工商管理精要系列·影印版

管理创新

Management Creativity

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《工商管理精要系列·影印版》

出 版 说 明

《工商管理精要系列·影印版》是中国人民大学出版社和西蒙与舒斯特国际出版公司继《工商管理经典译丛》之后，共同合作出版的一套大型工商管理精品影印丛书。

本丛书由欧洲著名管理学院和管理咨询公司的教授和专家撰写，它将90年代以来国际上工商管理各专业的最新研究成果，分门别类加以精练浓缩，由享誉世界的最大教育图书出版商Prentice Hall出版公司出版。每一本书都给出了该专业学生应掌握的理论框架和知识信息，并对该专业的核心问题和关键理论作了全面而精当的阐述。本丛书虽然篇幅不长，但内容充实，信息量大，语言精练，易于操作且系统性强。因此，自90年代初陆续出版以来，受到欧洲、北美及世界各地管理教育界和工商企业界读者的普遍欢迎，累计发行量已达数百万册，是当今国际工商管理方面最优秀的精品图书之一。

这套影印版的出版发行，旨在推动我国工商管理教育和MBA事业的发展，为广大师生和工商企业界读者，提供一套原汁原味反映国外管理科学研究成果的浓缩精品图书。有助于读者尽快提高专业外语水平，扩大知识面，掌握工商管理各专业的核心理论和管理技巧。

本丛书可作为管理院校的专业外语教材和各类企业的培训教材，对于那些接受短期培训的企业管理者、MBA学生，以及想迅

速了解工商管理各专业核心领域的师生来说，本丛书更是极具价值的藏书和参考资料。

为了能及时反映国际上工商管理的研究成果，中国人民大学出版社今后将与 Prentice Hall 出版公司同步出版本丛书的其他最新内容并更新版本，使中国读者能借助本丛书，跟踪了解国际管理科学发展的最新动态。

1997 年 8 月

Preface

Management Creativity is an old well-established topic but at the same time, as a subject area in its own right it is relatively new. I was introduced to the subject by Tudor Rickards in 1984–5 while I was a doctoral researcher at Manchester Business School. I was extremely intrigued by the subject and although my key interests at the time were Marketing and Business Computing I decided to show more than a passing interest in the subject.

In the late 1980s I was interested in computer assisted creativity and, indeed, my doctoral thesis addressed this particular aspect of creativity. Few people prior to this had addressed the subject and I became somewhat of a pioneer. Perhaps it was the initial pioneering spirit that eventually led me to become engrossed in the subject of management creativity and, eventually, to produce this book.

When I moved to Keele University in 1987 it was to develop Marketing as a subject within the curriculum. This I did, but at the same time I began to run undergraduate and postgraduate options in Management Creativity. I can only say that I was extremely surprised by the great amount of interest that was shown in the subject. It became one of the most popular options available.

Before writing this book I had been conscious for some time that there was not really a suitable textbook to use for the courses I was running. With this in mind I decided to write the book. It covers most of the material one would expect to find in a book on creative problem solving for management. Arguably, there is other material which could have been included. However, I feel that the material I have included forms a tight entity in its own right and to include material which might equally well be considered under the heading of such subjects as the management of change or innovation would not be appropriate.

Creativity and Management Creativity can encompass a wide spectrum of material. What I have included here is essentially concerned with creative problem solving. It contains many practical techniques and methods which will appeal to students and to practising managers alike.

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1

Creativity in management

This book is about creativity and problem solving in management. Many management problems require creative insights in order to find satisfactory solutions to them. Dreaming up new product ideas to gain an advantage over competitors in the market-place is an example. This first chapter introduces creative thinking and explores its importance in management problem solving. An overview of creative problem-solving techniques and methods is then presented within the general framework of problem-solving strategy. The chapter introduces the reader to the different topics to be found in the individual chapters that follow.

Nature of creative thinking

Creativity is something that one comes across every day. One hears of creative people, admires creative objects of art or reads creative books. Yet despite our ability to recognize creativity manifesting itself, there is considerable confusion about what creativity really is.

