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## **IT-STRATEGY AND IT-PLANNING IN THE FEDERAL STATISTICAL OFFICE OF GERMANY**

**Supporting Paper prepared by Ernst Schrey, Federal Statistical Office, Germany**

### **I. INTRODUCTION**

1. All statistical offices and agencies have to face a lot of new challenges, which can be coped with partially through the use of information technology.
2. There is a growing demand to lower the burden for the respondents, to produce figures in a more timely way and to make access to data more comfortable.
3. The statistical program has to be adapted to the changes in social and economic reality permanently, which causes a lot of change requests. In general statistical offices and other statistical organisations aim at improving the quality of statistical products and services (EFQM, Code of Practice).
4. Besides that, conditions for the work of IT-departments have changed in the last years.
5. In addition to the long known IT-processes in the production of statistics like data editing, tabulating and dissemination, administrative processes like human resources management, travel management, electronic workflow and content management systems etc. need support from IT.
6. Progress in IT creates new facilities and demands like new features in the Internet or mobile working environments.

7. The growing use of IT also in other administrative authorities and initiatives like e-Government leads to a stronger centralisation and standardisation of IT and a centralized controlling is set up.
8. There have been big cuts in human and financial resources in the last years.
9. To face the above mentioned challenges and in reaction upon the changing conditions we have set up new processes for planning and steering the handling of IT-projects in the Federal Statistical Office, which will be described in section II. As many projects in official statistics in Germany are put through in cooperation of the FSO and the offices of the Länder, an initiative called the masterplan was undertaken to optimize the cooperation too. A short description will be given in section III.

## **II. PLANNING AND STEERING OF IT PROJECTS**

10. IT projects have to serve the achievement of the general aims of the statistical office, but IT governance is of great influence for the success of the business vice versa. So a study of the MIT in the year 2004 states, that firms with superior IT governance had more than 20% higher profits than firms with poor governance given the same strategic objectives. To benchmark the different IT measures and strategies the deciding bodies need some criteria.

### **A. Criteria**

11. The strategic objectives of the Federal Statistical Office are laid down in the program called FIT 2008. It contains goals in two levels and is displayed in part in the following paragraphs.
12. Goals: (a) The Federal Statistical Office is perceived and recognised by the political community, business and society as a reliable institution and innovative information provider. (b) The Federal Statistical Office supplies high quality information required by its users on the state and development of the society, economy and environment. (c) The Federal Statistical Office takes into consideration the concerns of the respondents. (d) The Federal Statistical Office uses its resources efficiently. (e) The Federal Statistical Office is a competent and reliable partner in national and international co-operation. (f) The Federal Statistical Office supports and promotes the qualification and motivation of its staff and optimises their working conditions.
13. Though efficient use of resources (goal (d)) seems to be very familiar to IT personal, the sub-goals (i) The Federal Statistical Office optimises its work processes through state-of-the-art information technologies, (ii) The Federal Statistical Office pushes the standardisation and modernisation of its work processes and (iii) The Federal Statistical Office intensifies its cooperation with external partners to produce synergy effects are not operational directly.
14. From these goals we therefore derived a catalogue of objectives, which are specific for IT processes and could be handled as criteria for the actions in IT department in general and for the planning and steering processes of IT projects in particular. Fig. 1.1 shows an example for one goal.

