A new definition of the professional figure Open Manager

Una nuova definizione della figura professionale dell'Open Manager

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Abstract This study focuses on the manager's professional work and its evolution in the last years. In particular, the main focus is to detect the possible new dynamics in the managerial behaviour able to define the new professional figure of the 'open manager', based on some evidence derived from a survey conducted by interviewing a set of managers of Italian companies using a structured questionnaire. By using an agglomerative hierarchical cluster procedure with the Ward's method, results six different groups of managers with similar behaviours were defined, based on the responses to the questionnaire items.

Abstract *Questo studio si concentra sul lavoro professionale del manager e sulla sua evoluzione negli ultimi anni. In particolare, il focus principale è quello di rilevare le possibili nuove dinamiche nei comportamenti manageriali che possano definire la nuova figura professionale del "manager aperto", sulla base di alcune evidenze derivate da un'indagine condotta intervistando un insieme di manager di aziende italiane tramite un questionario strutturato. Utilizzando una procedura di clustering gerarchico agglomerativo con il metodo di Ward, sono stati definiti sei diversi gruppi di manager con comportamenti simili, sulla base delle risposte agli item del questionario.*

Key words: Open manager, Hierarchical cluster analysis, Ward's method

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1 Introduction

The labour market is a field in permanent evolution and this is also tangible in the realization of new professional roles or figures. Such evolution could be defined on the basis of the emergence of new tasks or alternatively it could be derived from a description of some behaviours that managers undertake in the course of their work. In this second case it is possible to talk about of evolution of a professional figure because even when managers perform the same tasks the behavioural approach could be different, for example in the field of interpersonal relationships or for other behaviours. In this context, this study focuses on the manager's professional work and its evolution in the last years. In particular, this aim of this paper is twofold: first, to detect the possible new dynamics in the managerial behaviour able to define the new professional figure of the 'open manager', based on some evidence derived from a survey conducted by interviewing a set of managers of Italian companies using a structured questionnaire; second, to validate the distributed questionnaire as a classification tool which could be useful for predicting the professional roles or figures of managers based on their reported managerial behaviours. The open manager figure is not actually well defined, so it appears to be as a latent figure, for this reason through the data analysis following this survey it was possible to outline some emerging attitudes and behaviours. Nonetheless, this concept was enhanced by some authors in combination with the definition of open innovation [1]. The paper is structured as follows: after the introduction, a second section is dedicated to data description and methodology, used to answer the research objectives whereas a third section shows some preliminary results.

2 Data and method

Data were collected by Fondirigenti and Confindustria in 2020 through a structured questionnaire distributed to two different sets of Italian companies and filled in by a managerial internal figure. The first group was composed by innovative companies, while the second one was obtained by selecting a set of generic firms. The total number of respondent in the two groups was equal to 383 managers, coming from 320 different companies. Of the 383 respondents, 213 belonged to the first group of firms and the remaining 170 to the second one. The questionnaire was made up of two sections: in the first section there were questions concerning the context in which the firms operate, such as economic sector, dimension, geographical area, as well as the main socio-demographic characteristics of managers, such as gender, age, education level, respectively; in the second section there were thirty items describing the managers' business behaviors and attitudes, useful for defining the concept of 'openness' characterizing the figure of the open manager. Such items were

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formulated as a 5-point Likert scale, with responses ranging from 1 to 5 where 1 stands for "totally disagree" and 5 for "totally agree".

In order to identify homogeneous groups of managers who share common behaviors and attitudes among those described by the items of the questionnaire, an agglomerative hierarchical cluster analysis was carried out using the Ward's method [2, 3]. Agglomerative clustering works in a bottom-up manner that is, each observation is initially considered as a single-element cluster. Next, pairs of clusters are merged until all objects have been merged into a single cluster. In particular, Ward's minimum variance method minimizes the total within-cluster variance thus, at each step of the agglomerative procedure, the pair of clusters that leads to minimum increase in total within-cluster variance (or with the smallest between-cluster distance) are merged. To apply a recursive algorithm under this objective function, the initial distance between individual objects must be (proportional to) squared Euclidean distance. The result of hierarchical cluster analysis can be easily visualized using a tree-based representation of the objects, called dendrogram. Subsequently, the obtained groups were analysed in relationship with the single items of the questionnaire by comparing the answers distribution in each single group with that in the entire set of respondents. This allowed to locate some discerning items identifying the managers' behaviors useful for defining their openness level.

3 Results

Data analysis carried out using the agglomerative hierarchical cluster procedure with the Ward's method allowed us to define six different groups of managers with similar behaviours, based on the responses to the questionnaire items. Results are shown in Table 1, in terms of descriptive label of each group, their respective absolute number and the correspondent percentage. To choose the right number of clusters of the final solution shown below, the elbow method and the inspection of the dendrogram were considered.

Table 1: *Groups of managers defined after the hierarchical agglomerative cluster analysis using the Ward's method*

Group	N	Percentage
Group 1: Guardians traditionalist, defender	76	19.8
Group2 : Open Leaders	79	20.6
Group 3: Selfish people	69	18.0
Group 4: Regulators	67	17.5
Group 5: Explorers	73	19.1
Group 6: Opponents	19	5.0

The descriptive labels were assigned after identifying those items characterizing the behaviors of the managers in each group. The main features that distinguish the

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managers in each group were derived by comparing the distribution of item responses for each group to the total, in order to bring out their level of openness. In shorts, the main characteristics of each group can be describe as follows.

- Group 1. Guardians traditionalist, defender: a) for the team to function, it is always necessary to clarify priorities; b) I feel that I am fond of my colleagues at this company; c) Sometimes I personally write the procedures that govern activities.
- Group 2. Open Leaders: a) I Don't like employees who can impose themselves on others; b) It is always prioritize the career development of your employees; c) Sometimes I do not personally write the procedures that govern activities.
- Group 3. Selfish people: a) Business today doesn't require the most consistency; b) I don't expect my employees to be able to make changes on their own; c) I feel that I am not fond of my colleagues at this company.
- Group 4. Regulators: a) I prefer collaborators who can impose themselves on others; b) Business today requires the utmost consistency; c) When faced with any critical task, I always know someone who can help me.
- Group 5. Explorers: a) I can accept constant change in the business world; b) It is important to admit your mistakes to co-workers; c) In the professional context, I act very quickly.
- Group 6. Opponents: a) I can't accept constant change in the business world b) It is not important to admit your mistakes to co-workers; c) I don't take every opportunity I get to learn new things.

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