88 |     |     |     |   | .86           |
| Los incentivos se otorgan de manera oportuna en el tiempo  |         |   |     | .90 |     |     |     |   | .91           |
| Los empleados tienen la información necesaria para alcanzar los objetivos                                |         |   |     |     | .64 |     |     |   | .76           |
| Los trabajadores cuentan con las<br>habilidades (saber hacer) requeridas                                 |         |   |     |     | .65 |     |     |   | .78           |
| Los empelados poseen las habili-<br>dades sociales necesarias en sus<br>puestos                          |         |   |     |     | .63 |     |     |   | .71           |
| Los trabajadores tienen las actitudes<br>necesarias para lograr los objetivos                            |         |   |     |     | .68 |     |     |   | .78           |
| Los empleados cuentan con el cono-<br>cimiento requerido para alcanzar los<br>objetivos organizacionales |         |   |     |     | .67 |     |     |   | .78           |
| El ambiente de trabajo se encuentra<br>seguro, limpio, organizado y permite<br>un excelente desempeño    |         |   |     |     |     | .77 |     |   | .76           |
| La empresa ofrece seguridad a los<br>empleados dentro de la organización                                 |         |   |     |     |     | .75 |     |   | .75           |
| El ambiente de trabajo es estimulan-<br>te para el logro de los estándares de<br>trabajo                 |         |   |     |     |     | .72 |     |   | .74           |
| La infraestructura de la empresa<br>facilita que los empleados trabajen<br>de manera satisfactoria       |         |   |     |     |     | .79 |     |   | .74           |
| La empresa proporciona un ambiente agradable   |         |   |     |     |     | .75 |     |   | .63           |
| Las sanciones se aplican a los<br>empleados que muestran un bajo<br>rendimiento laboral                  |         |   |     |     |     |     | .81 |   | .89           |
| Las sanciones van de acuerdo a la<br>falta laboral cometida por parte del<br>empleado                    |         |   |     |     |     |     | .80 |   | .87           |
| Las sanciones aplicadas coinciden<br>con las de otras organizaciones del<br>mismo ámbito                 |         |   |     |     |     |     | .85 |   | .82           |

|  |      | Factors |      |      |      |      |      |      |               |
|--|------|---------|------|------|------|------|------|------|---------------|
| Retained items   | 1    | 2       | 3    | 4    | 5    | 6    | 7    | 8    | Communalities |
| En la empresa existe un programa de sanciones  |      |         |      |      |      |      | .84  |      | .83           |
| Aplicar sanciones ayuda a que los<br>empleados mejoren su desempeño  |      |         |      |      |      |      | .80  |      | .83           |
| Todos los empleados conocen los<br>procedimientos para laborar y contri-<br>buir al logro de los objetivos |      |         |      |      |      |      |      | .70  | .79           |
| Los procesos y procedimientos están<br>definidos para que los empleados<br>mejoren su rendimiento          |      |         |      |      |      |      |      | .70  | .78           |
| Los procedimientos de trabajo defi-<br>nen el alcance de cada proceso, sus<br>objetivos e indicadores      |      |         |      |      |      |      |      | .67  | .80           |
| La organización tiene documentado<br>los requisitos legales y reglamenta-<br>rios del cliente              |      |         |      |      |      |      |      | .72  | .74           |
| Los empleados actúan de acuerdo<br>con los procedimientos establecidos                                     |      |         |      |      |      |      |      | .71  | .78           |
| % variance explained   | 4.70 | 7.2     | 2.43 | 4.16 | 41.9 | 1.9  | 2.29 | 3.11 |               |
| Cumulative variance  | 4.78 | 11.9    | 14.4 | 18.5 | 60.5 | 62.3 | 64.6 | 67.8 |               |
| Cronbach's α   | .91  | .94     | .90  | .97  | .90  | .90  | .95  | .92  |               |

#### Source: own elaboration.

Note: Obtained pattern matrix containing factor loadings in 8-identified factors of ADOPT scale.

