

Detailed Description of Professional, Management Experience

Work Experience as Lecturer, Researcher

I have a seventeen-year experience in higher education. I started my career at the University of Agricultural Sciences in 1997 as Department Staff. I taught seminars in Applied Mathematics, Physics and Agricultural Meteorology. In 1998 I was promoted to the position of junior lecturer and at the same time I became the course coordinator of the Applied Mathematics course in the general agricultural engineering program. As a way of fulfilling the requirements of university teaching with regard to scholarly activities, I started my PhD studies in 1998 at Kossuth Lajos University in Debrecen. My dissertation emerged from the field of mathematics and psychology and I defended it successfully in 2004. In the dissertation I studied the context systems of mathematical ability structure with multivariate statistical methods. I started teaching statistics, SPSS and business statistics courses, as a junior lecturer.

In July 2005 my contract as a teacher was interrupted and I received my promotion to associate professor with other status on 1 September 2006. During this period I taught statistics and research methodology in the doctoral program. From 2010 I returned to the training of full-time students as well, both in the Bachelor and the Master programs. Currently, I participate in the teaching of the following courses as course coordinator: Mathematics I-II (BSc); Statistics I-II (PhD); Statistics, Research Methodology I-II (PhD); Regional Analysis Methods I-II-III (PhD); Introduction to SAP (MSc); The operation of integrated IT systems in higher education (MSc).

My research interests include the financing of higher education (both in Hungary and abroad) and the study of the relationship between higher education and economic development. Currently, I am working on the development of the pre-calculation model of diploma prime costs and possibly its post-calculation model. With regard to the latter, my book titled "The Post-calculation model of diploma prime costs" (In Hungarian) was published in 2012. I regularly participate in conferences as an invited speaker.

Organizational and Managerial Skills

SAP project management (University of Debrecen), 1 November 2005 – 30 June 2007

On 1 July 2005 I started working at the Financial Directorate of the University of Debrecen with the task of supporting the introduction of the SAP business information system. I spent close to four months familiarizing myself with the financial mechanisms of the University of Debrecen and with the system to be introduced. I became the manager of the **SAP project at UD** after this.

The critical points of the introduction of SAP were the performance of integration tests, the creation of interfaces and their proper operation (Neptun, Dolber), the development and implementation of the concept of the conversion program, the preparation of SAP-based VAT return, and the creation of the authorization structure corresponding to the organizational structure and operating mechanism of the Financial Directorate of the University.

Outcome: On 16 January 2006 the staff of the financial units of the University of Debrecen started to work in the SAP system.

HEFOP 3.3.1 project management, 25 October 2005 – 30 June 2006

In October 2005 I became the project manager of the project called “The model reorganization of operating processes for the purposes of supporting the quality-oriented operation of integrated large universities outside the capital” (**HEFOP 3.3.1-P.-2004-09-0128/1.0**). The objective of the project was to help the large universities participating in the consortium (Pécs, Szeged and Debrecen) to establish the sample-model system of university processes with identical directions of development partly with shared and partly with autonomous activities, but most importantly, constantly helping each other, along the lines of similarities in structure and content, which would also provide the background for the operation of the university management systems.

Outcome: process models were prepared in 12 areas (with ARIS support), with the University of Debrecen being responsible for four areas: financial administration, controlling strategy management, research and student relations. The model-like nature of the project is underlined by the fact that its results have made it possible for the other institutions of higher education as well to reflect on operating processes in a similar way, to re-regulate them, and to adapt and introduce the operating model.

Projects related to the support of SAP operation, 1 November 2005 – 30 June 2007

Although with the implementation of SAP on 16 January 2006 one phase was ended, with the operation of the system a new phase also started. In connection with this, I was responsible for the SLA, SAP user manuals, the regulation of the financial tasks of the University of Debrecen, and the management of BCP projects.

Outcomes:

SLA project: a document was created (Service Level Agreement) that was regarded as a benchmark by the University of Debrecen with regard to the operation of the SAP.

SAP user manual project: the manual prepared as a result of the project discusses in detail each and every SAP user step, the connected SAP transactions, system windows and their use, supplemented by the input data needed for the performance of transaction steps and the output data created as a result of the transaction.

Regulation of the financial tasks of the University project: the processes of financial administration and the steps of transaction on the transaction level were written down in accordance with the operating conditions following the introduction of SAP.

IT business continuity plan project (BCP): the aim with the preparation of the plan was to help the continuous operation of the critical operating processes of the Financial Directorate and the IT systems supporting it.

Deputy Director-General for Finances (University of Debrecen), 1 February 2006 – 30 June 2007

From 2 February 2006 I was promoted to the position of deputy director-general for finances. One of my principal tasks was to manage the operation of the SAP, besides the management of SAP related projects mentioned above.

