

# An Evaluation of R.L. Ackoff's Interactive Planning: A Case-based Approach

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**Abstract** Russell L. Ackoff developed the *Interactive Planning* (IP) methodology as a conceptual tool to guide systematic and systemic development of organizations. One of its unique features is that such development should be ideal-oriented. IP has been well-received within the Systems Thinking community in particular; where more than 300 applications of IP are mentioned. However, it has not been easy to answer the question: “*does the use of IP enable that which it is proposing to enable?*” as there have been no systematic, empirically grounded, and critically oriented, evaluations of IP. This study attempts to offer such an evaluation. In this case, IP was employed to support a comprehensive development of a Department within a company. This IP application was evaluated using a set of predefined evaluation criteria derived from the IP as such and also from its critique. The results suggest that IP is indeed a powerful methodology to guide organizational development. While IP has several positive merits, a set of limitations were identified and serve here as a basis for deriving recommendations for the practitioners of IP and also suggestions of areas that merit further IP research.

**Keywords** Organization development · Participative development · Idealized design · Action research · Methodology evaluation · Systems thinking

## Introduction

This text presents an evaluation of the Interactive Planning methodology. R.L. Ackoff conceived Interactive Planning (IP) with the aim of guiding a systematic and systemic development of organizations. IP can be regarded as a seminal contribution to management in general and within the intellectual domain of Systems Thinking in particular. While the literature mentions 300 real-life applications of IP (Jackson 2000, p. 246), it is not possible to give an informed answer to the question “*does the use of IP enable that which it is*

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*proposing to enable?*”, as there exists no independent, empirically-based, comprehensive and critical, evaluation of IP. The aim of this text is therefore to present just such a study.

The overall result of this study suggests that IP is indeed a powerful methodology for guiding organizational development and that it can be recommended by the results obtained here; however several experienced and identified shortcomings provide foundation for deriving recommendations for practitioners, with regard to how IP can be used in practice and which issues should be observed, as well as recommendations for research areas that merit further development of IP.

The rest of this Introduction contextualizes IP within the scope of management sciences. Section two presents the Research Strategy employed in this study while section three presents a summary of Ackoff’s Interactive Planning methodology. Thereafter, section four characterizes the business organization subjected to developmental effort, by means of Interactive Planning, and section five presents the Results of the conducted evaluation of Interactive Planning; followed by the Summary and Conclusions.

### Management Approaches to Organizational Development

Since Frederick Taylor formulated so-called ‘Scientific Management’ as a means for developing and managing organizations, a vast amount of conceptual guidelines have been formulated with the same aspiration. These include such approaches as Operations Research (c.f. Taha 1997), Management Sciences (c.f. Gass and Harris 1996), Operations and Services Management (c.f. Russell and Taylor 2005; Graham and Johnston 2005), Organization Theory (c.f. Morgan 1997) and Organization Design (c.f. Daft 2004), and Strategic Management (c.f. Barney and Delwyn 2007).

However, there also exists a set of contributions to organizational development, its change and management, which are often associated with the intellectual domain called ‘Systems Thinking’ (e.g. Checkland 1981; Jackson 2000). Beside the more conventional Operations Research methods, Systems Thinking offers a set of conceptual frameworks based on alternative meta-theoretical foundations, such as hermeneutics, pragmatism, constructivism, and critical epistemology and social theory (Jackson 2000). Examples of such managerial tools include the ‘Soft Systems Methodology’ (Checkland 1981; Checkland and Scholes 1990), the various dialects of ‘System Dynamics’ (e.g. Forrester 1961), Managerial Cybernetics, such as the ‘Viable System Model’ (Beer 1979, 1981), and Ulrich’s (1983) ‘Critical System Heuristics’. In this context, R.L. Ackoff’s (e.g. Ackoff 1962, 1970a, 1974, 1981, 1999a, b; Ackoff et al. 1984, 2006) contribution to the management and development of organizations—the *Interactive Planning* methodology—assumes a particular role, as it has probably been most successfully canalized into managerial practice since its conception in the 1970s—Jackson (2000, p. 246) reports some 300 projects.

Interactive Planning (hereafter: ‘IP’) is built upon well-developed theoretical foundations, being based on American pragmatism and grounded in managerial experience. IP offers a comprehensive guide for carrying out a systematic, step-by-step, process of organizational development, centered in the design of an ideal organization. Even though IP has been well received, one question easily emerges: *does the use of IP enable that which it is proposing to enable?* On the one hand, there is a large set of original and secondary literature featuring IP and a set of case studies of its application, however on the other hand this investigation has not found any systematic, empirically-based and critical evaluation of IP. The available case studies employ IP only partially, focusing only on a product or a customer and not covering the comprehensive development of an

organization, even though this is the primary aim of IP. Further, the available case studies of IP applications do not provide any systematic and critical evaluation, only illustrations of IP's partial use.

To remedy this limitation, this text presents a systematic and critical evaluation of IP based on a case study where IP was employed as a conceptual guide for comprehensive development of an organizational unit.<sup>1</sup> The results of this case study provide unique experiences of IP in practical organizational development. Derived from this is a set of recommendations for the practitioner, in terms of how to use IP, and for the researcher, in terms of areas that merit further development of IP. Indeed, the experience presented here suggests that IP is a sophisticated and useful methodology for organizational development; but that there are challenges both for practitioners in how to use it and for researchers for its further development.

## Research Strategy

The research strategy and its motivation are presented in this section, starting with the general research approach followed by the research procedure, and ending up with the operational evaluation criteria employed.

Bearing in mind that the overall intention of this study was to assess Interactive Planning in practice, it is not feasible to conduct a large number of case applications followed by an identification of a significant invariance. Therefore, this evaluation builds on one performed application case study and also on the review of previous application case studies. The evaluation of IP was conducted in a real-life organization, including close involvement from the researchers; such a research approach is understood here as Action Research, as described below.

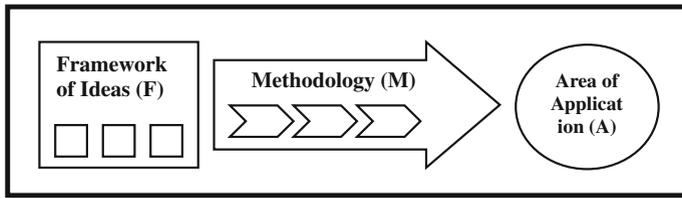
### Assumed Action Research Approach

The case-based evaluation was conducted in Action Research mode, which is today a well-established approach to conducting inquiries in a social setting (e.g. Lewin 1947; Blum 1955; Foster 1972; Clark 1972; Susman and Evered 1978; Hult and Lennung 1980; Argyris et al. 1982; Eisenhardt 1989a). Although there are several approaches to Action Research, its central feature is that the researcher is immersed into the actual situation, including research and social action; such a situation is natural in the sense that it has not been artificially created for research purposes only, as is the case with natural sciences laboratories. Therefore, in Action Research the researcher may assume two distinct roles, one as a natural participator in the situation, the other as a research worker investigating the situation at-hand. This means that *Action* and *Research* are conducted at the same time. From a meta-theoretical point of view, Action Research rests upon underpinnings from phenomenology, hermeneutics, and more recently from constructivism.

