

11 INTEGRATION OF MODERN TECHNOLOGIES OF INTELLECTUAL PROPERTY IN PUBLIC ADMINISTRATION

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ABSTRACT

Both theorists and practitioners of public administration continue to argue about the extent to which public institutions and organizations can be transformed by the latest technologies. Among those who believe that the transformations will be essential are scientists who support the concept and influence of the development of intellectual property. This article is devoted to the consequences on public administration of increasing public sector dependence on the development of intellectual property. It is claimed that intellectual property, as well as e-government, is the vital resource for achieving the objectives of state development. The use of objects of intellectual property in public organizations assumes their transformation (Figure 11.1). The overcoming of obstacles in a way to potentially influence intellectual property demands short-term reforms (for example, improvement of partnership) and long-term reforms (for example, changes in organizational culture).

Keywords: *public sector, protectable intellectual property, research and development centre, e-government*

I. INTRODUCTION

A notable issue here is the use of the results of research and development works financed from the government budget, a process causing big concerns. This question gains paramount value for ensuring economic development of the state, increasing the competitiveness of the industry and attracting additional resources in the budget due to the introduction in economic circulation of objects of intellectual property.

At first sight, a solution could be fixing the status of rights for scientific and technical activity. The results of this activity, including intellectual property, would be created with the financial resources of the government budget (Figure 11.2).

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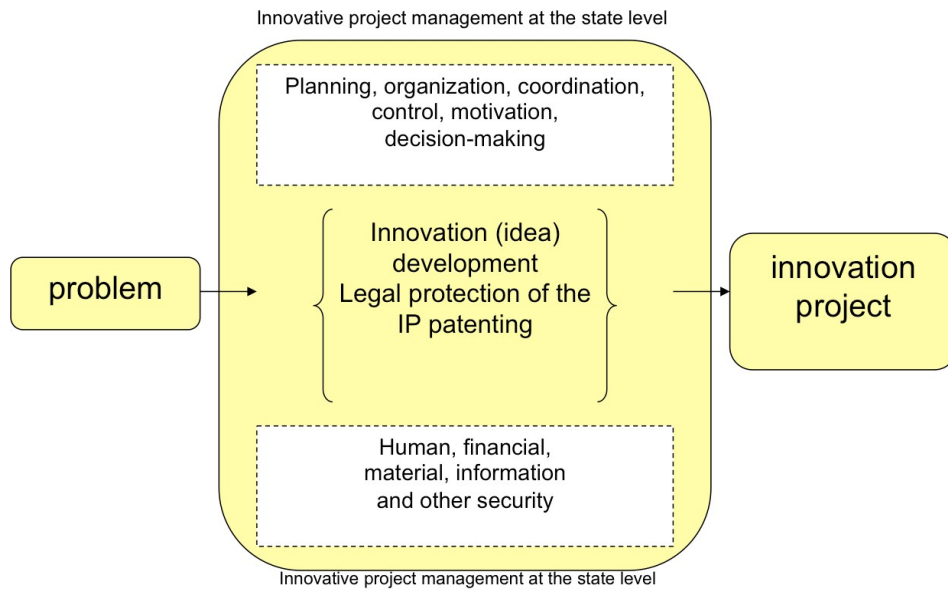


Figure 11.1. Model of the interaction 'Problem - Intellectual property - Innovative Project'

In most cases, the state directly finances scientific research, which results in the creation of new technical solutions in various areas. However, the state is not able to finance all innovative processes, bringing about examples of new technologies and the objects of equipment realized in the industry.

