

Evaluating and improving quality of administration

White Paper by Dr Ilia Bider of IbisSoft (www.ibissoft.se)

Abstract. This paper is aimed at creating guidelines for projects that concern quality of administrative work in modern organizations. With introduction of computers in the office, administrative functions have got a new generation of tools for information processing and communication. However, in spite of great efficiency of these tools, the expectation that their introduction will automatically lead to improvement of the administrative quality has not been realized. The administrative quality depends on the interplay of people (more exactly their administrative competence), rules (operational instructions), and tools. To obtain better administrative quality all these components need to be synchronized. Changing one of them, e.g. tools, without adjusting the others, e.g., rules or competences, may have little, or even negative effect on the administrative quality. The paper discusses two ways of improving administrative quality, gradual and “disruptive”. The first one is based on achieving synchronization after each small step. The second one consists of making a “jump” in the three-dimensional space keeping all three components synchronized after landing.

Motivation

This paper has been written to summarize the author’s experience, both positive and negative, in order to answer a simple question: “How to plan and complete projects that concern quality of administrative work?” To answer this question, I needed working definitions of administration and its quality, as well as an idea of how this quality can be measured and what factors affect it. The definitions presented in this paper may, or may not be in accordance to intuition of other people who work with administrative quality in theory and/or practice. Despite of this, I feel that they constitutes a system that allows to discuss problems of administrative quality and plan projects aimed at improving it.

My greatest concern was to find ways of improving administrative quality stepwise, without a “great leap forward” in one step. The latter is easier to propose, but it is extremely difficult (often impossible) to implement. A simple question arises: “If there is a feeling that a great leap is too difficult to implement, is there something else to suggest that may give practical results?” The author hopes that this paper gives a positive answer to the question. It, however, does not exclude feasibility of making a “great leap” which is also discussed in the paper.

Introduction

Introduction of computers in all spheres of life substantially changed the ways of how people communicate and exchange information. Administration deals solely with gathering, processing and communicating information. Therefore, introduction of computers in the office affected administration more than any other spheres of work. At the first glance, computers should have automatically improved the administrative quality, as they provide us with fast communication channels, and efficient tools for storing, retrieving, and processing information. However, this impression is not

always true. Our clogged mailboxes is a typical example of things that may go wrong when adapting new technology.

Administrative quality depends on the interplay between people, rules (operational instructions), and tools used in the administrative work. Changing one of these components without adjusting the other two may result in no or little effect, or even a negative effect on the administrative quality. Very often, introduction of computerized tools is not accompanied with a substantial revision of operational instructions (rules). The old instructions become obsolete and counterproductive, the new ones are created based on the try-and-error method. As a result, the “ad-hoc” operational instructions may not take into account all possibilities built-in the new tools, or all consequences of their use. As an example of consequences, we can point to the following scenario. Sending the same Word document as an email attachment to a dozen people creates a dozen documents, each of which can be changed and sent further to many other people. Not taking this into account may have serious negative consequences.

Note, that in this paper, we understand rules not as something formal given by a higher authority, like God, government, big boss etc., but as a mutually accepted agreement on how people coordinate their efforts when working towards a common goal. It does not exclude, of course, that this agreement should not take into account the existing legal regulations (e.g., Sarbanes Oxley).

The goal of this paper is to draft guidelines of how administrative quality can be evaluated and improved. We start with an explanation of what administration is, and what administrative quality may mean, followed by a discussion of parameters that can be used for evaluating administrative quality. After that, we discuss factors that influence the administrative quality, and ways of improving it. Two strategies are discussed gradual and “disruptive” (innovative). Both require serious attention on synchronization between tools, rules, and administrative competences of people. The latter encompasses both, technical competence of using the tools as such, and operational competence of using the tools in various work-related situations.

