

Strategic Prospective Planning of Human Resources Planeación prospectiva estratégica de recursos humanos

Mayly Torres Álvarez^{1*} <https://orcid.org/0000-0001-7703-5672>

Yosvani Orlando Lao León¹ <https://orcid.org/0000-0001-7491-3548>

Milagros Caridad Pérez Pravia¹ <https://orcid.org/0000-0002-3062-5939>

¹University of Holguin, Cuba

*Corresponding author: mayly.torres@uho.edu.cu

ABSTRACT

Aim: To develop a procedure for human resources planning of the hotel lodging process with a strategic prospective approach.

Methods and techniques: Analysis and synthesis for information gathering based on the review of the literature and documents on human resources planning, and prospective planning. The systemic structural method was used to analyze human resources planning through component breakdown.

Main results: A procedure for strategic prospective planning of human resources in hotel lodging was developed. The structural analysis method and the cross-impact method were included in the prospective methods.

Conclusions: This procedure conferred new qualities to human resources planning. The utilization of tools associated to strategic prospective in the area of human resources led to considerations of possible future events that might create unbalances in the estimation of staff size. The capacity of determining the size of the staff with the required competences in a desired scenario for touristic facilities was a novelty in the pursuance of efficiency.

Key words: touristic facilities; human resources planning; lodging process; strategic prospective.

RESUMEN

Objetivo: Presentar un procedimiento para la planificación de los recursos humanos del proceso de alojamiento de un hotel con un enfoque prospectivo estratégico.

Métodos y técnicas: Análisis y síntesis para la obtención de la información a partir de la revisión de la literatura y documentación sobre la planeación de los recursos humanos y la planeación prospectiva. Sistémico estructural para desarrollar el análisis de la planeación de recursos humanos a través de su descomposición en los elementos que lo integran.

Principales resultados: Se presentó un procedimiento para la planeación prospectiva estratégica de los recursos humanos del proceso de alojamiento de un hotel. Entre los métodos prospectivos se incluyó el análisis estructural y el método de impactos cruzados.

Conclusiones: El procedimiento aportó nuevas cualidades a la planificación de recursos humanos. El empleo de herramientas asociadas a la prospectiva estratégica en el campo de los recursos humanos permitió considerar los posibles eventos de futuros que pudieran desajustar los pronósticos del cálculo de plantilla. Constituyó una novedad poder determinar con antelación para el escenario deseado la cantidad de personal con las competencias requeridas que necesitarán las entidades turísticas para su eficiente desempeño.

Palabras clave: entidades hoteleras; planeación de recursos humanos; proceso de alojamiento; prospectiva estratégica.

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INTRODUCTION

Over the years, humans have wanted to know the future. At the beginning, those desires came along with the defeatism that the facts would happen as a result of tendencies and forecasts that pointed to the most probable future. One of the choices was to adapt to this kind of fate; the other was to make things happen in the most convenient way. Logically, the former comes up by considering several future possibilities, which is the nature of prospective. Now, make happen the one constructed with strategic decisions from the present is the essence of strategic prospective planning.

Since the beginning of strategic prospective planning, quite a few professionals have linked their research to this area. Every person who joins the study represents a possible definition, such as, Aguirre (2015), Berger (1957), Escorsa, Escorsa, Ayarza, and Chaur (2017), Escudero (2019), Georghiou (1996), Godet (2010), Miklos and Tello (2007), Mojica (2006), and Van der Meulen, De Wilt, and Rutten (2003). Cervera (2008) defines it as “(...) an interactive and comprehensive discipline that allows for exploration, analysis, and design of a desired future (objectives), and the manner of constructing it (means), through qualitative and quantitative variables that intervene in the present, actors involved, and rupture of necessary tendencies (actions) (p. 13).

Assuming the strategic prospective approach in human resources planning allows companies to visualize their horizons, to identify, and consider the behavior of influencing variables, which have been omitted in the short and long-term estimations of the staff.

Human resources (HR) planning has been studied by different actors throughout history; research studies that have gone through different stages of evolution, from quantitative analysis needed to determine the number of workers, to becoming a more complex process that also comprises qualitative elements, and actions, assumptions, and necessary means to use the required HR proactively, and meet the strategic objectives of an organization (Machado, Miguel, and Marrero, 2011).

Authors like Miguel (2006), Carrasco, Lozano, and Velásquez (2008), Borracci *et al.* (2009), Cavalleri, Castromán, Rodríguez, and Riva (2013), Hechavarría, Labrada,

Miguel, and Márquez (2013), Cavalleri, León, and Perez (2016), and Gómez *et al.* (2018) have worked on human resources planning using methodologies, but they have not applied the techniques of strategic prospective, so their research lack the anticipation of quantitative and qualitative need of personnel within a desirable future for the entity.