My job included the management of the preparation of the budget for the University of Debrecen as well as the monitoring of its enforcement and I was also responsible for the preparation of the financial statements. I considered it to be a priority to coordinate the regulation of the controlling activity and the financial processes. The “SAP conform” organization of the Financial Directorate was challenging as in the process significant organizational modifications had to be implemented.

During my work, I considered it important to emphasize the service function of financial administration. In line with this, I have considered it a top priority to extend the **electronic administration services**, which makes administration simpler for users, and which provides assistance for financial administration in operative work. With the help of my coordination, the so called "**Budget notification**" system was developed, which aims to provide up to date information for budget holders regarding the surplus of their financial centers, their original and modified appropriations, closing day utilization, possible inclusion among obligations, as well as their balance. The **creation and development of the concept for the new application registration system** was also started during this time. The objective while developing the system was to make the status of applications traceable (both from the perspective of finances and tasks) for everyone involved.

To be able to work with the necessary competence and thoroughness, in 2005 I started the Master of Business Administration program at the Faculty of Economics of the University of Debrecen. During my work as deputy director-general for finances, I could gain practical experience in the fields studied about in the program, sometimes reinforcing, sometimes reevaluating the theoretical aspects.

Deputy Financial Director for General Affairs and Strategic Management, 1 July 2007 – 30 June 2012

From the 1 July 2007 I continued working in the Centre for Agricultural and Applied Economic Sciences of the University of Debrecen as the deputy financial director for general affairs and strategic management. My most important tasks included the management of the preparation of the Centre's budget and the supervision of its enforcement, as well as the preparation of the report. As the deputy director for strategic management, the support of decision making by the top management was one of my central tasks, to which the preparation of strategic analysis is closely connected. In 2007 and 2008 I participated in the editing of publications related to a three year support by the maintainer published under the title of AMTC Analysis, which introduced the activities and performance of the institution in the fields of education, research, finances and organizational efficiency.

It was also a top priority in my work to develop a concept for such integrated systems (as well as the management of their introduction), which, among others, help with financial tasks as well. In connection with this, in the fall of 2007, I became the manager of the project titled "Modern IT tools in the Centre for Agricultural and Applied Economic Sciences."

Outcomes of the project:

The new online appearance of the Centre was introduced, in 2008 the Centre got a new portal. The portal family of Agricultural Studies was developed with such functions and database that made it unique in Hungarian higher education.

The management and development of human resources is one of the most important parts of institutional strategy. As part of this, we have developed the so called **Human Resources Registration System (HNYR)**. As a result of the project, an interactive web application with complex authorization structure was developed, which recorded the results of the activities of the employees from year to year, in the fields of education, research, applications and publications.

Also connected to the human resources strategy, a **performance evaluation system** was introduced in 2008 and I was an active participant in the process of developing this concept. Continuing this, for the evaluation of the activities of instructors and researchers, in 2013 we developed such an **application fund** called "**AGTC fund 2013**" for which the full time instructors and researcher of the Centre could apply. The management of the Centre and the faculties created this system for the evaluation of education, research and other activities, which was

added as a program to the HNYR system and based on the data registered there (in accordance with the evaluation system developed) it automatically prepared the summary of performances.

An additional development connected to the project involved the introduction of an **electronic leave registration system** adapted to the operation of higher education institutions. With this software, daily and internal administration was made simpler, and at the same time, it put an end to the paper-based documentation amounting to ten thousand pages a year, taking into consideration issues of environmental awareness.

In 2008 we started preparations for one of the largest project developments, i.e. the **infrastructure management system**. When introducing the system, it was our goal that the institution should keep a record of its available resources and make economical operation possible through the following tasks: structured records and retrievability of infrastructural resources; preparation of business reports on the resources; capacity management, report on utilization; registration of managed tools; management of events related to resources; automatic schedule generation and modification functions; integrated utilization management based on the schedules. Connected to this system, we created (for the utilization of free capacities), the **e-room reservation system** with which both our colleagues and other parties interested could request rooms for various purposes simply and quickly (rooms for teaching, council rooms, conference rooms, etc.)

The development of the **Management Information System (MIS)**: reports and statistics can be generated from the data found in the introduced systems that are important in the decision making process of the management, provide information for the preparation of institutional strategy, etc. In the various IT systems approximately 250 reports were programmed in the following areas: personal data, education, research, applications, publications, infrastructural resources and their utilization.

Daily communication with students and alumni is a basic challenge in institutions of higher education. For the institutions it is of crucial importance not to have the relationship terminated with the students after their graduation. Therefore, in 2009 we introduced our **MailHosting service**.

One of the prerequisites for the use of systems introduced as a result of IT developments is to ensure the technical conditions for stable operation. For the purposes of achieving this objective, we developed our **HelpDesk concept and operation**, which supports the operating conditions of IT tools with modern technology.

Later, during my work as the director of finance, I continued to manage the extension of e-administration: we introduced an **electronic accommodation booking system** and we also added an **online payment interface** to the portal.

