Admission to Lithuanian Universities
Evolutional Development of the Consolidate Information System

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Preface

The preparation of Lithuanian Law on Higher Education (HE) started only after the restoration of Lithuania's independence (1990-1991). Until now the Law was rather concise and schematic leaving the Government to regulate most of the practical issues related to the organization of studies and functioning of higher education institutions. On the other hand, after providing that "institutions of higher education are to be granted autonomy" such institutions interpret the concept of autonomy rather broadly.

According to the EU PHARE HERIL (HE Reform in Lithuania) programme (1998-1999) and its subprogramme " Lithuanian higher education and research information system (LieMSIS)" [1], two important issues were initiated and developed: "Lithuanian Law on Research and HE " (already in power from the middle of the year 2000) and LieMSIS specification (several IT projects will start in this year 2001) [2]. Now again, the matter of the autonomy should be reflected in the new statutes of HE institutions according to the new Law. Thus in the nearest future we expect major organizational, structural, and functional changes in the field of HE.

The autonomy of HE institutions also strongly influenced the admission processes and order: each single state institution developed its own admission requirements and criteria: from the attraction of pupils when HE wasn 't popular (1990-1995) until the implementation of sophisticated entrance exam system afterwards.

On the other hand there are many changes in general education schools and secondary education system. In this system there started to funcion a new National Exam Centre (NEC). Unfortunately at the moment it only dublicates the finals of secondary schools while providing pupils to choose whether to pass exams at school or at NEC. Meanwhile HE institutions tolerate choice of pupils but at the same time run their privious policy as entrance exams.

1 Problem overview

Until 1999, having the pure Legal Bases and State Regulation of HE system every Lithuanian HE institution was fully involved into its annual admission process more or less closely connected to its own Information System (IS). Several IT means and instruments are in usage to support the admission processes and provide the Ministry with documents

for consideration and reporting accordingly. Though the common admission system is a case of the concept of the LieMSIS project, some of HE institutions started to promote this initiative before now.

Against all the odds two major Lithuanian universities, Kaunas University of Technology and Vilnius University, were novice introducing the unified application form for secondary school applicants and creating the IS for the Common Admission.

Founded in 2000 Lithuanian Universities' Council on Admissions (LUCA) started managing all common efforts in the development of a consolidate IS for the admission. At the same time there was organized the Executive Committee as well as established a Team of IT professionals. All organizational structures were founded on the base of universities' representatives working on admission issues.

The i) Common Data Set on admission, ii) admittance regulations, and iii) admission procedures are a collaborative effort of LUCA's membership. Under the supervision of Ministry, this public order takes effective power and is published annually [3]. Already by tradition, admittance regulations are split into general and institutional parts. When a university joins LUCA, it begins a collaborative work in the development of the infrastructure to support its local admission office and pupils who learn about new IT usage, digital signature, private data protection, and other key aspects necessary for them to function in the open IS effectively.

LUCA aims at improving the quality and accuracy of information provided to all involved in pupils' transition into higher education, as well as assisting universities in compiling and reporting information.

Table 1: LUCA's activity profile

Year	LUCA's members / full members	Applications received	Study programs offered	Study programs / Entry exams required
1999	0 / (KUT+VU)	15244	93	93 / more than 93
2000	0 / 5	14200	181	87 / 40
2001	10 / 7	16000 expected	230	40 / 25
2002	(15+7) / 22 expected	20000 expected	?	?

Initially having ten associated members LUCA is intended to grow in the nearest future (there are 7 active members now, 15 Universities and 7 Colleges in Lithuania in total). A number of study programs offered might look quite large still the study programs are treated as different even if they differ only in a study form (full- time, part-time, etc.). Other important aspect is the fact that a number of entrance exams is decreasing: there is presented a dynamics of the ratio "Study programs " / "Entry exams required" in the Table 1.

2 Examples of LUCA's annual workflow

LUCA supports workflow models suitable for its members. In a Table 2 we provide two models used recently. Those models typically involve Local university admission offices, university and faculty administrators, other local authorities, lecturers, IT professionals, and possibly third parties such as LITNET or NEC companies. What is interesting, those models significantly differ from year to year, and either Software and Data Base to support that workflow is made freely available under authorization, along with many other resources to help LUCA's members. The only way to computerize such admission processes accordingly is advanced admission functions prototyping with the following its amendments foreseen from the beginning of real usage of the system. Another point to emphasize that "Application acceptance" period in LUCA' s admission processes usually overlaps with local universities activities on admission (limited local admission to part-time studies etc.).

