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Topic (iii): Resource management in statistical offices and the role of the IT departments

**IT APPLICATION DEVELOPMENT AND TEAM ORGANISATION AT STATISTICS
FINLAND**

Submitted by Statistics Finland ¹

INVITED PAPER

I. BACKGROUND

1. The traditional method of organising application work at Statistics Finland has been the use of application service units. Statistics Finland has six statistical units and three supporting units (Figure 1). IT application work was organised in such a way that we had one or more application service units in the Information Technology Services supporting one or several statistical units (Figure 2).

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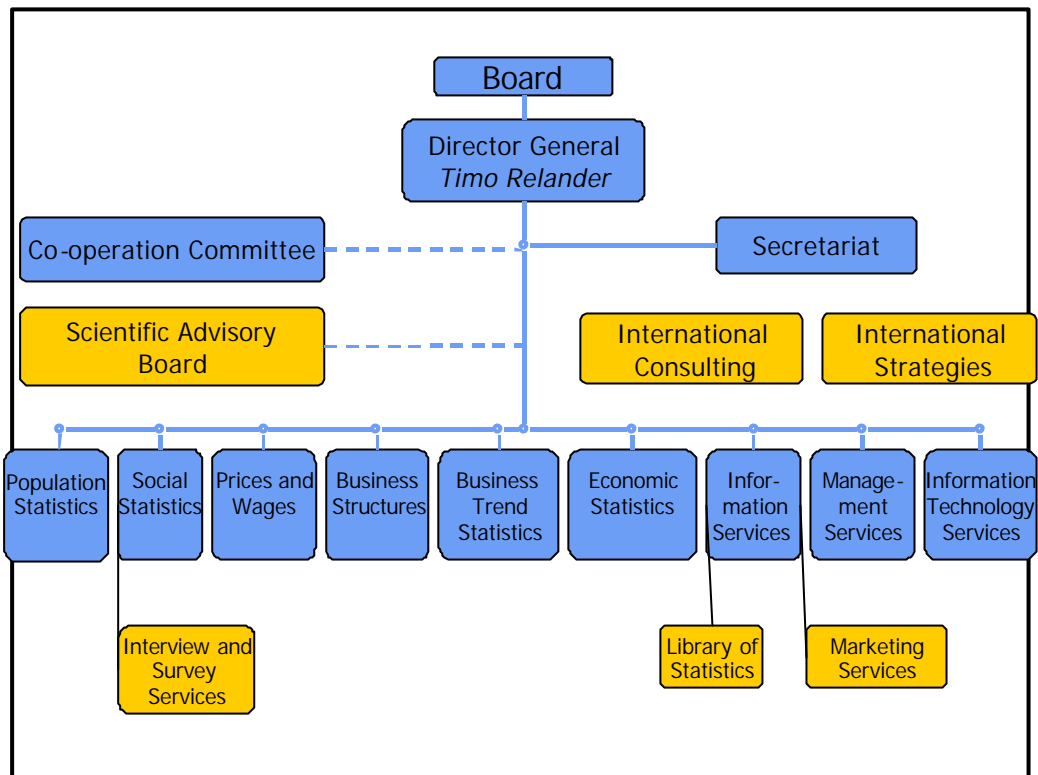


Figure 1: The organisation of Statistics Finland

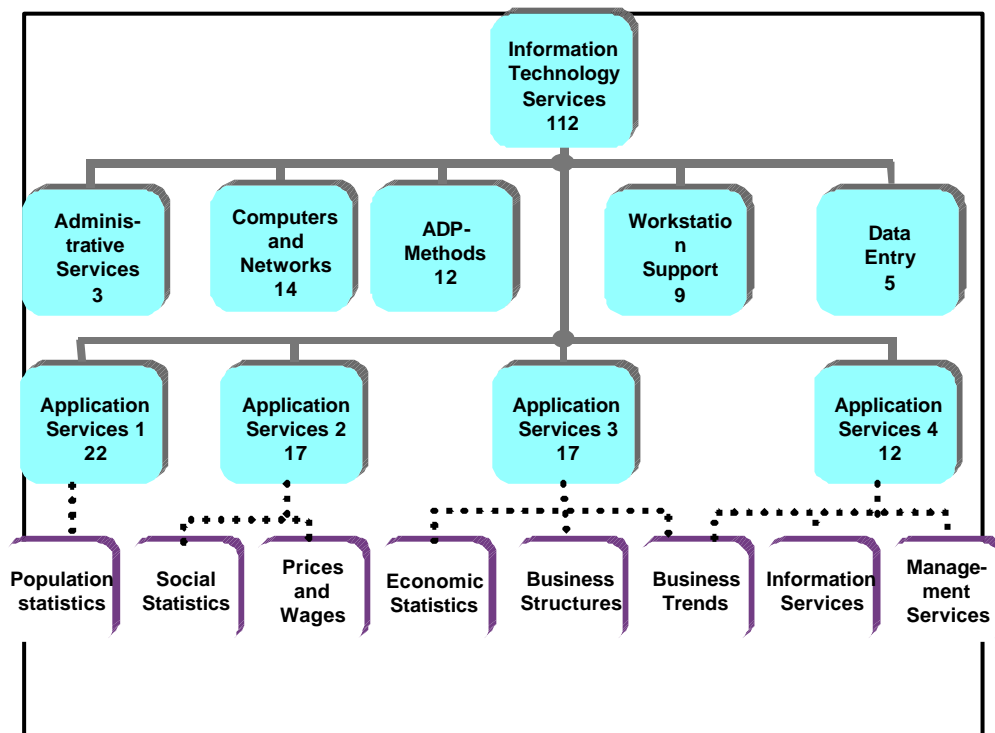


Figure 2: The organisation of IT services before 1 January 1999 (incl. number of persons)