Miklos and Arroyo (2015) were able to incorporate the idea of constructing a desired human resources scenario, at a facility that certified worker competencies. The prospective exercise, though lacking methodology for reproduction, has a system approach when tackling scenarios in which different RH processes are analyzed. Linked to RH planning, this analysis circumscribes to the proposal of a gradual descent in managing staff resources, and a quantitative increase in the outer personnel, assuming that human resources are certified, and meet strategic functions to improve competitiveness and productivity, associated to the qualitative side. Although both approaches of human resources planning are dealt with, they are not fully developed so as to determine the extent of the planned descent or augment of the number of workers. Among the sustainable development goals to 2030 (Economic Commission for Latin America and the Caribbean [CEPAL], 2018), Goal No. 8, related to the need of designing and implementing policies toward sustainable tourism that promote culture and local productions. Cuba is fully committed to the 2030 Agenda for development, so 6 strategic axes have been aligned in the National Plan for Economic and Social Development (Communist Party of Cuba [PCC], 2017), and defined tourism as one strategic sector, in which urban, and sun and sand destinations are encouraged. Having this background, it is important to analyze the actions of hotels to meet the goal, and make it sustainable in the long run, looking into the future, specifically how human resources management in hotels should contribute to this goal.

Touristic entities have the aspiration of becoming more efficient. The introduction of new techniques for RH calculation helps maintain advantages in the national and international markets. Especially, lodging is among the key processes of a hotel; it is one of the highest income contributors, and one of the most complex to plan labor use. Appropriate planning influences in the fulfillment of general indicators.

Planning human resources in hotels does not include future development scenarios, which means that influencing variables that cause staff variations, such as technological changes, and possible hotel extensions, as well as the growing or shrinking demands from issuing markets, are not analyzed.

Staff forecasting has a restrictive strategic prospective character when the scenario desired by the hotel is excluded. The above analysis leads to the determination of the aim of this paper: to present a procedure for human resources planning in hotel lodging, using a strategic prospective approach.

DEVELOPMENT

According to Coates, Durance, and Godet (2010), strategic prospective analyzes the future and a multiple reality, calling for a different way of thinking, instead of having a linear view of reality. The construction of a desired scenario within a set of possible scenarios that describe the future of a company is the essence of strategic prospective. According to this planning approach, companies promote development of a successful future, adjusted to the probability through actions that channel its occurrence. At the same time different planning takes place, it is important to forecast how much and what is the ideal number of employees to ensure efficient operation of entities within the projected future.

In strategic prospective of human resources, a study of the company is done based on the future image of it, which will result in the creation of probable scenarios, and the best choice for the company, for which quantity and quality human resources, and the proper strategies in the long run are needed. After implementation, they will guarantee the occurrence of the scenario identified as convenient, with the required and properly skilled staff quantity. In the hotel sector, particularly, this idea has special significance due to the variability of demand and capacity availability, along with other factors.

A procedure is introduced to standardize the applicability of strategic prospective planning to human resources planning in hotel lodging (Fig. 1). It contributes to forecasting the staff needed in different future development scenarios, and to take steps that guarantee, within HR, the available personnel with the required competencies that

facilitate the occurrence of the scenario identified as desired.

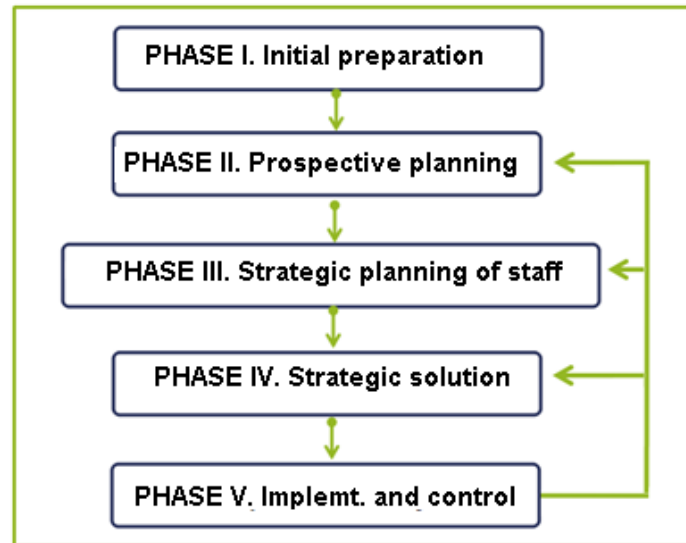


Fig. 1. Procedure for human resources planning, using a strategic prospective approach