The approach to Action Research as employed here is adapted from the action research program developed over three decades at Lancaster University in the UK (Checkland 1991;

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<sup>1</sup> This study focused on the comprehensive development of an organizational unit within a company seen here as an advancement versus more partial applications of IP, as presented in literature. However, a desirable further advancement, in the understanding of IP, is to conduct and present its application for the comprehensive development of a whole autonomous organization, such as a company.



**Fig. 1** Illustrates the main components of the Action Research approach used to test the Interactive Planning methodology. A *Methodology (M)* is used to apply a *Framework of Ideas (F)* to an *Area of Application (A)*—after Checkland and Holwell (1998)

Checkland and Holwell 1998). The Lancaster approach comprises three central components (Fig. 1 illustrates the relationship between these components):

- An *Area of Application (A)* to be investigated; here a ‘Medical Department’.
- A *Framework of Ideas (F)* which may include theories and hypotheses; in this study this is ‘Interactive Planning’, expressed as a set of postulates for test.
- A *Methodology (M)* to investigate A with the help of F.

### Research Methodology

In the present case, the Framework of Ideas was constituted by the transformation procedure selected here: Ackoff’s Interactive Planning. The Area of Application is the transformed object: the Medical Department. Finally, the following Methodology has been employed to guide the performance of this case study.

1. Definition of the *Area of Application*: the transformed object, here the ‘Medical Department’ at a pharmaceutical company.
2. Definition of the *Framework of Ideas*: the procedure for transformation of the organization: ‘Interactive Planning’.
3. Derivation of *Evaluation Criteria* from a Framework of Ideas that has provided a set of evaluation criteria and measurements.
4. *Execution* of the application of IP at a Medical Department, including continuous monitoring; resulted in collected execution information.
5. *Evaluation* of the conducted application in relation to the pre-defined criteria; resulted in values assigned to the defined criteria.
6. Derivation of *conclusions*; resulted in lessons learned and recommendations.

The study presented here assumed a longitudinal character and was executed over a period of two and a half years. A dedicated administrative office was set up during this time, with part time staff members that were involved in both the conduct of the organizational development and in the monitoring and evaluation of IP.

### Structure of the Analysis

A general challenge of a case study approach is that it is often based upon a single case study that in turn challenges the possibility of deriving any generic conclusion (Eisenhardt 1989a). One solution to this challenge is to select a particular case that may be postulated as representative for a certain class of cases, in some manner. A second solution is to conduct several case studies and to find the relation between these, seeking invariance, i.e.

patterns that recur within these cases (Eisenhardt 1989a). This evaluation of IP builds on the results of a conducted case, of a real-life application of IP. Further, a careful review of academic publications of IP applications was conducted in order to find other case study-based evaluations that could be related to the present study. Only one such case study was identified, the so-called DuPont case; however as this study only partially fulfilled the quality standards required (i.e. systematic, empirical and critical evaluation) the results generated here are only tentatively related to the DuPont study with regard to suggested invariance only.

The case analysis here is made up of three distinct steps. The first step is a *procedural approach* constituted by an evaluation of the IP-process as such, in relation to the pre-defined evaluation criteria. Secondly, a *substantive*<sup>2</sup> *approach* was assumed here to address an analysis of the actual outcome or result of the execution, i.e. the transformed organization. Thirdly, the procedural and the substantive analyses are thereafter related to each other to enable identification of any potential casual relations between them. The goal of the case analysis is thus to identify a pattern that characterizes the evaluated object, here IP, in relation to predefined evaluation criteria.

### Operationalization of Utilization and Evaluation

One challenge for any evaluation of a methodology designed to guide organizational development is the fact that the latter is not formulated in terms of clear-cut hypothesis for scholarly evaluation, as this would be counter-productive for its purpose. IP, as most such methodologies, is originally expressed in terms of a set of interrelated normative narratives, suggesting various activities to be conducted in order to achieve different kinds of outcomes.

To handle this challenge positively, IP's account, as found in the original sources, was transformed into a set of *IP-postulates* (in the same manner as Eisenhardt (1989b) formalized the 'Agency Theory'). The function of an IP-postulate is to provide a comprehensive and summarized representation of IP, in a more clear-cut form, aiming both to guide an actual *utilization* of IP and to constitute an unambiguous reference point for its *evaluation*. Generally speaking, an IP-postulate can be understood here as a uniform prescription for conducting a certain developmental activity in an organization, and/or generating a certain kind of such developmental outcome. This formalization of IP produced fifteen IP-postulates, where thirteen were derived from the prescriptions given by the IP's original source texts and two additional IP-postulates were derived from the central criticism of IP. Table 1 lists the IP-postulates formulated and employed here for the guidance of its utilization and evaluation.

The formulation of the IP-postulates was conducted by three organizational consultants who had utilized IP as a guide for organizational development, each for a period of more than 5 years. Two of these consultants were members of the development team conducting this case study, and one of them acted as a leading action researcher.<sup>3</sup>

<sup>2</sup> The distinction between a 'procedural' and 'substantive' approach to evaluation is derived from H.A. Simon's seminal proposal for the distinction between procedural and substantive rationality (Simon 1976).

<sup>3</sup> The fact that the IP-postulates were formulated and acted upon by the same people as were involved in their evaluation has both disadvantages and advantages. The former is that there is potential for a positive bias while the latter is that a higher degree of content validity may be achieved. The mentioned disadvantage was handled, at least partly, by the fact that the evaluation team included some additional people, the whole developmental team, as detailed here.