2. This solution had many advantages but also several disadvantages. Because employees in application development were very closely connected to the statistical unit, both physically and with respect to their knowledge of the subject-matter, it was difficult to transfer people from one task to another. However, statisticians were satisfied because in many cases they could always use their own IT people. In this sense, the organisation was similar to a situation where application development is decentralised. Because application development people worked more with statisticians than with other IT people, it was difficult to organise any substitute system.

3. Every application unit had its own head. The heads of each unit were responsible for follow-up on agreed tasks, i.e. timeliness and completion within the allocated costs. The heads could also transfer people from one task to another when necessary. This meant that application development people themselves could not influence their own work very much. As a result, the organisation was practical in many ways but was in a rut and was too static for a modern and dynamic IT unit.

II. MOVING TOWARDS TEAM ORGANISATION

4. Teamwork was one of the keywords in the 1990s. At Statistics Finland we consider a team to be a small group of persons with complementary skills working together towards a mutual goal. A team is more than the sum of its members. In order to get the best out of teamwork you also have to make changes to the organisation. The traditional hierarchical organisation has to be replaced with a flat, self-directed organisation. The change may concern the whole organisation or it can be implemented at unit level.

5. At Statistics Finland one of the first units that changed its organisation towards teams was the Information Technology Services unit. The first step was taken in 1996 when we organised workstation support to work as a team. In this case the change meant that decision-making became more collective and the team itself selected its leader.

6. The next step was when we considered different forms and solutions to improve application work. We began to plan ways in which teamwork and team organisation could be carried out in application development as well.

7. When we started to develop team organisation, one goal was to increase knowledge capital. The use of knowledge capital of an organisation (or the exploitation of the hidden know-how of an organisation) was one of the basic things that we wanted to boost. It is said that only 5-15 per cent of the knowledge of the organisation can be used. This is the same with human brains when only a few per cent of the capacity is in use.

8. The knowledge capital is to be found both in the employees and in the composition of an organisation. If our organisation is appropriate, it supports increasing and storing of the knowledge capital. Increasing the knowledge capital helps in the following ways:

- ◆ decision power has to be at the lowest possible level;
- ◆ confidence in the competence of employees;
- ◆ employees have to be able to discuss emerging problems constructively;
- ◆ the continuous movement and fluctuation of different situations;
- ◆ the use of organisation structure which supports co-operation;
- ◆ organising heterogeneous groups of employees.

9. We began the transfer towards team organisation in 1996-1998 by organising special teamwork

training for a group of 20 IT employees. This group was the core of our team organisation. In 1998 we set up the first IT application team. We called this the home team. The home team is the place in the organisation where people are actually situated. In most cases they are working in the working area of the home team but it is also possible to work temporarily in the area of another home team or a project. The role of the team leader is not that of a manager. The team leader can be considered more as a contact person, for example, he/she does not earn any additional salary. The team leader is expected to change about once a year.

10. The home team has a meeting once a week (or once every two weeks). In this meeting the team discusses the tasks and makes decisions about how to organise the work. The meetings are usually organised by the team leader. Decision-making in the team is made in consensus. The management team and the representatives of the teams meet once a month.

11. At the beginning of 1999 all application work was transferred under team organisation (see Figure 3). We now have nine applications teams that have named themselves as follows: Esikot, Yrek, Yrtit, Topso, Hipa, Eos, Timantti, Populus, and Paikkatiedot. The names are mostly anagrams of some issue related to the subject of the statistical unit.