Wertheimer (1945) suggested that creative thinking involved breaking down and restructuring our knowledge about a phenomenon in order to gain new insights into its nature. Understanding how we see things may therefore have considerable influence on our ability to think creatively. Kelly (1955) and Rogers (1954) both maintained that we can be creative by gaining an insight into our own understanding of a subject. Creativity occurs when we organize our thoughts in a way that leads readily to a different understanding of a situation.

The importance of creativity in management

The rapid growth of competition in business and industry is often given as a reason for wanting to understand more about the creative process (see, for example, Van Gundy, 1987). Many firms experience pressure to enhance old systems and products continually. Growth and survival can be related directly to an organization's ability to produce (or adopt) and implement new products or services and processes (Van Gundy, 1987); managers also need to discover new and better ways to solve problems (Ackoff and Vegara, 1988). In particular, an increasing number of problems have few or no precedents, hence there are fewer tried and tested ways of approaching them with the anticipation of reaching a successful outcome.

Trying to solve problems in the same way that they have always been solved in the past can sometimes lead to unforeseen difficulties and what may seem to be insurmountable barriers. This is particularly the case in a business environment which is experiencing rapid cultural, economic or technological change. Change is an ever-present phenomenon to which businesses of all kinds are forced to respond, if they want to stand the best chance of survival and prosperity.

It has been suggested that possessing creative ability is an essential asset for any leader (see, for example, Bennis and Nanus, 1985 and empirical evidence provided by Ekvall and Parnes, 1988). Creative leaders hunt actively for new problems and are especially successful in handling new challenges that demand solutions outside the routine of orthodox strategies. They often possess significant vision and are able to inspire others by their creative talents. Creativity is an important human resource and all organizations have to try to make use of this resource by devising settings in which creative talents are permitted to thrive.

There is evidence to support a direct link between creative thinking and organizational efficiency and effectiveness (for example, Raudsepp, 1987). Creativity also helps to improve the solutions to persistent organizational problems and has a broader role to play in an organization, since it helps to encourage profitable innovations, rekindles employee motivation and improves personal skills and team performance. Creativity is particularly important in marketing and corporate strategy formulation. A continuous flow of ideas for new products and services, and for improving work processes, provides the platform upon which an organization can develop its competitive advantage.

Despite the need for creativity in organizations many factors work against it (Figure 1.1). Van Gundy (1992) pointed out the kinds of factors involved. Managements, he argued, often believe that acquiring new technology through merger will spur innovation but, as he pointed out,

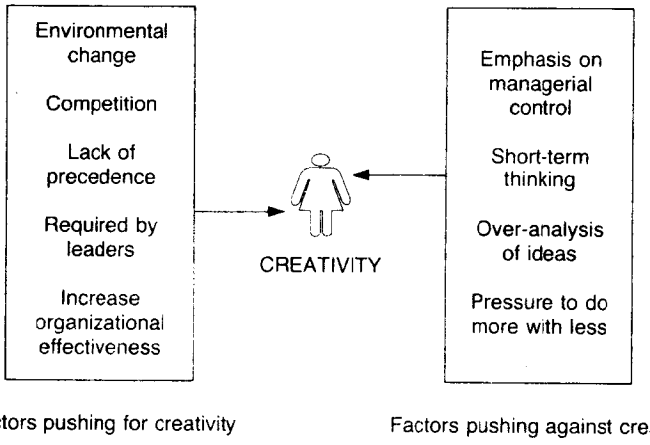

Figure 1.1 Some of the factors that push for creativity and some that push against it in organizations.

merged companies are not always compatible and this stifles innovation. Emphasis on managerial control, short-range thinking and over-analysis of new ideas often lead to creativity not having a chance to succeed. Among other reasons cited by Van Gundy were pressure to do more with less and perceptions that creative people are born and not made. Budget constraints make it difficult for companies to innovate. Zero-based budgets, personnel cutbacks and reduced product–cycle times all make it difficult to increase innovation. There is also a prevailing attitude among many managers that creativity is something that cannot be learned.