Program Director (DE AGTC Research Institutes and Experimental Farm), 1 March 2011-31 December 2012

The Council of the Centre for Agricultural and Applied Economic Sciences passed a resolution on 7 December 2009 regarding the establishment of a new organizational unit, namely the Agricultural Program Directorate. I served as director of this unit between 1 March 2011 and 31 December 2013. The directorate provided the administrative, technical, operating and facility management framework connected to the agricultural tasks of the Centre (research and development and innovation tasks related to the sector, practical training, consultation, marketing activity, etc.) and to the implementation of the strategic objectives of the Research Institutes and Experimental Farm and offers services within this framework.

Director for Finances, 1 July 2012– 31 December 2013

In June 2012 I applied for the position of director of finance at the Centre and worked in this position until the termination of the Centre, until 31 December 2013

After minor reorganization of tasks, I continued the work that I started as deputy and also took on the coordination of those tasks that were previously not my responsibility (development, investments, public procurement, etc.).

The management of daily operative tasks – which is really diverse – was just as important in my work as the annual financial tasks and IT projects mentioned before. With regard to financial administration, the management control built into the process both before and following it received a crucial role, which was carried out by the controlling group of the directorate according to a schedule prepared in advance. I always considered it to be important to continuously analyze the progress of tasks together with their evaluation for the purposes of increasing effectiveness, efficiency, and savings. I was also responsible for continuous communication with the organizational units of the directorate and with the other units of the University and the Centre.

In the last period, the volume of data reporting increased significantly, the importance of accurate, precise and fast work while also meeting the deadlines has assumed crucial importance. With the introduced IT systems and their continuous development and extension it was our clear objective to facilitate the operative work related to data services. The number of external and internal audits also increased in the last years, it was my responsibility to prepare for these, to make the necessary data and documents available for the audits. When deficiencies were identified in the control areas, we completed those actions that were described in the summary reports and we also submitted action plans. My new tasks included the coordination of procurement, the monitoring of public procurement procedures, the management of renovations and investments. Changes in legal stipulations are significant in all areas, and this is especially true for the field of human resources management. The monitoring of changes in law (labor, taxation, trade policy tasks, etc.), transferring these to the administrative (sub) systems, helping the colleagues to become acquainted with these changes were always a priority for me.

Deputy Director-General for Finances, 1 January 2014 – 30 April 2014

In the first quarter of 2014, I was responsible for the preparation of the public finances report and internal reports of the Centre for Agricultural and Applied Economic Sciences that ceased to exist.

MIS Director, 1 March 2014.–

Significant tender resources have been available for institutions in the last years for the introduction of Management Information Systems. The University of Debrecen won two such tenders. Outstanding developments took place within the framework of the project, where the maintenance and development of the systems are required by the specifications of the tender. The University, fulfilling its obligations, established the MIS Centre in the spring of 2014; I have been responsible for the management of this unit since 1 March 2014. Our most important tasks include the following:

- the formulation of MIS development objectives and strategy, their enforcement, the follow-up of strategy implementation in line with the institutional strategy.
- management of data extraction processes from resource systems related to the MIS.
- the creation, development, and monitoring of our own database system, with regard to those sets of data whose loading to the SAP-BW system is not relevant but which are necessary from the perspective of strategic, procedural and professional management information.
- the building and operation of reporting systems, follow-up and the preparation of planning, proposals with regard to these.

- preparation of reports in the SAP-BW system (for MIS content and if necessary, for the support of operative administration).
- continuous monitoring, development, and maintenance of top management indicators, regular reports supporting decision making as well as ad hoc reports.
- adaptation of MIS professional content to needs.
- the organization of services for management decision making and monitoring activity with the adequate provision of the content, structure, and reporting function of the MIS.
- the analysis of the implementation of institutional strategy based on the field, process, and strategic key indicators, preparation of analyses.
- participation in the preparation for data provision to various supervisory and financing bodies .
- sharing of MIS information within the institution.
- identification and specification of development needs (new reports, indicators).
- providing recommendations regarding the extension of resource systems necessary for the MIS, in the case of extension, the management of the connection of the resource system to the MIS.
- recommendations regarding the further development directions of the MIS.
- monitoring of stipulations of law related to the MIS, the organization of their application in practice.
- monitoring of news, innovations related to the MIS (both at home and abroad).

Ever since my promotion to the position on MIS Director, I have participated in numerous trainings:

- BW001 SAP NetWeaver Business Intelligence
- BW305 Reporting
- BW308 BW - Portal Integration
- BW309 BW – BW Workbook design with BEx Analyzer
- BW310 Enterprise data warehousing
- TBW10 BI Enterprise Data Warehouse
- TBW20 BI – Reporting and query design
- TBW41 BW Extraction with UDI and XI and APD
- WHUPPI SAP solution package for public finance organizations
- TBW42 BW Advanced Enterprise Data Warehousing and Reporting
- TBW65 SAP Business Intelligence Solutions and Authorisations
- T413 AVIR training
- Effective reporting
- Strategic controlling