EFA on the sample confirmed the 8-factor solution with a cumulative variance of 67.8%. Consequently, the initial 103 items were finally reduced to 40 every 5 of them corresponding to the following factors: Aims and Objectives (factor 1), Feedback (F2), Task Support (F3), Incentives (F4), Knowledge and Competences (F5), Context (F6), Sanctions (F7), and Work Processes (F8). Most contributing factors to the construct of organizational performance were F5 (Knowledge and Competences) and F4 (Incentives) while F6, F7, and F3 contributed the least. Overall reliability of the 40-item OE scale was highly adequate in this study ( $\alpha$ = 0.92).

### 3.2. Construct Validity

In *Table 4* the descriptive statistics of the eight ADOPT organizational performance factors are shown. These results are similar to those at the item level, which are therefore not included in this article. Keeping in mind the recording of the items and test scale, the means show that, in general, selected companies in Mexico describe a good level of criteria in their performance policy, with a total average score of 4.06 (SD=1.04). For the purpose of preserving high excellent standards of performance, these companies primarily rely on creating *Context* (factor 6), providing *Knowledge and Competences* (factor 5), and giving *Task Support* (factor 3), and less on *Sanctions* (factor 7) or *Incentives* (factor 4). However, highest standard deviations were obtained in these two last factors, which indicate high variability in their use within the sample.

| Factor<br>Sample (N=297)    | м   | SD  | F1  | F2  | F3  | F4  | F5  | F6  | F7  | F8  | CL |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| F1. Aims and objectives     | 4.0 | 1.1 |     |     |     |     |     |     |     |     |    |
| F2. Feedback                | 4.1 | 1.0 | .53 |     |     |     |     |     |     |     |    |
| F3. Task support            | 4.2 | .9  | .56 | .57 |     |     |     |     |     |     |    |
| F4. Incentives              | 3.7 | 1.4 | .41 | .37 | .34 |     |     |     |     |     |    |
| F5. Knowledge/<br>Compet.   | 4.2 | .8  | .55 | .49 | .69 | .34 |     |     |     |     |    |
| F6. Context                 | 4.4 | .8  | .54 | .46 | .68 | .32 | .79 |     |     |     |    |
| F7. Sanctions               | 3.6 | 1.4 | .47 | .39 | .36 | .30 | .36 | .30 |     |     |    |
| F8. Work processes          | 4.1 | 1.0 | .65 | .47 | .56 | .42 | .62 | .54 | .43 |     |    |
| Corporate longevity<br>(CL) | 20  | 17  | 02  | 03  | 05  | 02  | 12* | 06  | 05  | 04  |    |
| Organizational eff.<br>(OE) | 4.2 | .78 | .64 | .67 | .82 | .57 | .76 | .74 | .42 | .64 | 03 |

 Table 4. Means, Standard Deviations, and Correlations between the eight factors and outcomes variables (\*p<.05, in Italic, p<.01)</th>

#### Source: own elaboration

All factors in the sample correlate significantly and positively with each other. Most evident correlations were obtained between factor 5 and 3, and factor 5 and 6. Thus, when efforts are made for the sake of staff training, contextual and cultural aspects of organizational performance seem to increase, and vice versa. In addition, when job competencies seem to increase in staff, resources increase to guarantee the accomplishment of task, and vice versa. Moreover, the increase of context-dependent aspects of performance (factor 6) would contribute to the staff coordination and distribution of resources (factor 3). To a lesser extent, factor 8 (Work Processes) was also eminently correlated with factor 1 and factor 5, thus indicating that the design of work protocols may increase both clear perception of aims and objectives and /or staff learnings, and vice versa.

Finally, correlations between ADOPT factors and outcomes variables should be commented on. No significant correlation between organizational performance factors and corporate longevity was obtained. In fact, all scores were null and slightly negative except for factor 5 (Knowledge and Competences), that was statistically significant and negative ( $\rho$ = -0.12, p<0.05). No significant bicorrelations were found between ADOPT factors and OE organizational effectiveness.