Administration in the nutshell

The key to understanding of what administration means lies in the following picture:

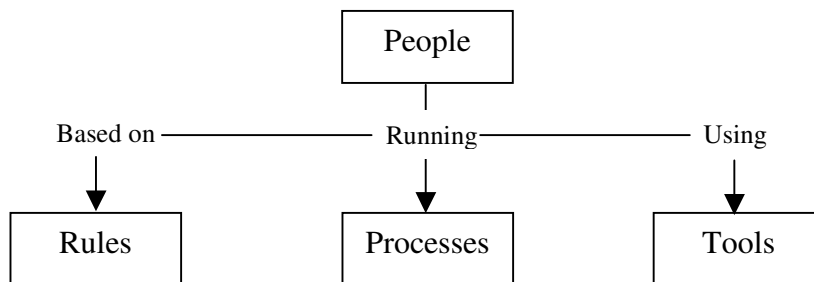


Fig. 1: Functioning of organization from the process perspective

It represents functioning of an organization as “*People* running *processes* based on *rules* using *tools*”

A **process** (aka business process) is a set of activities (operations, tasks) aimed at creating a desirable outcome. Typical examples of processes are *sales* (convincing a

potential customer to buy one of our product/services), *service delivery* (e.g., fixing a customer problem), *purchasing* (choosing, buying and paying for things we need), *product development*, etc.

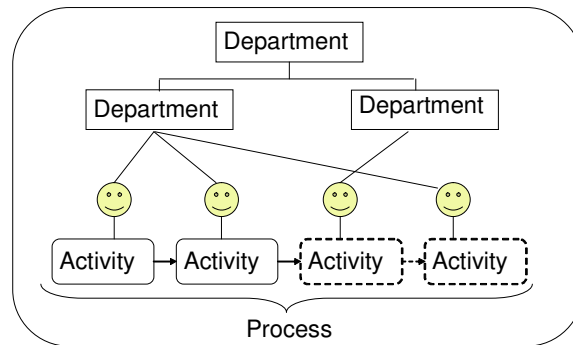


Fig. 2: Processes connect people

Some activities completed in the frame of a process belong to the category of doing something in *the real world*, like *going to* a customer site and *fixing* some technical problem during *service delivery*. Others, like *getting instructions* on where to go, and *reporting back* on amount of time spent for fixing the problem, belong to *administration*. They are needed to ensure the processes producing desirable outcomes. For example, *back reporting* is needed for the finance department being able to send an invoice and ultimately get paid.

The goal of administrative activities is to ensure smooth running of the organization's processes by coordinating people participating in the processes, and providing them with information needed for completing their assignments. Administration deals with gathering, processing, and communicating information. Practically, everybody working for an organization participate in the administrative activities. Even those who do not hold any managerial position participate when receiving written or oral instructions and reporting back on the outcome of their work.

The administration is regulated by *rules* (operational instructions, or procedures) that prescribe or recommend who should be doing what and in what order in each type of the processes. Rules can exist in a written form or as a tradition. They can even be incorporated in computerized tools.

To carry out administrative activities people employ *tools*. Typical tools here are *communication channels*, e.g. mail, email, telephone, chats, and *information storage means*, e.g., paper folders, shelves, boxes, computer servers, information systems etc.

Evaluating administrative quality

As the ultimate goal of administration is ensuring smooth running of the organization's processes, the quality of administration should be measured by how smooth the processes actually run. Smooth run means with steady pace and without unnecessary delays and stops. When evaluating the smoothness, the following type of criteria should be used:

- The length of the time gaps between “do-it in the real world” activities that cannot be attributed to external factors. The smaller are the gaps the better is the administrative quality.
- Chances that a process stops running and becomes forgotten. The lesser are chances the better is administrative quality.

The first criterion above implies that administrative quality requires efficiency. The time consumed by administrative activities should be kept to the minimum, otherwise the gaps between do-it in the real world activities may become too lengthy:

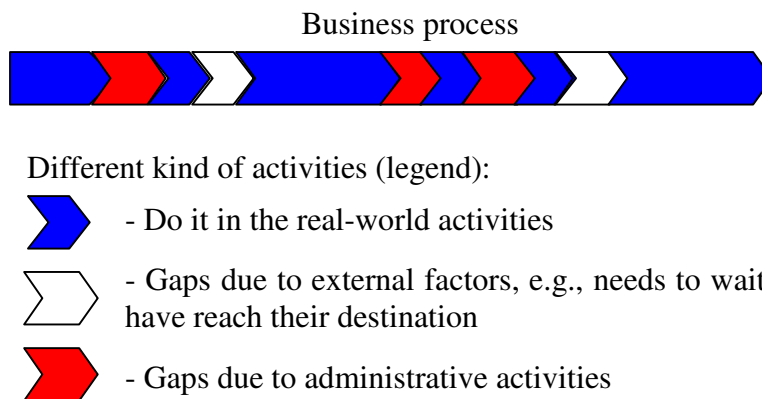


Fig. 3: Gaps in process runs

Roughly speaking, the administrative quality can be evaluated based on three parameters:

- Quality and efficiency of communication. Quality ensures that all information needed by recipient is transferred to him/her correctly. Efficiency ensures that time required for communication is kept to minimum. This time, besides the time for technical information transfer, encompasses time required for finding all information that needs to be transferred and time required to comprehend the information received.
- Quality and efficiency of information storage and retrieval. Quality ensures that all relevant information related to a process is stored and can be retrieved. Efficiency ensures reasonable time required for storing, and retrieving the information.
- Quality and efficiency of control over processes. Quality ensures that any process that needs attention gets it. For example, if there is an urgent task assigned to a person who cannot complete it, it should be reassigned to somebody else. Efficiency ensures that the needs for attention are discovered and dealt with promptly.

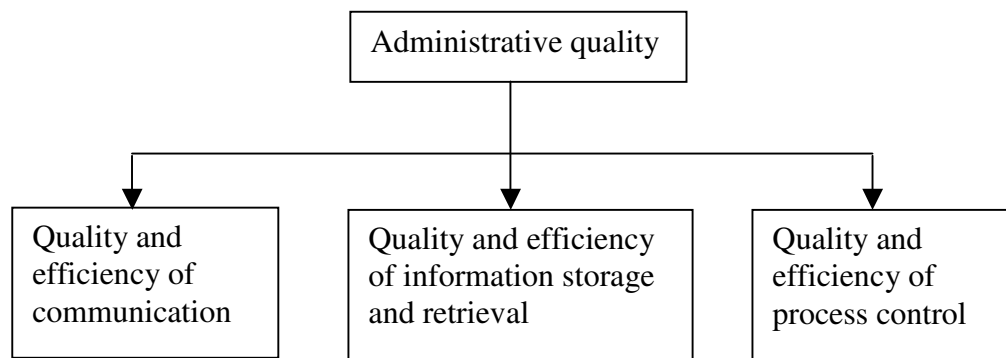


Fig. 4: Evaluating administrative quality

The parameters above are not independent; on the contrary, they are intrinsically interconnected. For example, poor quality and/or efficiency of communication may result in that information relevant to a process is not being promptly sent for storage. Without efficiency and high quality of information storage and retrieval it is impossible to achieve quality and efficiency of communication. It will take too much time to find information that needs to be sent, and/or the information sent may be incomplete, erroneous, or irrelevant. Control over processes can be obtained only if the information relevant to processes is communicated, stored, and made available to those who are responsible for solving problems.

Gradual improvement of administrative quality

There are three components that participate in running processes: people, rules and tools (see Fig.1). Understanding the reasons for insufficient quality requires analysis of each of these components, more specifically:

- *People*, more exactly their *administrative competence*. How well do they know, and understand the rules? Do they always follow them? Are they proficient in using the tools?
- *Rules*. Do rules exist in a written form or as a tradition? Are they easy to understand and interpret? Do they have any ambiguity? Do they provide sufficient level of guidance? Do they allow flexibility, or are extremely rigid?
- Are tools modern and efficient?

Analysis of each component will certainly give some clues for improvement. For example, if the administrative competence of the workers is low, training sections should be devised and conducted. If the rules exist only as a “tradition”, they need to be made explicit, e.g., written and published on the Intranet. If the rules are badly formulated, too vague or do not provide enough guidance, they should be rewritten. If the tools are old-fashioned, they can be changed for more modern ones.

However, improving each component separately might produce no or little effect on the administrative quality. We need to ensure that all components are synchronized with each other. Changing the tools without changing the rules may not produce any effect or even might produce an opposite effect. For example, introducing email instead of paper transfer can create an uncontrollable flow of documents, which might negate all effects of getting a faster communication channel! Rules of communication

should be adjusted to the new tools so that maximum effect is received from the investment in new tools. What is more, the new rules should be clearly communicated to the workers, so that they not only know how to handle the new tools (e.g., email) technically, but also how to use them according to the rules in their own operational environment.