**Table 1** Presents the fifteen criteria employed in the evaluation of Interactive Planning. The left-hand rows present the labels of the criteria, the Outcome row represents whether the criteria was fulfilled or not in the present case, while the Comment row presents any observations made that may have relevance for the future use of IP

#	Criteria	Outcome	Comment
1	Organizational self-development	Yes	Yes, until the deflection of employees
2	Ideal-seeking procedure	Yes	What should be the content of the ideal, how to be sure about its validity?
3	Learn & adapt	Yes	Learning & adaptation were limited to the detractions from the ideal defined
4	Participation	No	Difficult to get all stakeholders involved
5	Continuity	No	Disturbed, as several of the employees of the department left it
6	Holism	No	Partly only with other horizontal units, not with top management, i.e. not vertically
7	Current & uninterrupted future	Yes	Powerful didactic tool, and also operational prerequisite for derivation of valid activity and resource plans
8	Ideal organization	Yes	How to determine the validity of the content of a proposed ideal?
9	Management system	Yes	Powerful and needed for implementation control, decision making criteria needed
10	Organizational structure	No	Local organization too small and global policy did not allow
11	Activity plan	Yes	Careful prioritization needed
12	Resource plan	Yes	Careful prioritization needed
13	Controlled implementation	Yes	Resource demanding
14	IP cannot resolve power-structures	No	Unable to resolve
15	IP cannot include all stakeholders	No	Situations easily emerge where the number of stakeholders is unmanageable; also power-structures may hinder stakeholder participation

The formulated IP-postulates were used in two phases of the case study. Firstly and prior to the actual execution of the utilization of IP, the IP-postulates were detailed to the members of the team conducting the actual organizational development. The development team comprised twelve persons, both action researchers and organization managers and operational staff. Secondly, both during and after the execution of the utilization of IP, an assessment of the fulfillment of each IP-postulate was made collectively by all members of the development team; this employed the so-called consensus-based judgment meaning that after comprehensive discussion all members agreed upon a particular judgment. The outcome of this assessment could assume one of two values: *'positive'* or *'negative'*, where the first implied that the team members experienced a positive occurrence of the postulated content of an IP-postulate in question, while the second meant that these members experienced an absence of such an occurrence. Further, reflections and suggestions were collected for each assessed IP-postulate, with regard to observations considered important for a future execution of the IP-process; this was done both for the purpose to of identifying additional qualifications of IP and also at least in part to remedy the limitations of the binary, black and white, measurement scale employed.

This approach to the evaluation of IP follows the recommendation by Baert and Carreira da Silva, (2009, pp 8–9), where they clearly conclude that: “...while assessing any theory, it is important to take into account precisely what it was trying to achieve.”—it is thus unjust to accuse a theoretical body for failing to succeed with something that it never attempted to do.

## Object of Evaluation: Interactive Planning

The following presents the Interactive Planning approach as a conceptual guide for organizational development. It starts with a set of IP-postulates, summarizing the IP-methodology, which were used both to guide the development of the Medical Department and as criteria for evaluating IP.

### Interactive Planning

Interactive Planning is a procedure that prescribes how to develop and manage social systems, e.g. organizations, whether they are business or any other kind. Ackoff (1981, p. 246) expresses the intention of IP in the following terms: “*The objective of interactive planning is an effective pursuit of an idealized state. The state is formulated as a design of that system with which the current system’s stakeholders would replace it if they were free to do so. Such a system should be technologically feasible and operationally viable, and it should provide the system with an ability to learn and adapt quickly and effectively.*”

This presentation of IP’s evaluation is built on the assumption that the reader is somewhat familiar with IP as such. Secondly, while R.L. Ackoff has presented IP in numerous texts, its current presentation and application was guided mainly by one of its most detailed and coherent accounts: “*Creating the Corporate Future*” (Ackoff 1981). IP is thus presented below in a summarized form, in terms of thirteen Postulates of Interactive Planning; these were used as a guide for the actual use of IP in this case and also served as criteria for its evaluation.<sup>4</sup> Two additional IP-postulates are presented further on, accounting for key criticism of IP, providing the evaluation with a total of fifteen IP-postulates.

#### IP Postulate 1: *Organizational Self-Development*

The overall purpose of IP is to guide establishment of a successful self-developing organization. This means that IP’s function is to guide the setting up of organizational procedures, structures, roles, etc., that facilitate the organization in question in conducting its own desired development rather than being developed from outside.

#### IP Postulate 2: *Ideal-Seeking Procedure*

IP provides conceptual guidance for the design and realization of an ideal-seeking organization. This means that the prescribed organizational setup, procedures and structures, aim to facilitate an organizational design and development that seeks an ideal conception of the organization in question.

<sup>4</sup> The research team was aware that the content of several formulated IP-Postulates did overlap, and therefore introduced some redundancy to the prescribed developmental work. This was regarded as positive versus a situation where gaps could appear, missing some areas of IP and therefore not doing justice to it.

### IP Postulate 3: *Learn & Adapt*

IP provides conceptual guidance for the establishment of an organization that is able to learn and to adapt. This means that two key functions for organizational self-development and its ideal-seeking, are systematically conducted learning and also adaptation to internal and external circumstances.

### IP Postulate 4: *Participation*

Representatives from all stakeholder groups of the organization being subjected to development should participate in the process of plan formulation. This means that the stakeholders should be identified and positively included in the process of organizational development.

### IP Postulate 5: *Continuity*

Formulation of plans for the organization being subjected to development should be conducted continuously, i.e. in a never-ending iterative process. This means that activities for organizational development, such as identification of the current situation, design of the desired situation, activity and resource planning, execution, monitoring, etc., should be conducted in an iterative and spiral-similar fashion.

### IP Postulate 6: *Holism*

Formulation of plans for an organizational unit should include representatives from the unit subjected to the development, from all units at the same horizontal level, and from units that are one level above and one level below in the vertical structure.

### IP Postulate 7: *Current & Uninterrupted Future*

Formulation of development plans should generate a detailed description of (i) the current organization in its environment as such, its (ii) identified obstructions, and (iii) a future projected state of the organization when no deliberate developmental intervention is realized.

### IP Postulate 8: *Ideal Organization*

Formulation of development plans should generate a detailed description of an ideal and desired organization and its operations, as conceived by its stakeholders at the given time. The conceived ideal should observe two conditions: that the designed organization be technologically feasible and operationally viable.

### IP Postulate 9: *Management System*

Formulation of development plans should generate a detailed description of a specific Management System (procedures and resources) that is capable of identifying the current situation, comparing it with the ideal situation, and conducting informed decision-making regarding necessary corrective measures and re-formulation of the defined ideal being striven for.

### IP Postulate 10: *Organizational Structure*

The ideal organization of the developed operations should be structured in three dimensions in relation to (i) the *consumers* of the outputs, (ii) the *outputs*, and (iii) the *inputs*. This means that the designed organization should have responsibility functions for

the consumers of its outputs, the produced outputs themselves, and the inputs acquired into the organization.

#### IP Postulate 11: *Activity Plan*

Formulation of development plans should generate a detailed description of a plan of means that specifies the key activities that need to be conducted in order to bring the organization from its current situation towards its desired ideal situation.

#### IP Postulate 12: *Resource Plan*

Formulation of development plans should generate a detailed description of resources that are needed to execute the activities defined in the Activity Plan. Resources include people, money, information, and other material resources such as machines or natural resources.

#### IP Postulate 13: *Controlled Implementation*

Implementation of the formulated plans should comprise the realization of planned activities followed by monitoring and control of realized activities versus the planned ideal. When the difference between the actually-realized versus the planned-to-be-realized has been identified, corrective activities should be formulated and executed.