Phase I. Initial preparation: the objective is to make up and train the working team, make the entity and the lodging process familiar, to create the initial conditions to implement the procedure. The calculation of the number of experts required is based on criteria related to the binomial distribution of probability. Hence, the following formula is used:

$$M = \frac{P(1-P)K}{i^2} \quad (1)$$

Where M: number of experts, i: desired level of accuracy, P: estimated expert error proportion, K: constant whose value is associated to the confidence level chosen. The involvement of specialists in strategic prospective planning, and human resources planning contributes to staff training in the implementation of the procedure suggested, and the techniques to be used.

Phase II. Prospective planning: a prospective analysis of lodging is performed. The temporary horizon of planning coincides with the term in which the strategic conception of the entity is established.

In it, the expert team identifies the main factors involved in HR planning of the lodging process, and then choose the key variables. Accordingly, to determine the strengths and weaknesses, an internal diagnostic is made, whereas external diagnostic is made to

identify the most significant opportunities and threats. The key variables are chosen through the method of structural analysis, designed by Godet and Durance (2007) under the name of matrix of crossed impacts multiplication applied to classification (Micmac).

Using group work, and based on the analysis of key variables, hypotheses are determined, and possible scenarios are designed to be used in the lodging process. Then the most convenient scenario is chosen from the most probable group of choices by experts. The selection uses Smic, and implementation is aided by "(...) Lipsor, which has developed a tool now available to the public as freeware (smic-prob-expert)" (Godet and Durance, 2007, p. 84).

Phase III. Strategic planning of staff: human resources planning is made using the chosen scenario. Quantitative planning analyzes the behavior of variables that influence the load, capacity, and availability of personnel. Qualitative strategic planning defines the necessary competencies of workers to meet the objectives of the process in the projected scenario.

Quantitative strategic planning

Load and unit capacity are determined in the long run, considering the influencing variables, and the strategic staff size is designed, according to equation No. 3.

Position x:

$$Nt_x = Q_x / Cu_x \quad (1)$$

Position y:

$$Nt_y = Q_y / Cu_y \quad (2)$$

$$PEP = Nt_x + Nt_y \quad (3)$$

Nt: Number of employees per position

Q: Projected load

Cu: Projected unit capacity

PEP: Strategic staff size

$$PEP = Ntx + Nty \quad (3)$$

The monthly booking in the high and low seasons is used to project the load. The effect of influential variables in the probable scenario is analyzed, which may include the introduction of new markets in certain periods of the year, with a rise in the levels of occupation; increase or decrease of already existing market shares; expected new

investments related to extension of the process that, along with marketing strategies, can ensure higher levels of occupation; room renovations that mean out of service; and the opening of new hotels in the same destination, which increases competition, and threatens the historical occupation levels of a hotel. According to their presence or absence, similar behavior patterns should be modeled, so they can be known and favor prospective character. Time series methods are used to forecast the levels of occupation. Minitab, Stadgraphics, and Logware were used to process the results. For maid positions, the work load was determined according to the forecast of the number of rooms booked daily, which should be cleaned.

Unit capacity was projected taking into account the variables present in the chosen scenario: new investment in technology that favor working methods of the positions evaluated, historical absenteeism average, hotel category, deterioration of infrastructure that means overwork, and others. The techniques used were photos, instant observation, and diagram of multiple activities. For the room maid position, unit capacity was determined according to the number of rooms that one maid can clean daily.

To learn about the future losses in the staff per position, organizational variables that influence the mobility of human resources were considered, such as military service, termination of contract, promotion, labor market forecasting, traveling distance to work, improvements in working conditions, training courses, traveling abroad, moving to another province, and others which are less forecast, such as maternity or paternity leave, leave without pay, and death. The current future altered staff size is calculated using equation No. 4. Future deformation of the staff is affected by the percent of historical leaves from each position, and corresponding retirements within the period evaluated.

$$PADF_x = PA_x - DFPA_x \quad (4)$$

$$DFPA_x = \text{No. of retirements}_x + \% \text{historical of leaves}_x$$

$PADF_x$: Current altered staff in the future for the position of

PA_x : Current staff for the position x

$DFPA_x$: Future staff deformation for the position of x (permissible losses)

The strategic need of staff per position is then calculated, according to equation No. 5. A positive result suggests the need to hire new staff due to a future deficit; however, a

negative change indicates that the existing employees are enough to carry on the lodging process. A stock of employees represents a reserve of productivity.

$$NEP_x = PEP_x - PADF_x \quad (5)$$

Qualitative strategic planning

Qualitative strategic planning comprises a forecast of competencies that will be required in the long term, as well as the staff required for lodging. The desired human resources to develop the organization in the temporary projected horizon are determined. The expert opinion method Delphi is used to determine competencies, by rounds; each expert in the group provides a response to the question: What competencies do you think the staff in the position of x should acquire, depending on the projected scenario for the hotel?