With a view to examine the construct validity of the proposed scale, two hierarchical regression analyses were calculated using SPSS 20, one with the *OE*-organizational effectiveness- scale (40-items) as the outcome variable, and with *Corporate Longev-ity* (in years) as the outcome variable. In step 1, manager's gender, work experience, and level of education were entered in the model. In step 2, company size and gender composition of the company were entered in the model. All variables have been z-standardized and Durbin-Watson scores for self-correlation were obtained as expected. *Table 5* summarizes the hierarchical regression analyses for the outcome variables organizational effectiveness (OE) and Corporate Longevity (CL).

| Outcome variable                     | Predictor                            | b                              | t         |  |
|--------------------------------------|--------------------------------------|--------------------------------|-----------|--|
|                                      | Step 1                               |                                |           |  |
|                                      | Constant                             | .005                           | .058      |  |
|                                      | F1. Aims and objectives              | .088                           | 2.00*     |  |
|                                      | F2. Feedback                         | .198                           | 2.00**    |  |
|                                      | F3. Task support                     | .320                           | 6.44**    |  |
|                                      | F4. Incentives                       | .222                           | 6.33**    |  |
|                                      | F5. Knowledge/Competences            | .215                           | 3.83**    |  |
|                                      | F6. Context                          | .130                           | 2.33*     |  |
|                                      | F7. Sanctions                        | .031                           | .951      |  |
|                                      | F8. Work processes                   | 038                            | 792       |  |
|                                      | Manager's gender                     | 004                            | 137       |  |
|                                      | Manager's work experience            | .031                           | 1.06      |  |
|                                      | Manager's level of education         | .022                           | .738      |  |
| Organizational<br>Effectiveness (OE) |                                      | R <sup>2</sup> = .84; F=97.2** |           |  |
|                                      | Step 2                               |                                |           |  |
|                                      | Constant                             | .000                           | .000      |  |
|                                      | F1. Aims and objectives              | .041                           | 1.24      |  |
|                                      | F2. Feedback                         | .189                           | 6.38**    |  |
|                                      | F3. Task support                     | .362                           | 10.2**    |  |
|                                      | F4. Incentives                       | .243                           | 9.49**    |  |
|                                      | F5. Knowledge/Competences            | .181                           | 4.44**    |  |
|                                      | F6. Context                          | .150                           | 3.87**    |  |
|                                      | F7. Sanctions                        | 007                            | 27        |  |
|                                      | F8. Work processes                   | .024                           | .717      |  |
|                                      | Company size                         | .056                           | 2.42*     |  |
|                                      | Gender org. composition<br>(omitted) |                                |           |  |
|                                      |                                      | R <sup>2</sup> = .85;          | F=173.1** |  |

Table 5. Results of the hierarchical regression analyses

Source: own elaboration

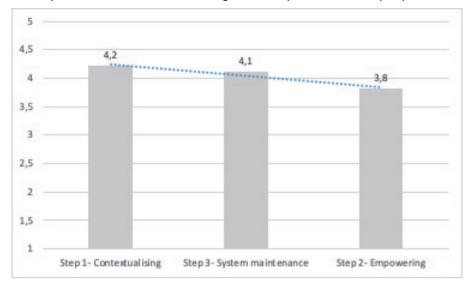
Concerning the first outcome variable, it appears that 6 out of 8 organizational performance factors predicted organizational effectiveness (OE) with at least factors 2, 3, 4, and 5 as highly significant. In Step 1, the results of the regression indicate that the model explained 84% (R2=0.84, F (11) = 97.2, p<0.01) also including factor 1 and factor 6 as predictive variables while excluding the rest. In Step 2, *company size* was included as predictive variable of organizational effectiveness among with factors 2 to 6 (R2=0.85, F (9) = 173.1, p<0.01). In the distinction of environmental *versus* individual level of organizational performance anticipated in Gilbert's model, average data indicate that environmental supports account for 22% of the prediction with 4 factors while the person's repertory of behavior contributed to the outcome variable up to 19.8% with only 2 factors (i.e., *knowledge/competences* and *feedback*<sup>1</sup>).