#### *Previous Applications of Interactive Planning*

Although literature (e.g. Ackoff 1981; Jackson 2000, p. 246) states that IP has been employed in some 300 practical cases, this investigation has succeeded in identifying only a few published *academic case studies* of the actual application of IP. These are the idealized design (i) of market research (Ackoff and Emshoff 1975a, b), (ii) of National Scientific and Technological Communication Systems (Ackoff 1976), (iii) of city planning (Ozbekhan 1977), (iv) of a university (Ackoff 1968), (v) of a black ghetto in the USA (Ackoff 1970b), (vi) of products (Ciccantelli and Magidson 1993), (vii) of a communication agency (Jacques 1999), (viii) and of an Academy of Vocal Arts (Pourdehnad and Hebb 2002). Jackson (2000) also mentions unpublished reports by Midgely and his associates, including idealized design (viii) of a diversion from a custody project for mentally disordered offenders (Cohen and Midgely 1994), (ix) of services of housing for older people (Midgely et al. 1996), and (x) of services with young people missing from home or care (Boyd et al. 1999). Further, a more recently-published case of IP application is the DuPont-case of transforming a *Safety, Health, and Environment Function* (Leemann 2002). Finally, Ackoff (Ackoff et al. 2006) has, together with his colleagues, recently published a pedagogic introduction of IP's Idealized-Design approach, with its key principles, followed by a partial presentation of several applications to various types of organizations and management situations.

The reflection upon all these publications of IP-applications may include attention to (i) the content of the cases, i.e. the type of organization addressed by IP, (ii) the scope of the case-presentation, i.e. whether a full and comprehensive IP application is accounted for or only some part(s) of it, (iii) the type of evaluation criteria employed for IP application, if any, and subsequently, (iv) whether any lessons can be learned from the derivation of implications from the results obtained, to direct further development of the type of operations addressed and Interactive Planning.

The following conclusions were drawn from a systematic analysis of the above-listed IP case studies. The recent DuPont study (Leemann 2002) addresses operations of a kind

similar to those addressed in the present case study, while the other cases typically address development of non-profit organizations or of marketing, communication and product development efforts. When it comes to the scope of the case study presentations, the typical approach employed by the above-identified cases is to present only some parts of the conducted IP-application—e.g. an idealized design or a scenario. Further, these presentations are *illustrations* only of IP-applications rather than attempts at systematic and empirical evaluation, and as such provide few justified lessons or ideas about IP strengths or limitations. In contrast, the present study attempts to provide a systematic, empirical and critical evaluation. The identified DuPont case is instrumental for the present purpose as some of its parts may be utilized for comparison to identify any similarities, hence invariance, between the two cases, as is done here.

### *Key Criticism of Interactive Planning*

Ackoff's Interactive Planning has attracted some criticism, mainly from a Marxist-oriented sociological point of view. Jackson (2000, pp. 244–246) summarizes this critique in two key issues. One is that IP is not capable of guiding identification and challenging *social power-structures* that may be inherent in a managerial situation; such power structures influence the planning and execution of the IP-process and thus its result. In this matter, a particular concern is the inequality of the political power within the group of stakeholders, the so-called '*irresolvable conflicts*'. The postulate is that such managerial situations make it impossible to agree upon a consensus-based ideal of a social system.

Secondly, and related to the above, is the fact that not all stakeholders will always be *allowed* to participate in the execution of an IP-process, which is a key feature of this both for its validity and its ethical concerns.

Ackoff responded to this criticism (Ackoff 1975, 1982; Jackson 2000, p. 246) by declaring that his own approximately 300 IP projects had never encountered a situation where power-conflicts could not be addressed successfully. "*In general, people disagree less about ideals than about short-range goals and the means for obtaining them.*" (Ackoff 1981, p. 118) Regarding the lack of participation of key stakeholders, Ackoff recognizes the problem from his own experience and has offered a solution. Those stakeholders who are not, for any reason, granted full participation in the project may initially be affiliated to the project as consultants, and thereafter, as work progresses, be recognized as full members of the project and its decision-making (Ackoff 1981, p. 118). A problem with such responses are that they cannot be easily verified and tend to be self-serving.

This criticism was utilized in the evaluation of the presented IP application. More specifically, it was operationalized in terms of two additional evaluation criteria, as follows:

IP Postulate 14: *IP cannot guide successful resolution of social power-structures.*

The procedures of IP do not provide any guidance for the identification and resolution of potential power structures inherent in the addressed managerial situation.

IP Postulate 15: *IP cannot guide the inclusion of representatives from all stakeholder groups.*

The procedures of IP do not provide any guidance for the identification of all relevant stakeholders of the addressed managerial situation and for securing their inclusion in the execution of the IP-process.

## The Transformed Organization

The organization that was subjected to deliberate transformation, as guided by Ackoff's Interactive Planning, is described in this section, including its structure, processes, objectives, resources and a brief history. The section also includes the challenges met by the organization and the approach designed to deal with them, which stands as a reference point for selecting the procedure for executing the transformation, i.e. Interactive Planning as investigated here.

### Structural Overview of the NorPhar

The transformed organization accounted for here was a Medical Department within the Nordic Branch of a major multinational pharmaceutical company. This Nordic Branch (hereafter NorPhar) was responsible for marketing and sales of pharmaceutical products in Denmark, Finland, Norway, and Sweden.

### *Business Rationale*

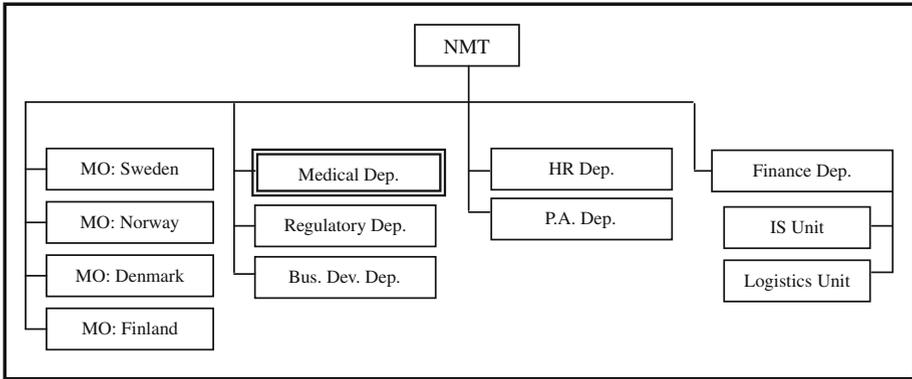
Research, development and production of pharmaceutical products were all conducted by the company's operations outside the Nordic Region. Once the products were ready for sale, they were introduced into the four Nordic marketplaces. The product portfolio included research-based, highly innovative, specialized ethical drugs.