2000/2001 year	Start	End	dur.
Legalization	10.2	1.17	14 w
Computerization	12.1	9.1	36 w
Appl. Acceptance	3.6	7.3	16 w
Registration	6.12	7.3	3 w
Examination	6.18	6.30	2 w
Scoring up		7.4	1 d
Selection		7.9	1 d
Reception	7.9	7.16	1 w
Fixation		7.17	1 d
Local activities	3.6	9.1	25 w

1999/2000 year	Start	End	dur.
Legalization	10.2	1.5	13 w
Computerization	12.1	9.1	36 w
Appl. Acceptance	6.6	7.11	5 w
Registration	6.6	7.11	5 w
Examination	7.13	7.21	1 w
Scoring up		7.24	1 d
Selection		7.26	1 d
Reception	7.26	8.1	1 w
Fixation		8.3	1 d
Local activities	2.1	9.1	28 w

Table 2: Timeline of 1999-2001 Admission processes

On the other hand, we can see a revival of some local university activities after the fixation: up to 30% of applications are dissatisfied at all, some of invitations has a cold reception etc. LUCA is solicituous to please universities while providing them with Common Admission data and services for local admission needs.

3 Information flow model

Our IS is absolutely based on Internet technologies usage and active participation of every university (describing its own study programs, admittance regulations, admission criteria,

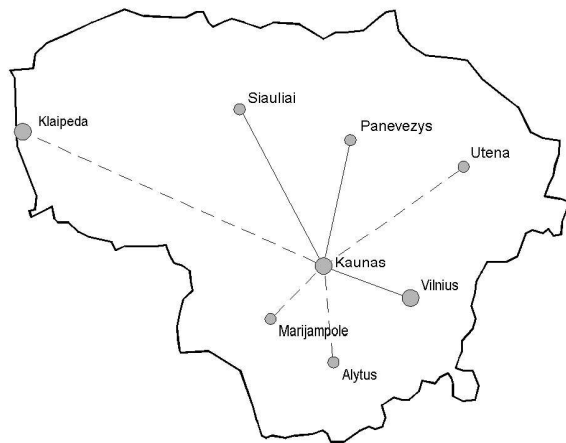user categories and properties, administration of web-services and web- applications, etc.).

Figure 1: LUCA's Application centres

In the admission season of the year 2000 we had 7 Application reception centres located in 4 main Lithuanian cities. Those centres were identified with University admission offices or its branches. Figure 1 represents locations which all belong to the LITNET infrastructure. Dotted lines point at HE institutions that do not belong to LUCA. Staff in reception centres was waiting for applicants and was filling in online forms for the data to be transferred to a central database (in Kaunas). Another main DB (in Vilnius) was supported via replica. Other daily copies of data were produced and sent to LUCA members upon their demand. Replicated data was dedicated for the satisfaction of all IS user information needs.

We tried to look at the picture forthcoming from a subdivision of the whole country into regions surrounding our application centres. It is really a pleasure to state that our customers have trust in our system and services allowing applications go through the nearest centre. Only a small amount of applications from other regions was transferred via two major cities showing the traditional draught to centre. Herewith we can see some "technologist - humanitarian " exchange between Kaunas and Vilnius.