<sup>1</sup> Differently from Gilbert's classification, we have included 'feedback" organizational performance factor in the individual level because we consider that job expectations and task guidelines cannot be given without a two-way communication between managers and employees.

| Tab | le | 5. | Cont. |
|-----|----|----|-------|
|     |    |    |       |

| Outcome variable            | Predictor   | b  | t   |  |  |
|-----------------------------|---|--|---|--|--|
|                             | Step 1  |  |   |  |  |
|                             | Constant<br>F1. Aims and objectives<br>F2. Feedback<br>F3. Task support<br>F4. Incentives<br>F5. Knowledge/Competences<br>F6. Context<br>F7. Sanctions<br>F8. Work processes<br>Manager's gender<br>Manager's work experience<br>Manager's level of education | .120<br>007<br>.098<br>.077<br>285<br>.103<br>.013<br>038<br>.070<br>.441<br>023 | 1.359<br>1.188<br>083<br>.856<br>.949<br>-2.21*<br>.802<br>.170<br>343<br>1.05<br>6.45**<br>334 |  |  |
| Corporate Longevity<br>(CL) |   | R²= .23; I   | F=4.99**  |  |  |
|                             | Step 2  |  |   |  |  |
|                             | Constant<br>F1. Aims and objectives<br>F2. Feedback<br>F3. Task support<br>F4. Incentives<br>F5. Knowledge/Competences<br>F6. Context<br>F7. Sanctions<br>F8. Work processes<br>Company size<br>(omitted)<br>Gender org. composition<br>(omitted)             | .062<br>.033<br>.060<br>.013<br>11<br>.063<br>005<br>.045                        | .000<br>.893<br>.488<br>.736<br>.216<br>-2.02*<br>.670<br>084<br>.616                           |  |  |
|                             |   | R <sup>2</sup> = .10; I  | F=4.08*   |  |  |

In the case of *Corporate Longevity* outcome of Step 1, factor 5 (*Knowledge and Competences*) and *manager's work experience* managed to explain 23% of its variance (R2=0.23, F (11) = 4.99, p<0.01). In Step 2, only factor 5 was able to explain 10% of the outcome variable (R2=0.10, F (8) = 4.08, p<0.05) being all non-factor variables omitted in the model. Finally, Graphic 1 shows performance factors means considering the process of organizational performance management under a time perspective approach.



Graphic 1. Factor means under the organizational performance time perspective.

As shown in the graphic 1, performance factors are being attended by the sample as empirically expected in each step. Precisely, *Aims, Task support,* and *Context* factors are generally considered in the appropriated amount of interest at step 1, followed by step 3 – *Feedback, Sanctions,* and *Incentives* factors-, and finally, step 2 – *Work processes* and *Knowledge/Competences* factors-. Interestingly, swapping steps 2 and 3 could be a common indicator of SMEs' functioning that may enhance the system maintenance in the detriment of empowering strategies to further improve stable organizational routines. As pointed out by Penney and Combs (2013) when addressing insights from family science, family structure affects the level of innovation within a family firm depending on how flexible or rigid it might be.

## 4. DISCUSSION OF RESULTS AND CONCLUSIONS

A review of organizational performance management literature and the current need of companies for organizational improvement has shown pertinent the development of a questionnaire to assess and monitor organizational factors influencing organizational performances. Based on pioneer Gilbert's model (BEM) and revisions of theoretical models of performance improvement, the first analyses of psychometric properties of ADOPT instrument was presented. An AFA showed an eight-factor solution for the 40 items of the ADOPT questionnaire.

The eight factors reflect dimensions widely cited in the organizational performance literature aligned with the BEM framework: aims and objectives, feedback, task support, incentives, knowledge/competences, context, sanctions, and work processes. Reliability analyses on the different factors showed highly acceptable Cronbach's alphas ranging from 0.90 to 0.97, with an overall reliability of the ADOPT of 0.92. Correlations between the item and the factor level show mostly moderately to high positive correlations.

This could be seen as evidence for mediation effects between different organizational performance factors as we recall for broad assessments of organizational policies that impact employees on long-term bases. For instance, investing in staff knowledge

or competences would only increase potential staff incentives if acquired learnings can be really applied at the workplace (Lin, 2017). Alternatively, sanctions may be weak related to the contextual values of the company if they are wrongly or poorly informed by inadequate communication channels (Obeidat et al., 2017). Descriptive data analysis showed that managers primarily rely on new training, contextual variables and task support to implement policies on organizational performance.

Lower average scores were obtained in factors referring to incentives and sanctions. These findings may suggest a clear move from contingent, behaviorist theories of staff behavior control towards contemporary frameworks of positive environment and information-driven management to subtly guarantee and control staff performance (King, 2013; Kim, 2018). As expected, all ADOPT factors significantly correlated with organizational effectiveness, those factors being those referring to *task support, knowledge and competences*, and *contextual aspects* the highest. These relationships have received empirical evidence on long-supported literature (see Rothwell et al., 2007).