### *Organizational Structure*

NorPhar had approximately 250 employees distributed over a number of organizational units within the four markets. The organizational structure included four Market Organizations, one for each country. Further, there were a number of shared-services units such as: the Medical Department, Regulatory Department, Human Resources Department, Public Affairs Department, Business Development Department, and Financial Department which also included the Information Systems Unit and Logistics Unit. The whole organization was managed by the Nordic Management Team, comprising the Directors from each Department and Market Organization, and led by the Managing Director who in turn reported to the European President. Each Market Organization was led by a Country Manager and included a number of Business Units, each led by a Business Unit Manager, and made up of one or more Market Assistants and Product Managers, and one or more Field Sales Managers, where the latter managed a number of Product Specialists, also referred to as sales representatives. Figure 2 shows an overview of the organizational structure of NorPhar.

### *Key Operations*

The key operations included marketing and sales of pharmaceuticals and were executed by the four Market Organizations. These operations mainly targeted relevant physicians and local decision-makers, such as committees formulating lists of recommended pharmaceuticals and thus influencing the physicians' drug prescription behavior.



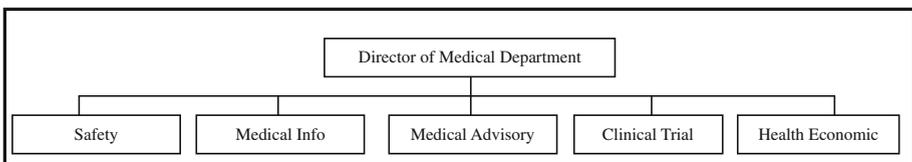
**Fig. 2** Illustrates an overview of the organizational structure of the NorPhar. The organization was led by the Nordic Management Team (NMT), managed by the Managing Director. There were four Market organizations (MO), one for each market: Sweden, Norway, Denmark, and Finland. Shared services were constituted by the Medical Department, Regulatory Department, Business Development Department, HR Department, Public Affairs Department, and the Finance Department which also managed the IS Unit and the Logistics Unit. The Medical Department was subjected here to an application Interactive Planning

### Operations of the Medical Department

The Medical Department, the subject of transformation in this investigation, was structured into five medical units, namely: the Safety Unit, the Medical Information Unit, the Medical Advisory Unit, the Clinical Trial Unit, and the Health Economic Unit—see Fig. 3 for an overview.

The Safety Unit was made up of Safety Officers with sole responsibility for management and execution of the so-called Adverse-Event-Reporting process. This process typically started when an external customer (physician or patient) reported a perceived adverse event, probably caused by a pharmaceutical promoted by the NorPhar. These events were investigated by the Safety Officers and reported to the Headquarters as well as to the local authorities in the five markets.

The Medical Information Unit was constituted by Medical Information Officers (MIO) who handled the first phases of the Medical-Information-&-Advisory process. This implied responding to medical questions put by the customers (external: physicians and patients, internal: sales representatives). However, if the MIO could not answer the question received, he or she passed it on to one of the Medical Advisors within the Medical Advisory Unit, who had a more extensive knowledge of specific medical areas and could normally handle the enquiry successfully.



**Fig. 3** Illustrates a functional overview of the Medical Department subjected to development; it includes a Safety Unit, a Medical Information Unit, a Medical Advisory Unit, and Clinical trial Unit, and a Health Economic Unit

The Medical Advisors within the Medical Advisory Unit were also involved in the Clinical-Trial process. This was the optional so-called phase-four study of pharmaceuticals, typically executed for promotional reasons or to collect long-term drug effect data. Medical Advisors, together with the Business Unit Managers from the Market Organizations, were responsible for designing the clinical trials (defining which variables should be investigated and how), while the Clinical Managers and Clinical Monitors within the Clinical Trial Unit were responsible for operational execution of the clinical trials, including collecting data and first-hand analysis. The analyzed data was then passed to the Medical Advisors who made the final reports and derived conclusions, which were then reported to the Market Organizations. The clinical trial process typically involved extensive collaboration with physicians participating in the study.

Medical Advisors were also involved in the Marketing process, as managed by the various Business Units within the four Market Organizations. The Medical Advisors' responsibility here was to secure the medical validity of the marketing material. Further, Medical Advisors were used as medical experts for Review-of-Business-Strategies for the various products being sold. Finally, Medical Advisors, together with the Medical Director, were responsible for the Formulation-of-Medical-Policies governing the NorPhar's operations.

The Health Economic Unit was made up of Health Economic Officers who were responsible for generating relevant health-economic data and arguments as an input to the pricing negotiations conducted between the NorPhar and the local pricing authorities.

Finally, the Medical Director was responsible for the management control of the Medical Department, including planning, budgeting, monitoring and controlling, of the department's operations. This included coordinating of the units within the Department, and also coordinating the Department and other organizational units within the corporation.

### The History and Challenges of the NorPhar

NorPhar, as a Nordic affiliate of an American company, was introduced into the Nordic market at the end of the 1980s. From this introduction to the start of this investigation, NorPhar manifested an average annual revenue growth of approximately 15%, which was significantly above the annual market growth. This rapid growth of revenues was associated with limited development of the organization and its operations. Ad hoc based growth of the Medical Department staffing created a need for further improvement in the quality of its operations which had lagged behind.

In order to achieve a continued growth, NorPhar's senior management formulated the vision of becoming the most customer-oriented pharmaceutical company in the Nordic region. This was the key response formulated to manage the aspired business objectives.

The entire organization of NorPhar underwent a comprehensive developmental program. Within this the Medical Department identified the need to redesign its current operations in order to (a) establish flawless coordination with the marketing and sales units and their operations, (b) establish a higher level of customer-orientation in its operations, and (c) increase both the overall quality and efficiency of all the operations conducted at the Medical Department.

A key challenge of this developmental need was how to transform this organizational entity, as there was no best practice of customer-centric operations available on the market, which could be studied and then copied into the NorPhar. Therefore, the company and its Medical Department literally needed to invent their future operations.

## Results

This section reports the results obtained from the evaluation of Interactive Planning. The results of the *procedural perspective* are presented first followed by the *substantive perspective*, and an identification of the *relations* between the two. In this, the actual evaluation of whether or not a postulate has been fulfilled is often accompanied by suggestions for improvements to Interactive Planning as such. This is then followed by a short reflection on the relation between the results generated by the present case and another similar case, the DuPont application of IP, with the aim of identifying any potential similarities. This section ends with some *self-critical reflections* upon this study.

### Evaluation of the Utilization of the Interactive Planning Process

The following text provides a summary of the IP assessment in terms of each evaluation criterion; Table 1 presents a summary of the outcome.

(1) *Organizational Self-Development* was assessed *positively* as the establishment of organizational procedures and sub-organization was successful as specified by IP and gave rise to continuous self-development.