“Disruptive” improvement of administrative quality

“Disruptive” improvement is associated with an innovation that radically changes the way of how things are being done. In the case of administration, disruptive means radical change in all three components, i.e.: tools, rules and administrative competence in order to significantly improve administrative quality.

Radical change may be initiated by appearance of completely new tools, which will require total revision of rules, and retraining of people. It may also be initiated by new ideas on how administration should work (rules). This will require development of new tools, and retraining of people. A new generation of workers with completely different sets of values might require rethinking of what tools should be used, and how rules should be formulated and imposed. In the future, hiring youngsters may require installation of chat-programs through the office, as well as a strictly imposed rule system to curtail their lack of discipline.

Note: an example of a disruptive improvement based on changing the information logistics is outlined in our other white paper “New Logistics for Administrative/Business Processes” available at <http://www.ibissoft.se/whitepapers/newlogistics.pdf>. More information on the topic is available at <http://processplatsen.ibissoft.se/node/28>

Conclusion: planning administrative quality projects

The deliberations presented in this paper are aimed to serve as guidelines for projects that concern evaluating and improving administrative quality.

The first mission of an evaluation project is to understand how well communication, information storage and retrieval works, and how much of a control, the organization in question has over their processes. This can be done through analyzing the ways people communicate and exchange information when completing administrative activities, and how they store and retrieve information. The level of control can be figured out through investigation of how many processes “hangs”, and how much time (on the average) is required for such “hanging” to be discovered and dealt with.

The next task of the evaluation project is to understand the reasons for why the administrative quality is not satisfactory through investigation of each component separately: administrative competences, rules and tools. The last stage is to check whether the components are synchronized, e.g., the rules employ all possibilities given by the tools, and they take into account all possible consequences that arrive from the tools usage.

The nature of an improvement project depends on the approach: gradual improvement, or disruptive one. If the gradual improvement is preferred, the first task is to synchronize the existing components. Adjust the rules to the already existing tools, or/and introduce tools that suit better the existing rules. Train the staff in how to use the tools in connection to the rules, or change the rules and tools so that they

better suit to the people currently working for the company/organization. For example, introduce more computer gadgets to satisfy the habits of the young generation, thus making administration more attractive to them. The latter, on its own, can help to improve the administrative quality. The next task after synchronization is to plan stepwise changes in rules and/or tools having in mind that all three components should be synchronize at each step.

If the “disruptive” approach is preferred, the first task is to find more efficient tools, and device rules that take full advantage of their efficiency. Alternatively, devise or find some better rule system, and find or develop tools that can make it work in practice. Then device training programs, and carefully plan a “jump”. Most probably, the project will require introduction of new computerized tools accompanied by substantial change in operational procedures/instructions. Introduction of such kind of tools requires a project on its own. Some suggestions on how to handle it see in “Introducing New IT in Operational Practice” available at:

<http://www.ibissoft.se/papers/A3method.pdf>

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Short information about the company: IbisSoft (www.ibissoft.se) is a consulting company based in Stockholm, Sweden. It specializes in the borderland between Management and IT, the main focus being on organization of operative work in non-manufacturing business processes.

Short bio of the author: Dr. Ilia Bider (ilia@ibissoft.se), Researcher, SE engineer and Business Analyst, is a cofounder and Director R&D of IbisSoft. He has MS in Electronic Engineering and PhD in Computer and System Sciences, and combined experience of over 30 years of research (in the fields of IS, SE, DB, and computational linguistics), and practical work (business analysis, and software design, coding, sales, and marketing) in five countries (Norway, Russia, Sweden, United Kingdom, and United States). Dr. Bider has published over 50 research papers as well as a considerable number of articles for practitioners. His main specialty is finding research topics in his business practice, and testing research results in the business practice. Dr. Bider is an inventor of the state-oriented approach to business process modeling and control that is based on the application of the conceptual ideas of the Mathematical system theory to the realm of business processes. This approach has been successfully tested in business analysis and software application development practice of IbisSoft and its partners. Dr. Bider puts a lot of effort in bridging the gap between the academics and practitioners. He co-founded a series of international workshops on business process modeling and support (BPMDS) where both academics and practitioners in two domains Business Development and Software Application Development meet for fruitful discussions. He frequently holds tutorials at international conferences, and he sits on the editorial board of several academic journals.