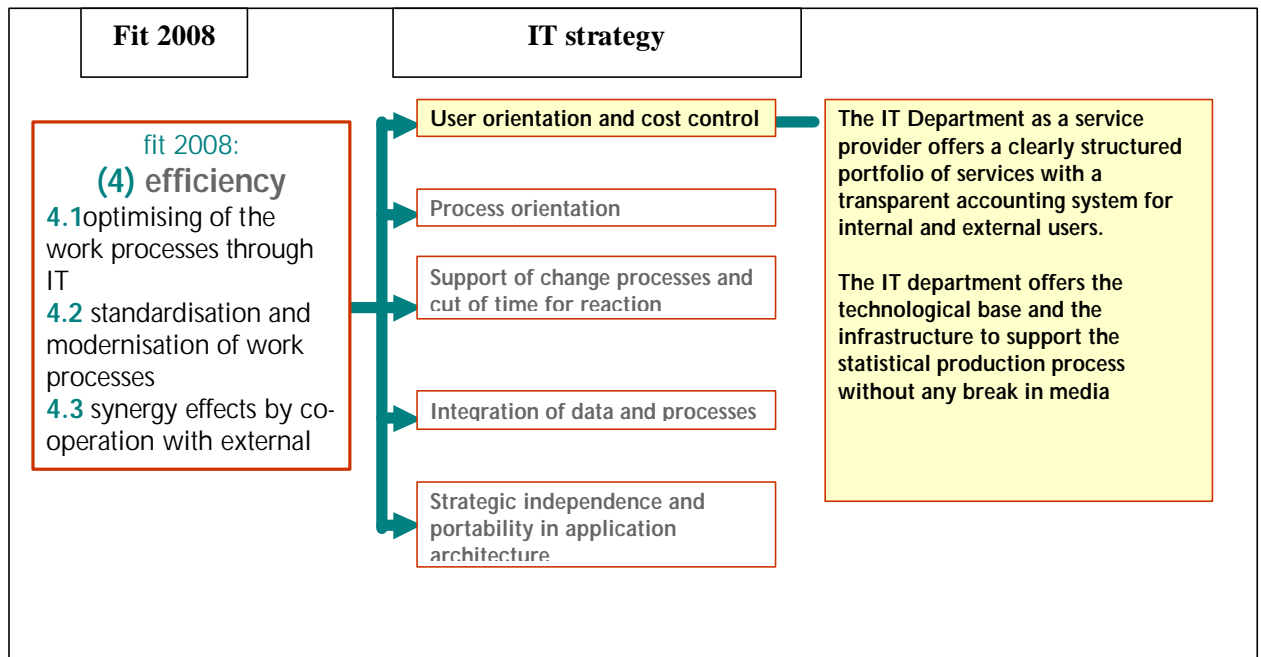


Fig.1.1 Derivation of IT strategy from general strategy

## B. Organisation

15. To support the planning and steering process, the following organisational structure was set up.

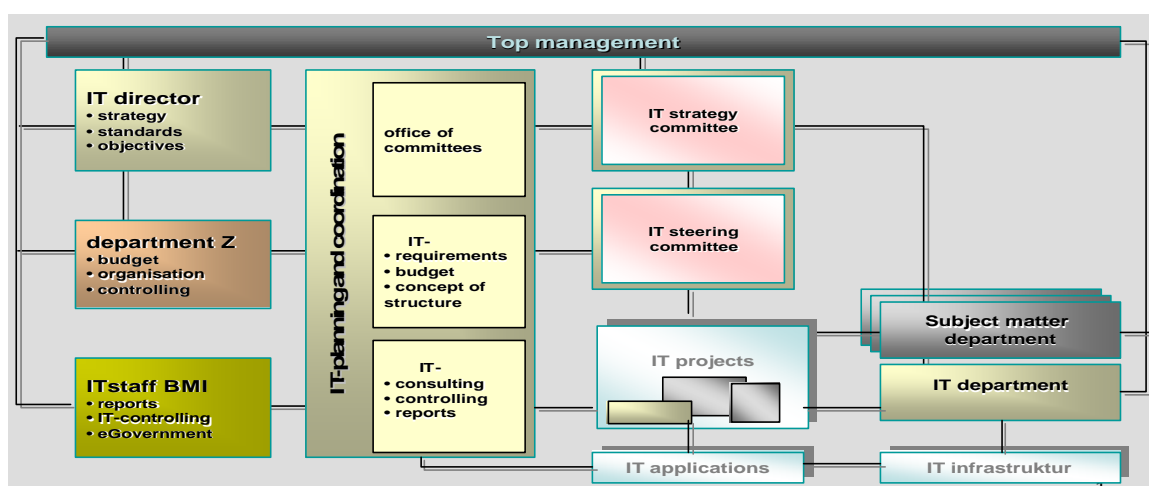


Fig. 1.2 Organisation model

16. It shows the acting units or how they interact. The main building blocks and some of their tasks are discussed below.

17. The **IT strategy committee**, the head is the IT director; members are the heads of department for Administration, department for Questions of Principle of Federal and International Statistics, one subject matter department.

- Advisory board for the top management for the development of the IT strategy based on the general strategy
- Decisions about IT project portfolio
- Advice for the IT director concerning the connection of total budget and IT budget
- Decisions about IT projects with a budget of more than 250 000 €

18. The **IT steering committee**, the head is the leader of the subdivision IT Planning and Controlling; members are heads of divisions or subdivisions: 3 from central (budget, organisation, etc.) units and 3 from subject matter units.

- Steering committee for IT projects following the corresponding management rules
- Building up and managing the IT project portfolio
- Central point of contact for subject matter divisions concerning IT based innovation projects
- Support of IT strategy committee

19. The **subvision IT planning and controlling** within the IT department.

- Office of the committees
- IT controlling
- Planning of IT budget and advice for projects
- Reporting for top management and administration (e.g. Ministry of Interior, eGov Initiative)

### C. Planning an steering process

20. The planning of IT-projects is based on the general planning of measures in the subject matter division. Each subject matter subdivision defines a bundle of activities for about 5 years depending on new legal regulations and interaction with the offices of the Länder. For the far future the plans are very rough, but they become more and more detailed in the course of time.