(2) *Ideal-Seeking Procedure* was assessed *positively* as the established procedures for self-development of the Medical Department did generate visionary and ideal notions for its future, 3 years ahead. The key issue identified in this process was how to *validate the content* generated by the ideal-seeking procedure, i.e. the actual formulated ideal. IP's answer to this is that a *consensus* among the involved stakeholders provides validity status for a proposal. However, the issue identified was: what if all stakeholders hold a consensus about an ideal, but the agreed ideal lacks feasibility in the actual operations, for example, if the stakeholders' understanding of the competitive market-place at hand is not adequate? IP does not give any explicit answer to this. However, more implicitly, the philosophical foundations of IP—a particular version of pragmatism: Teleological Experimentalism—suggests an experimental approach: to try out and learn!

(3) *Learn and Adapt* was assessed *positively* in so far as a learning-procedure was established through the Management System commented below, which continuously monitored performance and detected any divergence from the plans, which were then subject to modifications and changes. However, the observation was made that such learning and adaptation were easily limited to the pre-defined goals and ideals, and thus did not promote learning and adaptation in regard to issues outside the pre-defined ideals. This may be hazardous if the proposal of such pre-defined content lacks relevance for the emerging conditions, whether they are external or internal. A practical solution may be to impose a regular activity of Ideal reformulation, thereby challenging the current ideals.

(4) *Participation* of the stakeholders became a key challenge in the employment of IP and hence the development of the Medical Department; therefore the assessment made became *negative*. IP prescribes that all stakeholders should be involved in the formulation of the ideal to be striven after. If a stakeholder is understood to be someone or something—e.g. a person or an institution—that holds a stake, or an interest, in the organization in the broad sense, the immediate question is then what is really meant by a stake or an interest, and where should the boundary be set? There were various types of stakeholders in the present case, including the employees of the department, the departments at the same horizontal level in the company and the management team vertically above the department. There were also various customers and consumers served by the department, both internal (e.g. Product Managers, Product Specialists) and external (e.g. authorities, physicians,

patients and relatives). The whole developmental effort suffered from a lack of participation of the stakeholders, in two ways. Firstly, the absence of several internal stakeholders, e.g. the internal customers mentioned, and also members of the senior management team of the company. Representatives from departments at the same horizontal level were not represented either. Secondly, no external stakeholders were represented; thus only the members of the Medical Department participated in the IP process and the development of the operations. Every communicational effort was made to inform and invite the internal stakeholders, yet there was a lack of managerial prioritization to fulfill this participation. In the case of the inclusion of external stakeholders, various regulatory matters made their inclusion complicated in terms of who could be included and what subject matter treated. This resulted in the Director of the Medical Department deciding that inclusion of external stakeholders would be attempted only at a later stage, something that in practice did not occur. In this context, one may suggest that

(5) *Continuity* was judged *positively* as the execution of the IP-process included regular organizational development work, with a bi-weekly progress review. After a year of developmental work, an additional review activity was introduced where the formulated ideals were reviewed fundamentally.

(6) *Holism* includes the principles of coordination and of integration, i.e. that the departments or units hierarchically immediately above and below the studied department ought to participate in the IP-process of the Medical Department. This overlaps the participation postulate as discussed above, as it specifies the type of stakeholders needing to participate. As mentioned above, no other units or departments within the company were represented in the executed IP-process; therefore a *negative* outcome for this IP-postulate was logged.

(7) *Current and Uninterrupted Future* was assessed *positively* after extensive descriptions of the department's current situation and of its obstacles, problems and scenarios for the future assuming that no intervention was conducted—all as suggested by IP.

(8) *Ideal-Organization* was also judged *positively*, however it became a catalyst for the emergence of a conflict between two professions, as described here. The participants were asked to conceive and propose ideal situations, with the only limitations being those suggested by IP. In several senses this ideal-focused approach to design was regarded as positive by the participants, in that they experienced that suddenly someone was seriously asking for their personal opinions with regard to their profession—something they did not experience often. This, in consequence, gave rise to an experience of empowerment, i.e. that each person could influence their daily work in accordance with their ideals. Even though the ideal-focused approach was experienced as positive with regard to its procedure, or way of working with the design, it was not perceived as positive with regard to the decision as to content of the ideal design. This was particularly manifested in the Clinical Trial Unit, where two different roles of employees attempted to find a consensus of the ideal way of conducting clinical trials. The Clinical Managers considered that they should be responsible for the whole clinical trial process while Medical Advisors should be used as advisors in the initial phase of the design of a trial and later in the final phase when conclusions were derived. The Medical Advisors, on the other hand, held the view that they should be responsible for the whole trial, and that Clinical Managers should be used for the operational work of setting-up a study and for gathering of data. Even though various attempts were made to find a solution to this, and the final decision became a policy document stipulating the second approach, this conflict for power position resulted in employees leaving the department for other jobs outside the company, which also created

operational disturbances in the department; in other words, the conflict was not solved while maintaining the system constituents!

(9) *Management System* was judged *positively*, as an explicit procedure was established for managing the whole IP-process, with dedicated roles and staff members and their activities. This proved particularly useful in the implementation phase, where the objectives and their related activities were monitored during the execution and follow-up, feeding the processes of evaluation, learning and then adaptation. A challenge was however identified when new circumstances, e.g. newly imposed regulatory requirements, were identified and a decision was called for with regard to their potential impact on the plans designed and being pursued. The question was: how to judge the impact of potential new conditions?—i.e. should the defined long-term goals and ideals be modified? Another lesson learned was the need for varying frequency of the Management System follow-ups of the Operating System. Depending on the capabilities of the staff members and the type of implementation tasks assigned to them as well as the dynamics of the external environment, the Management System may need to be followed up more frequently and follow the implementation work more closely, or vice versa.

(10) *Organizational Structure* was judged *negatively*, as it was never established strictly in accordance with the IP-directive. The latter stipulates that the customer-related units, the output units and the input units be separated from each other. The Medical Department was structured mainly according to its outputs, e.g. Adverse Event reports and Clinical Trials, for two main reasons. One was that the Department was regarded as too small in terms of number of its employees, i.e. approx. 20, to justify the stipulated three-dimensional organization as a meaningful and cost-effective operational structure. Secondly, the department was part of a Nordic company, which in turn was part of a global company with general global policies for organizational structure; these global policies did not promote the structuring approach stipulated by IP; this exemplified a challenge for the pursuit of Interactive Planning.

(11 & 12) *Activity Plan and Resource Plan* were both judged *positively* and shown to be a powerful input to the implementation phase. Once the desired situation and the current situation had been explicitly and consistently described, it became an analytical task to derive the activities and resources needed to move the organization from its current state to its future one. Examples of activities were the establishment of a new organizational role, requiring a new staff member, and procurement of a new information system. A key challenge in the planning phase was the prioritization of the activities and resources. At the end, this was often reduced to a cost-benefit analysis, prioritizing those activities and resources that provided the greatest benefit and lowest costs.