While many managers may think that creativity cannot be developed, Van Gundy indicated that creativity training has increased in US companies from around 4 per cent of companies in 1985 to more than 26 per cent by 1989. He also commented that a study by the American Society for Training and Development reported that 31 per cent of US companies planned to offer creativity training during the next 3 years. There are no comparable figures for the United Kingdom but it would seem that the need for creativity training cannot be less than it is in the United States.

The need for creativity makes itself felt in most aspects of organizational decision making. New ideas are required and old ideas need to be re-examined. Creativity is the process of revealing, selecting, swapping around and combining one's store of facts, ideas and skills. Rickards (1988) described creativity as an 'escape from mental stuckness', an operational definition very much in keeping with its role in decision making and problem solving.

Creative problem solving

One way of defining a problem is that it is a gap between a current and a desired state (Van Gundy, 1988). The gap may be viewed as the difference between 'what is' and 'what should be'. What constitutes a gap is relative and subjective, of course, and two different people might have different perceptions about the same situation – that is, 'what is' and 'what should be'. If a problem is a gap between two states, then problem solving is the process of closing that gap – in other words, changing the current state into the desired one.

Creative problem solving seems to work best in situations where traditional problem-solving methods have already been exhausted. For well-structured problems, routine or ready-made solutions are well known. In such cases one usually has a pretty good idea about the problem states and how to transform the current state into the desired state. For example, suppose the problem is to explain why the money in the cash till of a shop at the end of the day does not equate with the difference between the initial float money and the receipts and refunds which have been issued during a day's trading. The current state and the desired state can easily be defined and clearly there can be several explanations for the discrepancy. Such a problem does not require creative problem-solving methods to find a solution.

Other problems, however, are not solved so easily. These problems have much less information available about them and are more ill-structured in nature. In these cases there is ambiguity about the problem states or how to transform the current state into the desired state. To solve such problems requires divergent thinking – that is, one needs to think of many different potential solutions. A problem faced by many managers, for example, concerns how to make the best use of their time. In such a case both the current and desired states may be difficult to define precisely and the method of effecting a transformation between the two states may be even less obvious.

The background of creative problem solving

Osborn (1957) proposed that creative thinking involved three stages:

- fact finding;
- idea finding; and
- solution finding.

Fact finding, he argued, contained two substages: problem definition and

preparation. Problem definition is quite clearly an imperative. Not only is it the case that ill-structured problems are characterized by vague notions about the 'current and desired states' concerning the problem, but it would also be pointless to try to find solutions to problems that are ill-defined. Idea finding helps to generate potential ideas, and solution finding helps to evaluate and select the best ideas.

Osborn also noted that the more ideas generated, the greater the probability that a high quality solution will result. He also suggested that judgement should be deferred during idea generating. He felt that if the latter is not done, one can focus too much on evaluation and limit the total number of ideas. Separating the processes also helps to encourage a climate more conducive to creative ideas.

Another person to make a substantial impact on our thinking about creative problem solving (CPS) was psychologist Sydney J. Parnes. He conducted several major research studies on CPS and added new stages – problem finding and acceptance finding – which placed greater emphasis on problem definition and solution implementation. Parnes also suggested that each stage in the process should begin with a divergent search for data (without trying to evaluate it) and conclude with a convergent selection of the most important data.

The Osborn–Parnes model was refined further by Scott Isaksen and Donald Treffinger (1985). They added a preliminary problem-solving stage: objective finding. This stage helps identify a target area to resolve (i.e. the primary concern, challenge or opportunity).

Overview of the creative problem-solving process

Current thinking argues that the creative problem-solving process involves six stages, although it is not necessary to go through all the stages for every problem (Figure 1.2). Sometimes, for instance, one may begin at the problem-finding or idea-finding stage, depending on how much information is available and how much time is available. Whatever the case, however, the ground rule is to defer judgement. Data should always be listed and studied before it is evaluated.