In the case of corporate longevity, no significant correlation was shown except for *knowledge and competence* factors that were negative but statistically significant. The relationship between corporate longevity and organizational performance is likely to have greater complexity than expected and probably does not describe a linear tendency. As indicated by Galadanchi and Bakar (2018), many factors contribute to business longevity that are based on strategic elements and financial excellence that may mediate between these variables. Long-term companies are 'living companies', the purpose of which is to fulfill their potential and perpetuate themselves as ongoing communities. Thus, strategic decisions made on organizational performance factors such as on culture values or work processes may continuously change in contents, directions, and timings for the sake of adaptation no matter their importance. As stated by Burgelman and Grove (2007), corporate longevity depends on matching cycles of autonomous and induced strategy processes to different forms of strategic dynamics, turning organizational performance management rather chaotic in action.

In the case of learnings and competences, undoubtedly essential for a performance management, what an organization knows or creates today will be obsolete in a three or five-year period and in doing so, making their knowledge and competences irrelevant for organizational effectiveness (Pazy, 2004; Jain, 2015).

The separate regression analyses showed that organizational effectiveness is significantly predicted by ADOPT organizational performance factors. Precisely, factors referring to aims, feedback, task support, incentives, knowledge/competences, and context are very good predictors of present organizational effectiveness. This is in line with previous research underlying the impact of organizational macro-variables such as data, feedback, task design, incentives, learnings, or contextual variables on organizational performance (Chevalier, 2003; Bernárdez, 2005; Mager & Pipe, 2006; Brethower, 2007; Piersol & Paris, 2007; Del Castillo & Vargas, 2009; Crossman, 2010; Kang, 2012; Fu, 2023; Fu et al., 2023). Despite internal consistency as factors, 'sanctions' and 'work processes' did not explain the company's final organizational effectiveness. However, previous studies have found that the existence of work sanctions policies can give rise to inefficient allocation of resources, resulting in structural rigidity and organizational stagnation (Olson, 1982; Nee, 1998).

These results reflect the definition of nowadays organization based on the promotion and control of employees by positive environment designs rather than external negative stimuli. Additionally, the existence of job protocols to guide employees in the development of tasks may be subjected to timely adequate ways of informing on such work processes, taking for granted the acceptance of allocated duties and roles amongst the staff (Chen and Lin, 2018). As previously mentioned, strict allocation of individual roles may be counterproductive for innovative adaptation towards organizational productivity. Following job crafting positions, it is known that the encouragement of employee involvement and usage of knowledge, skills and abilities may improve work performance (Guan & Frenkel, 2007). The predictive model did not vary upon respondents' gender, experience nor level of education.

Finally, we have found support to indicate that organizational performance factors at the environmental level are of similar importance in predicting organizational performance than factors at the individual level. This is contrary to information given by previous surveys that overestimated the first level (Pierce, et al., 2003; Piersol & Paris, 2007; Crossman, 2010; Kang, 2012), and more in the line of balancing both types of factors (Rummler & Brache, 1995; Bernárdez, 2005; Gilbert, 2007; Rosellini & Bank, 2021).

On the other hand, corporate longevity is significantly predicted only by 'knowledge and competences' organizational performance factor, though weak and negative, regardless company size and gender organizational composition. This fact partially matches our literature revision on the relationship of organizational learning and corporate longevity (Cefis & Marsili, 2005; Weitzman & Chermack, 2013; Weitzman, 2014; Wallace & Addison, 2023). While serving the bases and structure of constant learning in organizations is essential for a company's survival, its final long-term impact on corporate longevity will certainly depend upon both learning contents and strategic financial investments of the on-going success (Pawlowski, 2000; Weiztman, 2014).

Finally, results have been considered under the time perspective proposed in our theoretical model of organizational performance. Organizational performance model within this perspective foresees a loop of three consecutive steps to achieve organizational targets: (1) contextualizing, (2) empowering, and (3), providing feedbacks. Each step can be tracked using the self-made ADOPT questionnaire with items referring to *Aims, Task support,* and *Context* for Step 1, *Work processes* and *Knowledge/Competences* for Step 2, *Feedback, Sanctions,* and *Incentives* for Step 3.

