

The Interactive Management of Human Resources in Uncertainty

Applied Optimization

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The Interactive Management of Human Resources in Uncertainty

by

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PREFACE

The ups and downs faced by society during the latter half of the XXth century, have left remnants, from the uncertainty of which could emerge a different way of living together. This not only includes new ways of looking at more or less old problems, it also means a profound change of the very foundations on which investigation is based.

The patterns of our existence itself are being attacked by an uncontrollable overload of information and by profound changes in general, which give a cloudy, uncertain image of the future. It would appear that the time has come for a decline in stability and security. Economic and business activities, professions and jobs, which in the past were permanent and passed on from generation to generation, find that the interest shown in them in the past, has now ended, and they arouse no enthusiasm in those who make up the new strata of our society. Nowadays it is impossible to think that anyone who has or is receiving any scientific or technical education can expect to work the rest of their lives without constant updating of their knowledge and capacities. In this unstable and uncertain world there is no room for rigid specialisation, but what is required is imagination, the creator of flexible and adaptable spirits.

Today's world, and the world we can expect in the immediate future, is portrayed by a system of rapid interchanges, which convert labour relations within institutions and companies, which are not always fluid, into an amalgamation of complex and varied problems, because they affect something as vital as the adaptation of man to constant change. Although this phenomenon was already brought up in the past, nowadays it has overflowed the traditional channels in which economic activities move.

Because of the continuing changes in industrial technology, which incorporate new equipment, processes and products, there exists an urgent demand for rapid adaptation by those people using the same. Machines which have always been a mayor support to human activity, are currently operating in an enormous spectrum of different activities, freeing man from many routine and at times arduous tasks. In workshops automation has brought in the robot, in administrative tasks it brought in the computer following hard on the heels of the calculator. It seems only logical to assume that in the near future, both white and blue-collar workers will be subjected to constant changes, in order to adapt themselves to the tasks that the requirements of modern times signify.

Fortunately mankind evolves, just like any other living species, in an uncertain environment. One of the first goals of all living species is to mitigate the effects of this uncertainty. To be able to do this, we make recourse to the accumulation of repetitive events, take them into account and use them at the time of taking decisions. In this way, the transition from uncertainty to chance, and from chance to decision is reached. In the context of the economic sciences, the decision concept is one of the most frequently used. So much so that, for many people, economics is the science of decision. Therefore, given that within the economic systems, processes of acceleration and deceleration are occurring, and these are not always pulling in the same direction, pressures of a different nature take place within their spheres; Legal, financial, labour, etc., which create substantial problems of very differing characteristics. Problems that are, in part, consequent upon the absence of a platform for future events, sufficiently stable to develop selection processes, based on forecasts, which allow for the suitable delimitation of future events.

In latter years there has been a growing interest for giving a new meaning to the concept of uncertainty, as a consequence of the fact that it is constantly more difficult, in spite of progress obtained with processes and machines, to obtain sufficiently stable and even significant data. The phenomena related to human relations in general and labour relations in particular, are clearly getting less and less predictable.

Fortunately handling the phenomena relative to human resources management, which has arisen in this new era, appears to have entered upon a course, which could hold out new hope for the future. In fact the long-term lethargy into which operating techniques for studying the economy and company management had fallen, appears to have ended with the incorporation of certain new elements, based on the theory of fuzzy sub-sets. The lack of adaptation between reality and model, all too often led to the mutilation of this reality to make it adapt to a predetermined model. This practice, repeatedly exposed by many researchers desirous of searching for more honest ways to perform their work, led to certain attempts which have been crystallised into this profound conceptual, methodological and objectively oriented change.

We believe, in an almost imperceptible but constant manner, that those researchers working on the contractual and human aspects of management are accepting the new techniques on which modern decision taking is based. However, it should be recognised that the passage from a situation in which the scientific community is firmly entrenched, to another which requires great efforts in adapting, will not be easy, at the same time taking into account the risk involved on entering upon a path of which very little is known. Perhaps this is the principal challenge that induced us to write this book.

JAIME GIL ALUJA