Phase IV. Strategic solution: Upon definition of the projected hotel scenario for lodging, and knowledge of staff needed with the required competencies, it can be constructed. Accordingly, the working team establishes the objectives to meet. In that direction, techniques like brainstorming and document review can be used. Then the actions are oriented, depending on the previously identified objectives, in order to contribute to an increase in the occurrence probability.

The evaluation of strategic actions is performed through a multi-criterion method, such as the multi-criterion, and multi-level methods, which can be used to rank suggested actions. Lastly, a comprehensive plan of action is made, comprising the actions to be implemented, the personnel involved, responsible parties, approval of necessary resources, and deadline for implementation.

Phase V. Implementation and control: further projections and planned actions are implemented in this phase. When quantitative and qualitative forecasts of the necessary human resources for quality services, are known, the designed HR strategic prospective planning for lodging is implemented. The staff involved is trained, and workshops are performed to disclose the benefits of the actions proposed, in order to achieve commitment and motivation.

Control is set up to check the accomplishment, opportunity, and pertinence of the measures taken, so that necessary adjustments can be made in cases of deviations from the plan. If the projected scenario changes, new competencies will be needed,

along with a different staff size, new objectives, and actions. The development of the process is analyzed to see correspondence with the forecast of occupancy levels; the monthly results are input to update tendencies, which can influence the determination of staff size. Process output indicators can be used to control the results, such as working hours, accomplishment of customized training plan, according to the learning needs, to model the scenario and customer satisfaction in the lodging process.

DISCUSSION

The works evaluated conceive staff calculation as an extension of the historical estimate, regardless of possible future events that might lead to unbalances, and variations in forecasting. Furthermore, the few research studies related to analysis of scenarios to improve human resources planning (García, 2017; Hidalgo, 2018; Miklos and Arroyo, 2015) are directed to areas other than the hotel sector, and are not included in the procedures for staff size calculations, and their necessary competencies in different projected scenarios.

The inclusion of strategic prospective techniques for human resources planning enables starting from a future image to design probable scenarios, which are analyzed. Then the organization determines the most convenient one, according to HR quantity and quality needs, and proper strategies to accomplish it. Upon implementation, these practices will ensure the occurrence of a scenario identified as suitable, with the right amount of personnel having the required competencies.

The procedure suggested is suitable to handle uncertainty, by using methods that help reduce it. Micmac and Smic enable possible future alternatives, whether they are desirable or not; and the utilization of the multi-criterion and multi-level matrices help examine the actions to be implemented to construct a more convenient future. Additionally, it involves the participation of parties interested in collective construction of their future, since the greater convergence of actors' wills, the greater likelihood to reach the desired future.

The managing cycle is conceived depending on three basic functions: planning, in charge of creating necessary conditions for labor calculation, and forecasting this

function in the desired scenario for lodging; implementation, where projected actions are carried out to reach the suggested scenario; and control, which can permit necessary adjustments in the occurrence of deviations arisen from the emergence of an undesired scenario.

CONCLUSIONS

Strategic prospective is little known in the field of human resources planning. However, it is enriching, it adds knowledge from a variety of experts to the rigid calculation of staff size performed by entities today.

The inclusion of prospective techniques was a novelty to determine the size of staff needed with the competencies required by touristic facilities in advance, in the desired scenario, to achieve proper operations.

The procedure presented was structured into phases that link strategic prospective thinking to human resources planning in the area of hotel lodging.

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Conflicts of interest and conflict of ethics statement

The authors declare that this manuscript is original, and it has not been submitted to another journal. The authors are responsible for the contents of this article, adding that it contains no plagiarism, conflicts of interest or conflicts of ethics.

Author contribution statement

Mayly Torres Álvarez. Conceptualization (leader), research (leader), methodology (leader), Redaction of the original draft (equal participation).

Yosvani Orlando Lao León. Conceptualization (support), research (support), methodology (support), project management supervision, redaction of the original draft (equal participation)

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