According to our sample, organizational performance management of SMEs is attained by primarily considering contextualizing factors (step 1), followed by organizational factors of the system maintenance (step 3) and to a lesser extent, organizational factors of empowering participants (step 2). Consequently, the final optimal loop for organizational performance follows the sequence of contextualizing, providing feedbacks, and empowering, therefore indicating that staff assessments are essential for positive decisions on empowering.

In addition, findings indicate that empowerment action is not as common a theme for SMEs as for large companies while this might be due to limited resources and closer supervision of these latter (Wyer & Mason, 1999; Penney & Combs, 2013). Never-theless, the relationship between company size and empowerment strategy was not the main purpose of the present study. Further research could then pay attention to how empowerment strategies can contribute to SME's organizational performance outcomes. In future attempts, economic organizational outcomes such as income statements and not only scale-based quantification could be used to measure overall performance of the organization.

The methodological approach of this research provides ADOPT instrument with both academic and managerial implications. Consequently, ADOPT instrument can be academically used to continue exploring the robustness of Gilbert's BEM and its

theoretical bases. In addition, ADOPT instrument is probably a swift and effortless way for HR practitioners or managers to monitor the evolution of the company both in terms of the 8 key areas of organizational development and also to map and trace managerial decision makings in the optimal time loop for organizational performance (i.e. contextualizing, providing feedbacks, and empowering).

## 5. LIMITATIONS AND FURTHER RESEARCH

Organizational effectiveness and work performance are conditioned upon many variables in complex intertwined relationships. A theoretical model based on Gilbert's definition of *worthy performance* was successfully translated into the so-called ADOPT instrument composed of 40 Spanish-written items. Despite showing good internal and external consistency, ADOPT must be analysed under the considerations of present study limitations.

First of all, this research made an extended interpretation of Gilbert's model including eight key variables to be considered. While this classification was based on the revised literature on the HPT and the inner Mexican national studies, its contents are subjected to alternative interpretations of the market economy in which the company operates. For instance, data was obtained in this study to revise ADOPT Factor 5, so future studies should look at the pertinence of separating *knowledge* from *competencies* within the organizational analysis.

Secondly, organizational effectiveness and corporate longevity were used as outcomes variables of the theoretical model among many potential options. Organizational effectiveness was too broadly defined and may have conditioned positive relationships between the studied variables. Therefore, future studies should include other indicators of organizational effectiveness such as economic growth, sustainability, or labour productivity.

Finally, other shortcomings in the present research may affect the generalization of results and consequently, the validity of ADOPT instrument. Representativeness of the sample relied on a response rate of 60,4% of the selected pool of companies. The reason of the rest of companies for not taking part in the consultation was unknown but could include very successful companies whose data were not acknowledged. Moreover, nothing was mapped out to guarantee that only company managers (or founders) answered the questionnaire despite using corporate emails directly to them. In addition, a stratified sample was needed to match a Mexican labour market concentrated on the service sector that accounted for almost 50% of the population. However, final sample by which ADOPT analyses was made showed an equal distribution of the three sectors (services, commercial, and industrial). Further studies should then test ADOPT instrument using qualitative procedures (i.e. direct interviews with managers) in single economic sectors and scenarios.

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### Conflicts of interest:

The author declares that he has no conflicts of interest.