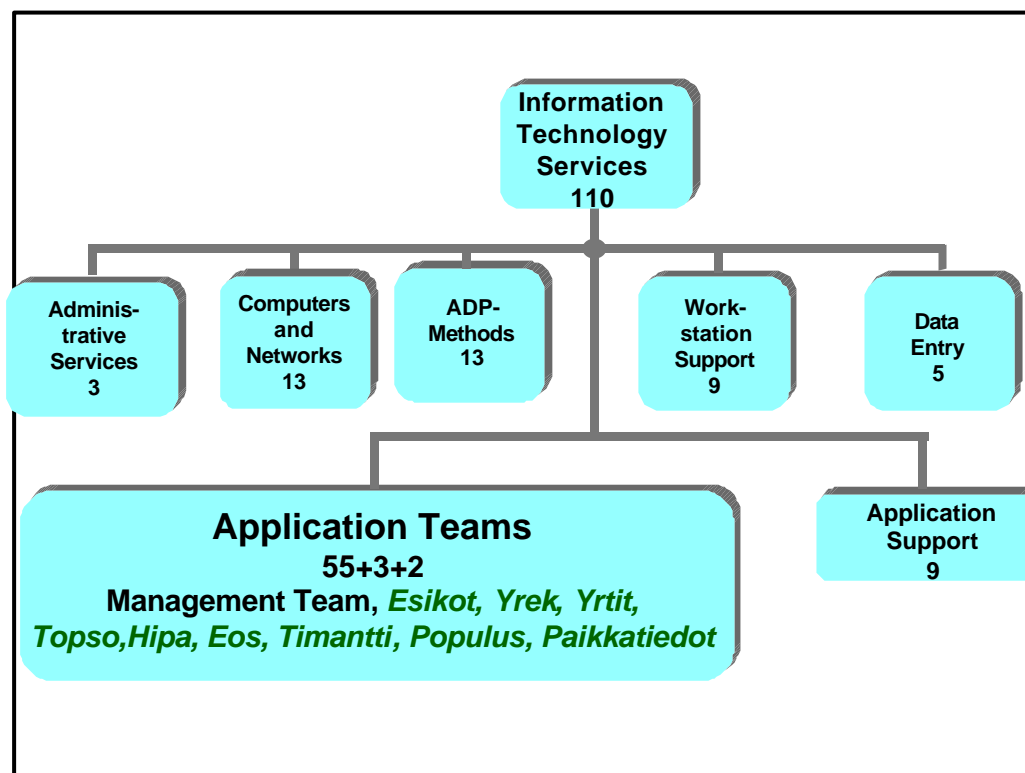


Figure 3: The team organisation in use since 1 January 1999 (incl. number of persons)

Figure 4 shows a detailed picture of the organisation of application work. You can see in this picture how the teams are connected to the statistical units.

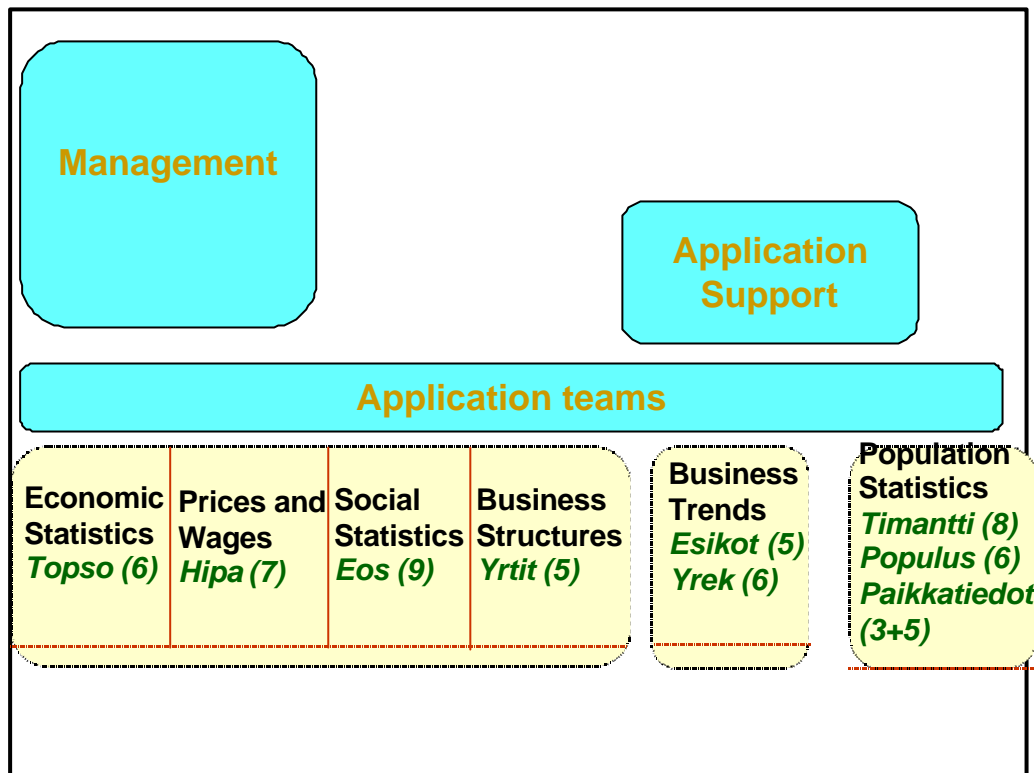


Figure 4: A detailed view of the team organisation (incl. number of persons)

12. At the beginning the basic goals of the teamwork were:

- ◆ application development goes on at least as well as before;
- ◆ substitutes are available better then before;
- ◆ division of work is more flexible;
- ◆ to develop co-operation and interactive working methods;
- ◆ to increase the possibilities to enjoy one's work.

III. EXPERIENCES AND THE FUTURE

13. The Information Technology Services unit has always emphasised cooperation with statistical units. Today, this is increasingly important. We consider teamwork as a method where we can dispel the differences between the Information Technology Services and the statistical units. First experiences show that the number of collaborative projects has increased. One potential way of developing teams would be to have persons from the IT unit and from the statistical unit working in the same team.