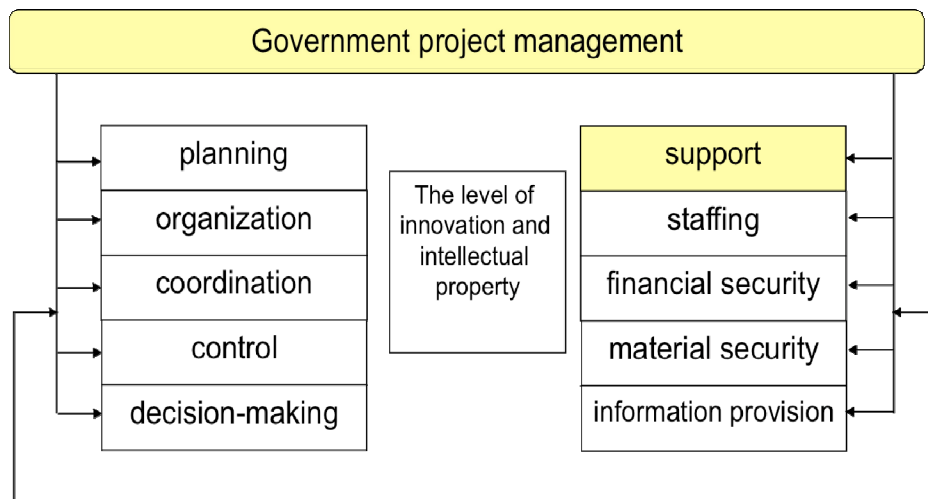


Figure 11.2. Government project management system

Having acquired all rights to scientific and technical results, the state assumes a duty to realize them by introducing them to commercial firms. This automatically assigns to the state the excessive burden of expenses necessary for an embodiment of research and development in the latest objects of equipment and technology.

It is undoubted that the key question becomes when and in what form will the state receive a return on investments made in scientific and technical activity? The answer is simple: when the results of such activity bring new technologies to operating plants and ultimately the market. The investments create new workplaces, tax revenues from profits of such enterprises, realization of production, and the income tax taken in the production and realization of goods. From this it follows that to the state, as to the owner of scientific and technical results of the intellectual property created at the expense of the government budget, it is necessary to solve a very 'unpretentious' problem—to organize and finance work to a stage when these projects will start making a profit.

II. DIFFERING MODELS FOR PUBLICLY ADMINISTERING INTELLECTUAL PROPERTY

From the experiences of developed countries such as Germany, France and the United States, one can know the various forms and methods of public administration for the intellectual property created at the expense of budget financing. At different times and in different conditions the following models were applied:

(a) Fiscal—provides the state exclusive rights to protectable results of scientific and technical activity created by order of governmental departments with proceeds recouping the spent budgetary funds;

(b) University—provides the researcher/ performer (represented by the scientific organizations and authors) with exclusive rights to results of scientific and technical activity;

(c) Industrial—provides rights priority to the industrial companies that participate with the state in both financing and using the results of research and development;

(d) Liberal—assumes a transfer of exclusive rights to the results of research to the researcher/performer with a lack of state control over the expenditure of budgetary funds allocated for science, and also limits participation of the state in profits derived from the intellectual property.

The development of a state-managed system of intellectual property is a transition from more traditional models to a fiscal-liberal one. Now the university and industrial model, and also their combination, are mainly applied.

In a market economy, the right to results of scientific and technical activity provide their owners with the opportunity to exploit those rights. However, the introduction of scientific and technical results in economic circulation is always interfaced with certain difficulties. Now, owing to an adverse general economic situation, they are shown especially sharply.

Actually, denying ownership of intellectual property rights from developers using public funds hinders investment in knowledge-intensive production and interferes with the creation of the enterprises involving individual-based financing of scientific and technical and innovative activity (Figure 11.3).

The path the state chooses regarding the acquisition and transfer of exclusive rights to scientific and technical results of intellectual property depends on a number of factors, the most important of which are:

- The priority of the national industry and increasing its competitiveness;
- the protection of exclusive rights to research results obtained in the public interest;
- the Government's intention to bring their own development to industrial application and sale of finished products.

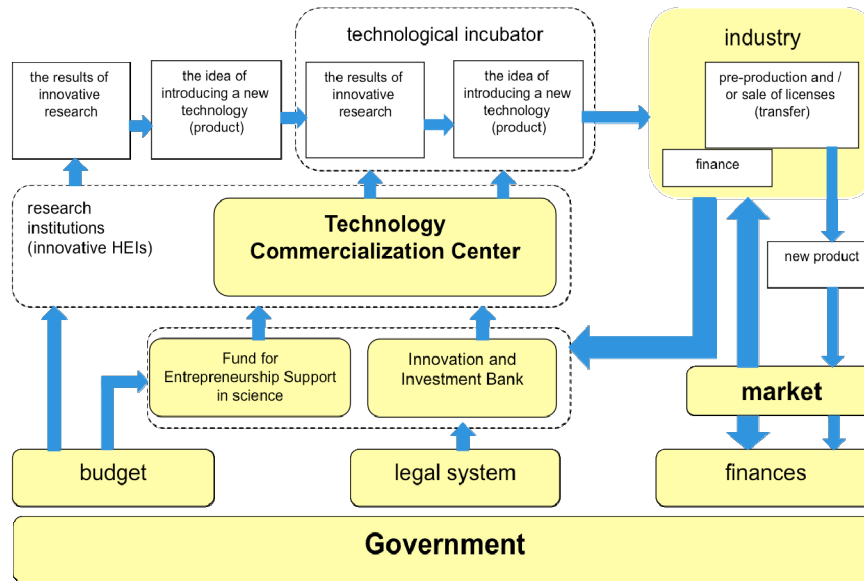


Figure 11.3. Structure of the interaction between the participants in the process of commercialization of intellectual property