(13) *Controlled Implementation* was judged *positively*. However, the following experience was generated. An ideal design easily promotes formulation of new types of solutions which has typically not been realized before, within or outside the organization, implying that the proposed solutions are highly hypothetical and lack empirical experience. Implementation of such solutions can easily be risky—i.e. give rise to unanticipated and unwanted consequences—and is resource-consuming, as it is not always feasible to re-use previous solutions. To cope with the management of the above-mentioned danger, Ackoff (1981, p. 237) proposes experimentation: “...if an organization’s ability to improve its performance continuously is to be developed, the implementation of plans should be undertaken experimentally. Experimentation is controlled experience; it enables us to learn much more rapidly and effectively than we can from ordinary experience and trial and error.” However, the experience is that such experimentation is also highly

resource-consuming. At the end, the implementation of ideals can easily become a matter of a cost-benefit analysis.

(14) *Lack of Conflict Resolution* facilitation capability offered by IP was judged as *positive*—which in this case is not desirable; it means that in the present case, and contrary to Ackoff's position, IP was unable to contribute to the resolution of an organizational conflict. As mentioned above, the emerged conflict between the two professional roles, the Medical Advisors and the Clinical Managers, in the design of the ideal clinical trial process, could not be resolved while maintaining these individuals within the Department; this led instead to employee deflection. No conceptual support was found in the IP-literature with regard to handling such conflicts. The only IP-suggestion identified was to focus on ideals even further away in time: "*In general, people disagree less about ideals than about short-range goals and means for obtaining them.*" (Ackoff 1981, p. 118). However, even though the organizational process conducted was ideal-oriented it gave rise to some crucial and seemingly irresolvable conflicts between two groups of staff members.

(15) *Lack of Stakeholder Participation* facilitation offered by IP was also judged *positively*—which in this case is not desirable. As stated in the discussion, IP's directive to include all stakeholders is intuitively reasonable yet was conceptually unclear and operationally not feasible in this case. Conceptually regarded, there is a need to support the definition of who or what is a stakeholder, and why. Practically regarded, the number of stakeholders may easily become unmanageably large, challenging both the resources needed to include all and also the lead-time needed to execute the IP-process.

In summary, three key challenges were experienced in the actual use of IP: (i) the lack of stakeholder participation, (ii) the challenge of validation of the content of the ideals conceived, and (iii) the difficulty in resolving conflicts between people. In the present case, these three challenges seem to be interrelated, as the lack of some of the stakeholders influenced the conception of the ideal, while the content of this led to the emergence of a conflict; yet there is no way to conclude whether the outcome would have been different if the participation had been secured. Table 1 presents an overview of the results presented here.

## Reflections Upon the Content of the Developed Organization

So far, this discussion has focused on the IP-process itself and its experiences in relation to pre-defined criteria. This section presents reflections upon the actual content dealt with by the IP-process, i.e. the Medical Department; and can thus be seen as the substantive analysis. The outcome of this has two functions: one is to enable the identification of potential relationships between the actual utilization of the IP-process and the actual result of such a utilization; the other is to enable the identification of any potential invariance when relating this case study to another similar IP case study, which would suggest that utilization of IP contributes to certain kinds of results.

- (a) *Quality*: The first characteristic was the improvement of the quality of the operations executed within the Medical Department. This was achieved by establishing several Standard Operating Procedures stipulating execution of processes in a certain manner. Together with the establishment of a dedicated quality monitoring process and role, the effect was that operations were conducted in a more standardized fashion, and that deviations from the standards could be identified and subjected to improvement. An example of this was the Clinical Trial process which, prior to the IP initiative, was managed in accordance with the preferences of the individual Clinical Monitor, while the new operations imposed a commonly-agreed process.

- (b) *Performance*: A second characteristic was the increased performance of the operations executed by the Medical Department. After 2 years of developmental work, the Department executed more clinical trials than ever before (up approx. 50%, from 8 to 16 per year); a similar pattern was obtained with regard to Adverse Event Reports and Medical Information delivery (from 300 to 700 per year)—all this while maintaining the same resources. At the same time, these operations managed to conduct extraordinary working duties in addition to their daily activities, namely the developmental activities themselves.
- (c) *Leadership*: Thirdly, the Head of the Department, the Medical Director, experienced a challenge regarding the leadership approach needed. This became a consequence of the IP-postulate stipulating the participation of all stakeholders and led to a decentralization of the formulation of relevant objectives and the activities and resources needed to achieve these objectives. Experience showed that the staff members had two different expectations in this regard: some were very happy about receiving the opportunity to influence their work themselves, while the rest were not, as they expected the boss to define the goals, propose activities to be executed, and give instructions, which they would then obey. This put an extra burden and stress on the Head of the Department, as different types of leadership were needed for the two different profiles of employees. IP does not provide any explicit conceptual support for leadership of heterogeneous groups, rather the opposite; it implicitly assumes a homogenous and decentralized leadership approach which proved to be less successful in the present case.
- (d) *Customer-orientation*: Recalling that one of the key strategic objectives of the whole NorPhar was to transform its operations from product-orientated mode into a customer-orientated mode, and that this aspiration included the whole company, the development of the Medical Department as such into customer-orientation became a challenge. As stated above, no external customers were actively involved in the execution of the IP-process; and they were thus excluded from the formulation of the ideal. On the other hand, a company-internal survey was conducted with regard to the current satisfaction level and the desired services that internal customers perceived and wanted from the Medical Department, e.g. Product Specialists and Product Managers. As a consequence of this some new services were developed and launched aimed at the internal customers, for example training in the adverse events reporting procedure.

However, the elaborated identification of the current and the desired situations, together with other ongoing initiatives within NorPhar, unlocked a set of issues and therefore opportunities for ways in which the Medical Department could move towards customer-orientation.

In summary, the execution of the IP-process generated new operations within the Department resulting in (a) increased quality in terms of monitored operational execution following pre-defined standards, and (b) increased performance in terms of more work being conducted with the same resources. However, on the other hand, the established operations within the Department also manifested (c) unsuccessful leadership and (d) limited customer-orientation of the new operations.

#### Potential Relations Between the IP-Process and its Outcome

An elaboration of the relation between the outcome of the procedural and the substantive analysis may provide the following insights and suggestions.

Starting with the above-identified issue of how to *validate* content of a proposed ideal, the *evolutionary* character of IP as experienced here suggests that there are only two means of validation of an ideal within IP. One is the mentioned *inter-subjectivity* and *consensus* among the stakeholders with regard to a proposal, and the other is the experimental *feasibility* of the ideal proposed. This is well in accordance with the theoretical foundation of IP.