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## Annexe

#### Assured Design of Organizational Performance Test (ADOPT)

#### INSTRUCCIONES Haciendo uso de la escala que se proporciona, indigue hasta qué punto las distintas tareas que se mencionan forman parte de la gestión laboral de su empresa o grupo de trabajo. Concentre sus respuestas considerando la actuación organizacional de los últimos 6 meses. Recuerde que no hay respuestas ni buenas ni malas por lo que sea lo más sincero posible. Totalmente en desacuerdo 1. En desacuerdo 2. Ni de acuerdo ni en desacuerdo 3. De acuerdo 4. Totalmente de acuerdo 1 2 3 4 5 1 Los empleados tienen el tiempo necesario para llevar a cabo su trabajo El ambiente de trabajo se encuentra seguro, limpio, organizado y permi-2 te un excelente desempeño 3 Aplicar sanciones ayuda a que los empleados mejoren su desempeño Los recursos proporcionados son claros y relevantes para apoyar el 4 desempeño de los empleados Las sanciones aplicadas coinciden con las de otras organizaciones del 5 mismo ámbito Todos los empleados conocen los procedimientos para laborar y contri-6 buir al logro de los objetivos Las sanciones van de acuerdo a la falta laboral cometida por parte del 7 empleado Los objetivos fijados en la empresa son alcanzables 8 9 La realimentación es relevante en contenidos La infraestructura de la empresa facilita que los empleados trabajen de 10 manera satisfactoria 11 La empresa proporciona un ambiente agradable 12 En la empresa existe un programa de sanciones 13 La realimentación a los trabajadores es oportuna en el tiempo Los trabajadores tienen las actitudes necesarias para lograr los 14 obietivos 15 Los empleados actúan de acuerdo con los procedimientos establecidos 16 Los objetivos generales de la empresa están por escrito La organización tiene documentado los requisitos legales y reglamenta-17 rios del cliente 18 Los incentivos son relevantes en contenidos 19 Los incentivos son efectivos para modificar el desempeño En la organización se trabaja en equipo y se mantiene la comunicación 20 entre áreas Los trabajadores cuentan con las habilidades (saber hacer) requeridas 21 Los empleados progresivamente mejoran el desempeño con la reali-22 mentación recibida

| 23 | Los empleados cuentan con el conocimiento requerido para alcanzar los objetivos organizacionales           |  |  |  |
|----|--|--|--|--|
| 24 | Los incentivos están alineados con los objetivos de la organización  |  |  |  |
| 25 | Las sanciones se aplican a los empleados que muestran un bajo rendi-<br>miento laboral                     |  |  |  |
| 26 | En la empresa existe un programa de incentivos   |  |  |  |
| 27 | Se promueve el cambio por medio de procesos para toda la organización                                      |  |  |  |
| 28 | La realimentación proporcionada a los empleados resulta suficiente<br>para mejorar el desempeño individual |  |  |  |
| 29 | Los incentivos se otorgan de manera oportuna en el tiempo  |  |  |  |
| 30 | La información obtenida por la empresa se utiliza para tomar decisiones                                    |  |  |  |
| 31 | El ambiente de trabajo es estimulante para el logro de los estándares de trabajo                           |  |  |  |
| 32 | Los procedimientos de trabajo definen el alcance de cada proceso, sus objetivos e indicadores              |  |  |  |
| 33 | La empresa conoce las normas o leyes que debe cumplir  |  |  |  |
| 34 | Los empelados poseen las habilidades sociales necesarias en sus puestos                                    |  |  |  |
| 35 | El directivo fija los objetivos y son comunicados a la mayor parte del personal de la organización         |  |  |  |
| 36 | Los procesos y procedimientos están definidos para que los empleados mejoren su rendimiento                |  |  |  |
| 37 | La empresa ofrece seguridad a los empleados dentro de la organización                                      |  |  |  |
| 38 | Los empleados saben cuándo y porqué actuar   |  |  |  |
| 39 | La realimentación es particular para cada puesto o cargo   |  |  |  |
| 40 | Los empleados tienen la información necesaria para alcanzar los objetivos                                  |  |  |  |
|    |  |  |  |  |

**NOTE:** Scale targeted to founders, HR directors, business owners, top managers or workteam facilitators.

#### Items correspondence

| Organizational area         | Items              |  |  |  |
|-----------------------------|--------------------|--|--|--|
| F1. Aims and objectives     | 8, 16, 27, 30, 35  |  |  |  |
| F2. Feedback                | 9, 13, 22, 28, 39  |  |  |  |
| F3. Task support            | 1, 4, 20, 33, 38   |  |  |  |
| F4. Incentives              | 18, 19, 24, 26, 29 |  |  |  |
| F5. Knowledge / Competences | 14, 21, 23, 34, 40 |  |  |  |
| F6. Context                 | 2, 10, 11, 31, 37  |  |  |  |
| F7. Sanctions               | 3, 5, 7, 12, 25    |  |  |  |
| F8. Work processes          | 6, 15, 17, 32, 36  |  |  |  |