As Figure 11.3 shows, it is necessary to create an organizational-management system for innovation adequate to the existing economic situation in a specific country. The greatest economic benefit for state industrial development can be developed by the latest technology and sales made using its products in domestic and foreign markets. However, the commercial use of research and development requires huge financial costs of a ready-to sale of goods.

It is therefore important to:

- Ensure a selective approach to the use of the state budget for the development of technologies, whose implementation will bring the best economic and social results; and
- attract investors in high-end production, and the development of various forms of equity and partial state participation in

financing science, technology and innovation.

The state takes measures to protect intellectual property rights created with government funds in order to control use and recoup its costs for research and development through the sale of licences to third parties. However, as a process of creation, legal protection and the use of objects of intellectual property can be carried out only with the assistance of their founders—authors and organization developers. The organization developers also have to be economically interested in it, having gained from the activity the income proportional to their creative achievements and incurred expenses. Otherwise they cannot notify, for example, the customers about the created objects or protect them on behalf of third parties. In most cases, there is now a leak abroad created at the expense of government funding for intellectual property (Figure 11.4).

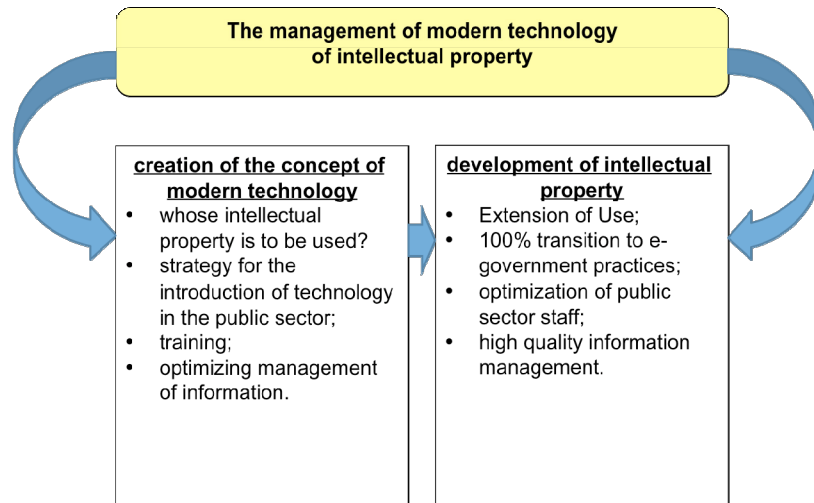


Figure 11.4. The management of modern technology of intellectual property

Therefore, the more attractive and important state interests are not exclusive rights to resulting intellectual property, but rather the continuous expansion of the production sphere, the development of the latest technologies containing intellectual property, and the release of competitive goods.

With sufficient funding, the industry would certainly be interested in mastering the production of new types of products and technology. This would improve the competitiveness of products, expand markets and increase profits. Public interest would cause an increase in gross domestic product based on the development of new products, and, with the support of investors creating new production capacities, it would increase the number of jobs and income in the budget in the form of sales taxes, taxes on producers, and workers in the industry. It is also possible to anticipate and legislate special contributions to the state budget from the profits obtained using techniques, including intellectual property created at the expense of the state budget. Thus, it is advisable to send the accumulated funds to support the research sector.

III. DISTRIBUTING RIGHTS AND RESPONSIBILITIES BETWEEN THE STATE, AUTHOR AND IMPLEMENTING ORGANIZATION

The following is a proposed distribution of rights and responsibilities for the results of scientific and technological activities between the state, as represented by the authorized state executive body (hereinafter 'the customer'), the implementing organization and the author.

The organization performer has the right:

- To use results of scientific and technical activity in own production;
- to transfer, with the permission of the customer, on a contractual (licence) basis, the rights for results of scientific and technical activity, including objects of intellectual property containing those results and including the rights to transfer such interests to the third parties.