Creative thinking comprises two kinds of thought process: *divergent* and *convergent* (see for example, Guilford, 1967). Divergent thinking develops and broadens out the thought process. Thinking divergently entails starting with a specific problem or idea and generating various perspectives on it. The purpose of divergent thinking is to ignore constraints and entertain all kinds of possibilities. Convergent thinking follows divergent thinking and it acts to narrow down the options available in order to obtain a number of satisfactory solutions to a problem or decision. When thinking

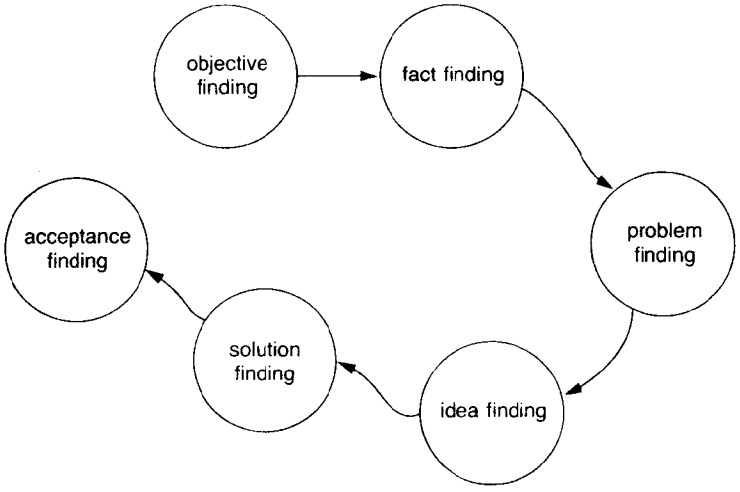

Figure 1.2 Six stages of the creative problem-solving process.

convergently, one begins with a wide perspective on a problem and proceeds to narrow down the focus to specific issues or options (Figure 1.3).

Each stage in the creative problem-solving process contains a set of divergent and convergent activities. That is, there is an initial search for data and then a narrowing down of the data. During the convergence one looks for material which is either very close to the point at issue or close enough to warrant further consideration.

Most consideration is given to 'hits': specific items that are identified as important or relevant to a particular stage (the best objectives during objective finding, the best facts during fact finding, etc.). 'Hotspots' is the name given to clusters of 'hits' which seem to be related to one another in some way. The six stages are discussed below.

Objective finding

At this stage one needs to target a problem area, beginning by using divergent thinking to generate a list of all the problems one is facing. Next one converges, identifying the most relevant problem area for further exploration. To facilitate, the problem is stated using the format:

'In what ways might we (I) do something or other?'

For example,

'In what ways might we reduce our marketing expenses?'

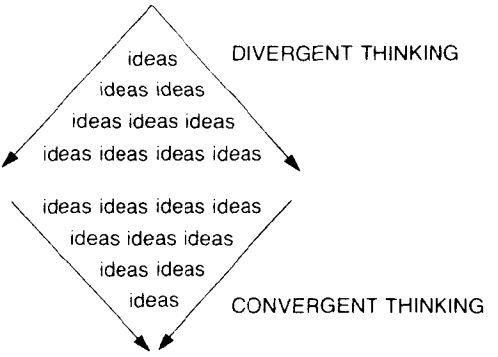

Figure 1.3 Divergent versus convergent thinking.

Before moving on to the next stage one needs to have identified the important problems (hits) and the key problem area or areas (hotspots). Here the criteria are applied:

- ownership (is one motivated to solve it?);
- priority (how important is the problem?); and
- critical nature (how urgent is it to solve this problem?).

Hopefully, by the end of this stage one should have identified the central problem or problems upon which to work.

Fact finding

This stage increases overall comprehension of the problem: the objective is to collect all the information related to the problem. This, in turn, helps to generate unique ideas. Convergence during this stage can again be assisted by using hits and hotspots. Fact finding helps to collect relevant data and may even enable one to see the previously identified problem or problems from a new perspective.

Problem finding

This stage uses fact-finding hits to develop the most productive problem definition possible.

Idea finding

The fourth stage in the creative problem-solving process helps to structure the search for potential solutions. The primary divergent activity during