Secondly, the lack of participation of key external stakeholders in the conducted IP-process, and thus overrepresentation of the internal stakeholders, may explain why reported *quality improvements* and *performance improvements* were generated, as these clearly represent an internal focus, i.e. do what is done yet better! On the other hand, the partial success of development towards customer-orientation may be explained by the lack of key external stakeholders participating in the execution of the IP-process, i.e. customers and consumers of the outputs generated by the department's operation. The lesson derived here is that customers and consumers of an organization's outputs should be involved in the IP-process, as is indeed stipulated by IP, while no suggestions as to how to secure such participation are provided.

#### Potential Inter-Case Similarities

The purpose of an inter-case identification here is to identify common patterns, i.e. invariance, across two or more similar case studies of IP utilization. In the above-mentioned literature review of the IP applications, only one case was found to be similar to the one presented here: that of Safety-Health-Environment organization transformation at the DuPont Corporation (Leemann 2002). The similarities can be perceived in the type of the two organizations—i.e. both are knowledge-intensive supporting functions, with imposed existence due to regulations—and the type of transformation: total organizational development in order to improve the overall quality of operations.

Considering the reported outcome of the IP-process conducted in the DuPont case, two characteristics seem to emerge in both cases of IP utilization. These are generated *operational efficiency* and emphasis on *customer*.

Leemann (2002, p. 106) reports that: “*Overall costs for doing SHE [Safety, Health-Environment] work were substantially reduced...*” and that performance increased in some places by up to 50%, as a result of more efficient working procedures realized, and also careful investments. Secondly, Leemann reports also that some new value-adding services were launched for key customers—e.g. a “*...knowledge database of experiences in doing SHE...*” (Leemann 2002, p. 107)—in order to contribute to the differentiation from the competitors. This was a result of the customers' involvement in the conduct of the IP-process.

As with Leemann's case study, the case presented here also shows a significant increase in operational performance. However, customer-orientation was realized only in relation to the internal customers and not in reference to the external customers—as discussed above.

#### Some Critical Reflections Upon the Study

Limitations and shortcomings are inevitable in all research; these may be identified, at least to some extent, with the help of a critical reflection upon the research process. In this case four potential key sources of shortcomings were identified.

The first relates to the fact that the utilization of IP was guided by a set of ‘IP-postulates’, summarizing the key proposals of the Interactive Planning methodology. If the formulation of these IP-postulates was inadequate, i.e. something was postulated that should not have been postulated or vice versa, then the rest of the case study would be flawed. An attempt was made to guard against this problem, when an external expert, not involved in this case, was asked to validate this formulation of IP-postulates. This expert was well familiar with the IP-process and provided a positive answer.

A second and related issue is the actual interpretation of the IP-postulates. The participants of the IP-process execution had to interpret the meaning of these, and if their interpretation differed from the intended, the actual organizational development would be flawed. To balance this problem, dedicated training sessions were given to the participants regarding the IP, including both its theoretical background and operational features. Secondly, organizational development consultants involved in the formulation of the IP-postulates were also involved in the development of the organization, thereby contributing to a reduction of misinterpretation.

A third and also closely-related shortcoming may emerge from the conducted process of measurement and evaluation of the IP-postulates. This measurement and evaluation was conducted by the project team and was therefore inevitably subjected to individual and inter-subjective biases and projections. On the other hand, the irregular pattern obtained in the results of the IP evaluation—i.e. some postulates were judged positively while others were not—suggests that there was no systematic projection in the evaluation.

Yet another shortcoming may be caused by the capabilities and experiences of the people involved in the execution of the IP-process, particularly the project managers and facilitators. It is reasonable to assume that facilitators with more extensive experience of IP are more likely to produce a successful IP utilization than when the situation is the opposite. In the present case, the leading facilitator and project manager had extensive experience of Interactive Planning.

Finally, a limitation of this evaluation is that it is based upon the one case study conducted here and its relation to another case study conducted and documented elsewhere. Even though there emerged clear invariances between the two cases, these results should still be regarded as indicative and suggestive rather than conclusive; additional case studies are needed to further advance our understanding of the properties inherent in Ackoff’s Interactive Planning.

## Summary and Conclusions

The case study presented here was aimed at performing a systematic and critical evaluation of R.L. Ackoff’s methodology for organizational development: *Interactive Planning*. In order to obtain such a qualified assessment, IP was applied to a real-life situation regarding the guidance of the development of a Medical Department at a pharmaceutical company. This application was monitored and evaluated in an Action Research mode.

### Summary of Results

The results revealed that most of the propositions provided by IP were actually realized during its application process, and also that the targeted organization did develop successfully, chiefly in terms of its operational efficiency and quality. However, some of the IP-proposals could not be realized; these included securing the participation of all

stakeholders in the process of IP execution and successfully managing power structures inherent in the social setting addressed. These two latter findings conform well to the previously delivered critique of IP.

A number of observations were also made. One observation was that IP implicitly promotes organizational leadership and a culture that implies decentralization of decision-making, assuming that this is good for all employees in the organization. In the present case this was shown to be a challenge, as one part of the organization found a decentralized approach to be preferable while the other part did not.

A second observation was that while IP promoted development of an ideal organization, it also opens for risks and high costs, as it is typically costly or impossible to validate an ideal design (unless low risk and low cost are part of the ideal).

### Implications for Practitioners

All these results may imply the following recommendations for practitioners of organizational development. When using Interactive Planning the practitioner may find conceptual support for developing an organization that will most likely increase the quality and performance of its operations and also its customer-orientation—provided that its customers are included in the execution of the IP-process.

The practitioner needs to be observant, however, with regard to securing full participation of all key stakeholders, including customers, as well as being able to manage conflicts and the underlying power-structures inherent in most social situations. Further, ideal designs may require extensive risk and cost management. Yet another issue to be addressed in IP-guided organizational development is the decentralized leadership that IP-promotes. Depending on the situation at hand, this mode of leadership may not always be the relevant one.

### Implications for Researchers

The results summarized above suggest the following agenda for researchers into methods of organizational development. IP would benefit from further development or complementary contributions with regard to securing stakeholder participation, managing conflict resolution, explicit and contingent leadership and culture management, as well as deliberate risk and financial management of ideal implementation.

### The Contribution

The study presented here is a systematically planned, executed, monitored and critically evaluated application of the organization development methodology *Interactive Planning*. The study has resulted in a set of recommendations for both practitioners and researchers. In this regard it is understood here that this contribution is novel as previous IP-applications, identified here, typically address only some part(s) of an organization—e.g. product, customer—rather than the whole organization, and they do not present a systematic evaluation, including learning and recommendations.

Finally, the overall experience is that IP is a powerful conceptual tool for guiding organizational development. It is a comprehensive methodology for the development of an organization as a whole and provides a unique approach to systematic development of ideal-oriented organizations.

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