The organization performer is obliged:

- To inform the customer on all created protectable objects in the course of work performance;
- to submit an application for the issuance of the security document and to get in the country and abroad exclusive rights to protectable results, specifying the applicant and the person addressed to whom the patent (certificate), authorized government body of the executive authority and the organization performer has to be granted;
- to provide to other enterprises and organizations instructions on the customer's non-exclusive licence for use of objects of intellectual property in developed technologies, which would be gratuitous when using those objects for state needs and paid in other cases;

- to present the customer with figures showing income from sales to third parties which have not been directly connected with the performance of work for federal state needs.

The customer has the right:

- To forbid organization-performers from acting contrary to the interests of the state and transferring rights resulting from state-funded research to the third parties, including licencing;
- to relinquish rights, including on the licences belonging to it stemming from the rights created by organization-performers, and in the case of refusal, to authors or the third parties;
- to instruct the organization performer on transfer of results of scientific and technical activity, including objects of intellectual property according to the licence to the third parties, including other state organizations and abroad;
- to receive an established share of proceeds from (1) sales and licences to third parties not connected with ensuring state needs, (2) use rights within the country, and (3) payments by the customer for the expenses of organization-performers engaged in foreign patenting. These proceeds (after satisfying requisite payment obligations) will be used on development of the scientific and technical sphere, with a focus on scientific research, marketing, patenting, licensing, stimulation, and vocational training.

The customer is obliged:

- To allocate funds for the payment of patent fees for submission of demands for obtaining security documents, their maintenance in force, and also payment of award for creation and use of objects of the

intellectual property created by the state order.

Creators (authors) of protectable intellectual property have the right:

- To receive monetary compensation defined by legislation and an established share of the income from the funds allocated to the organization-performers by the state from proceeds of their intellectual property;
- to receive a share of the income from the sale of licences of the intellectual property created by them with an additional attraction of government financial resources when the transaction is made on behalf of the state.

In our opinion, an introduction of the listed norms will provide the economic interest of the organization performer and authors to notify the customers about all objects of intellectual property created in the course of work and that their creative achievements and the incurred expenses will be compensated.

A. INFORMATION TECHNOLOGIES AS OBJECTS OF INTELLECTUAL PROPERTY

The emphasis on financial and human resources continues to dominate the troubled landscape of management in the public sector. Nevertheless, the importance of information resources continues to grow, and the management of the electronic government is an integral part of a problem of government as a whole. The increased importance of management of intellectual property, and the related information technologies, is a valuable asset that the government has to operate, especially considering public trust. The policy also demands from public institutions the use of electronic systems as the best way of creation, use and management of information. Information technology has already become the central resource to satisfy this requirement (Figure 11.5).

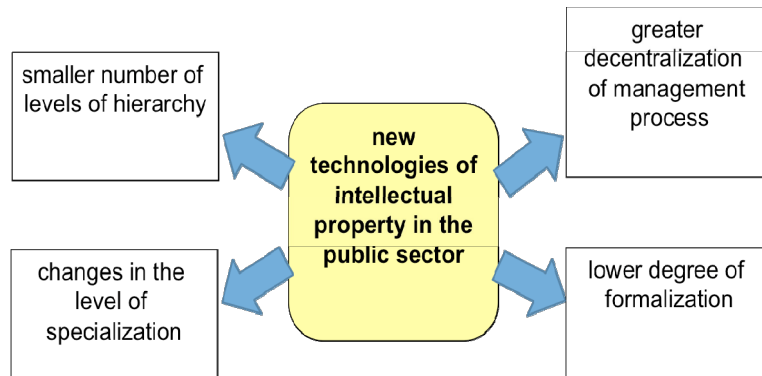


Figure 11.5 Result of the new IP technologies in the public sector

B. SEARCHING FOR THE SKILLS AND MEANS TO INTRODUCE INTELLECTUAL PROPERTY TO SOCIETY

The use of intellectual property assumes that public sector staff must gain special skills and spend considerable financial resources. In this regard, departments have to compete within their own management for public funds necessary to research and develop objects of intellectual property. They must also compete with the private sector for technologically qualified employees.

C. EFFICIENCY INCREASES

The use of intellectual property assumes the increase of overall performance at the expense of optimizing the management of information. The use of intellectual property in an information directorate can bring essential efficiency.

IV. CONCLUSION

This article describes the impact of proposals on the implementation of intellectual property for government institutions in Ukraine and in the world. This research supports the argument that the use of new technologies in the public sector will lead to greater transparency and ease of use of e-government.

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