21. Activities, which need a quota of IT activity of 3 month manpower or a budget of 50000 € are candidates for the IT project portfolio. This leads to a project proposal that is discussed in the IT steering committee. The committee comes to a decision and sets priorities under respect of the IT strategy, the rules the IT strategy committee has set up and taking into account how urgent and risky a project will be. The portfolio is completed under the same conditions by projects which are planned by the IT department itself e.g. migration of the client operating system, establishment of a new storage architecture, etc.

22. The IT steering committee is involved in the start of a project and also in all critical phases when a decision concerning IT has to be found.

23. At the moment the IT project portfolio contains about 70 projects. Nearly 50 projects are active, 20 are in the queue.

### III. MASTERPLAN

24. The above described cycle of planning, deciding and controlling is the internal one in the FSO. Nevertheless a big quota of the IT projects has to be handled in co-operation with the Statistical Offices of the Länder. To get a better understanding of the questions and problems that have to be handled in that context, it must be kept in mind, that the Statistical Offices are independent legal bodies, which cooperate under the frame of the Federal Statistical Law. In the following this co-operation will be called “Verbund”. From the very beginning this co-operation followed the principle “one for all”. That means, one partner did the development of an application e.g. a tabulation program and all other partners were able to use the program in their computer centre to run the tabulation for their basic data. As IT infrastructure (operating systems, hardware, etc. ) is different in the different Länder and the Federal Office, a large expense had to be done to standardise the application development.

25. The different jobs for the development of applications were apportioned in an IT working group (AKIT), which met about three times a year and took the decisions in a kind of gentlemen agreements. The capacity distributed per year was manpower of about 800 months.

26. In 2003 the “masterplan” a strategic program for the development of the system of official statistics in Germany was set up. It aims at the optimization of the statistical products and services and the cost effectiveness of the production process. As one building block it contains the measure “optimized cooperation” (OPTIKO). This new structure of co-operation between the FSO and the offices of the Länder and first experiences will be described in that part.

27. In the framework of OPTIKO the offices of the Länder and the Federation agreed to a new process model for the common development and maintenance of applications. In some statistics it might include the centralisation of the running of the applications too, what means the micro data of all Länder have to be stored and processed in one office and only the results are disseminated to the different offices, or the Länder use remote access respectively.

28. The co-operation will be tested with about 10% of the total amount of common workload.

29. The process of OPTIKO works like a limited competition between offices of the Länder and the Federation and the regulations are formulated in a guideline called VMAS.

30. According to VMAS, the process is divided in 4 phases:

- Initialisation of the project (First idea of subject matter statistician; project sketch developed by subject matter statistician and IT personal of his office; agreement in the subject matter bodies of the Verbund and formulation of project proposal; appointment of the project manager who delivers the proposal to the AKIT);

- Formulation of the specification sheet (decision of AKIT and steering committee OPTIKO whether the project is handled in accordance with OPTIKO or not; formulation of the specification sheet by project manager, subject matter statisticians, specialist for systems analysis following the regulations of the guideline “usability engineering process” of the Verbund);
- Award of contract (branch office OPTIKO disseminates the call for tender to the statistical offices; check of offers by AKIT and acceptance of tender by steering committee OPTIKO and appointment of a Land for the quality assurance);
- Software development (including quality assurance, delivery of the application and invoice to the statistical offices).

31. We hope the VMAS model will assure a precise conceptual formulation, traceable process flows and products of high quality. Nevertheless it has to be mentioned, that the handling of the process with many involved offices and boards will need time. First assumptions for time need (from the first idea till award of the contract) are about 6 to 10 month. The first trials are running now.

#### **IV. CONCLUSIONS**

32. The paper describes the processes of planning, steering and setting priorities for the delivery of IT services within the FSO invented in the last two years and the changes which were started concerning the way the cooperation of the Federal Office and the offices of the Länder is organized. The latter concerns a special kind of “partnership”, as it is a partnership of administratively independent offices, but they cooperate in the framework of the common law for federal statistics.

33. As a result of the new procedures it can be mentioned that it causes more transparency for answering questions like:

- where and how big is the demand for IT-services,
- which projects compete for the same resources (manpower for IT-development, money).

34. Single-minded reaction to short-term influences, e.g. cut in budget, becomes easier.

35. A common understanding of problems arises between subject-matter statisticians and IT-people. Decisions are taken and responsibility is borne together.

36. Nevertheless it must be kept in mind, that the building up and carrying out of these new planning- and steering-tools needs additional capacities. An accounting system and Service Level Agreements (SLA) have to be set up for the IT services delivered from one partner of the co-operation to another.

37. Besides that there exist some restrictions to transpose the theory into real life, caused by the missing flexibility of legal regulations for official services, e.g. for budget and human resources.

38. Another crucial condition consists in the support of the strategy by the top management.

39. But even if the new strategies need manpower and new ways of acting and thinking from all persons concerned (management, subject matter statisticians, IT staff) it seems to be worthwhile for us to follow this way.

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