4   Workflow diagrams

Having about 200 users allowed to access our IS via authorization and authentification procedure we tried to be in the track of such users activity and provide you with the following diagrams.
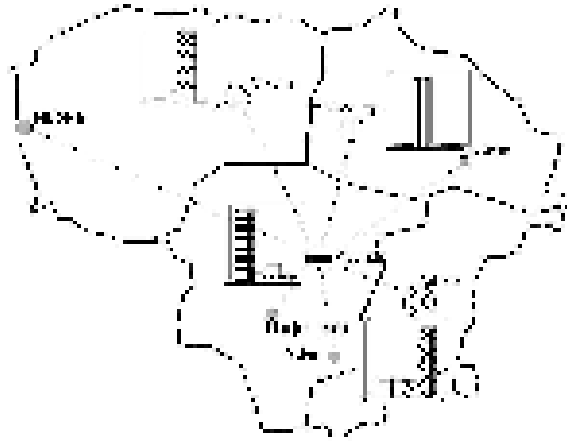
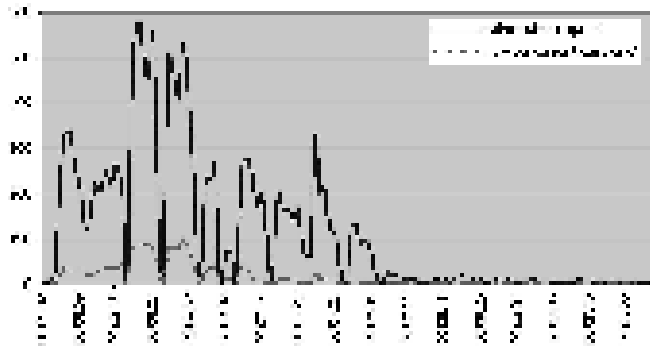Figure 2: Activity of LUCA's Application centres

Figure 3: Day-to day authorized users activity

This chart is produced on the regular base of "application calls" when dynamic Web pages come into being. Talking in terms of the "select" statement usage frequency all the quantities given should be 3-4 times increased at least.

5 Conclusion

It could be noted that since the LUCA's activity area is quite new in Lithuania, and since our IS and services are still largely prototypes, there is a considerable room for the evolution. This actually fits in well with the development of LieMSIS, which is naturally based on local campuses IS, and the implementation of services by different institutions.

Another benefit of Common Admission is its influence on assisting universities in a collaborative work: all universities have their local admission processes overlapping in time
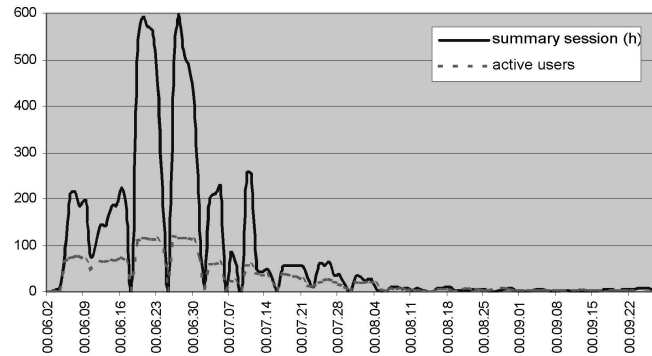
Figure 4: Maximum number of active users and its summary session duration (day- to-day)
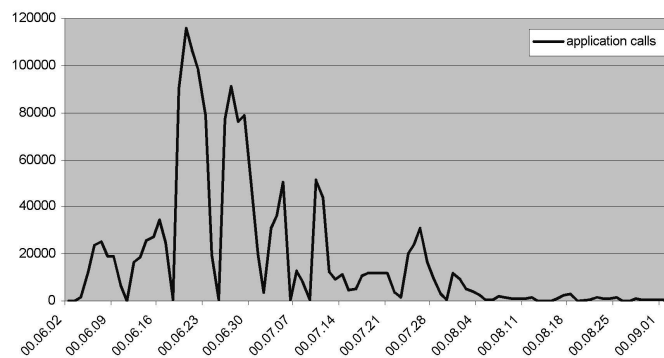

Figure 5: Day-to-day accesses to the Common Admission services

with Common Admission. As those processes are provided with significant time and other university resources, there is an incentive to proceed with LUCA's at the university level. Especially since it ensures some basic level of Common Data Set and services among universities and reduces overall costs.

Taking these motivations into the consideration as well as emphasizing that a number of universities are interested in helping pupils to ensure that LUCA services increase in quality and quantity, it is obvious that there are incentives for the common university collaboration.

Since the LUCA's membership is intended to grow and is going to reach its top in the nearest future it is becoming obvious that while participating in Common Admission Project universities already developed at least a basic infrastructure of the Admission to Lithuanian universities.

Finally, we would like to emphasize the importance of such rapid growth in an internet technology usage by our end users - pupils: moreover we are already prepared to provide them with a wide range of valuable self-catering services.

References

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