



Forit, UAB

Žalgirio str. 114,
LT-09300, Vilnius
Tel. (8 5) 266 1110
E-mail: info@forit.lt

FEASIBILITY STUDY

SUMMARY

Creating the system of analysis and modelling of the culture and art projects and processes in Lithuania (SAMS)

LCC scope of operation.

Lithuanian Council for Culture (hereinafter referred to as LCC) is an institution under the Ministry of Culture of the Republic of Lithuania (hereinafter referred to as MC). The institution was established in order to ensure proper implementation - within the area of their competence - of the State Policy within the managed sectors of the Minister of Culture, excluding the implementation of State Policy that falls under the responsibility of the Lithuanian Film Centre under the MC.

Objectives of the activity:

- ◆ in accordance with culture policy priorities, to enable diversified culture and arts development and dissemination, ensuring rational and reasonable use of allocated funds;
- ◆ to implement culture policy based on competence;
- ◆ to analyse culture and arts processes influencing culture policy.¹

Current LCC level of computerisation.

Currently, LCC employs the following information systems for their operation:

- ◆ Electronic system for management of cultural and artistic projects
- ◆ LCC website <https://www.ltkt.lt/>;
- ◆ LCC website, an archive storing publicly available research and studies on the cultural sector <https://www.kulturostyrimai.lt>.

To this day, the analysis and process monitoring of cultural and artistic projects is performed by LCC and by of different tools. The data required for the performance of analysis and process monitoring is provided by various cultural and artistic institutions by use of various means and formats at their discretion. Processing of data received at different time intervals requires for additional human resources and more time. The data is stored and archived using a decentralized approach, i.e., there is a lack of a uniform system which is capable of storing and archiving data received from multiple data sources (databases, information systems, registers, etc.). Microsoft Excel software is employed for processing of the majority of received data by creating various tables and charts.

Description of the Project implementation.

LCC is implementing the Project “Development of a modelling system for process monitoring and analysis of cultural and artistic projects” (hereinafter referred to as the Project). During the Project implementation period, LCC aims to develop a modelling system which is capable of process monitoring and analysis of cultural and artistic projects (hereinafter referred to as SAMS) during the Project implementation. The aforementioned system will be used for ensuring of proper monitoring of both cultural sector and implementation processes of cultural and artistic projects, gathering and storing of data on the processes of cultural and artistic projects, as well as processing of the aforementioned data for the evaluation of the results of the cultural policy and the investments towards the culture.

The development of SAMS shall be divided in to two phases. Aim of the first phase: to prepare an indicator matrix allowing for the description of the entirety of the cultural sector and development tendencies, as well as the results of the LCC Project funding. The aforementioned indicators shall be used as the basis for the implementation of the second phase during which the access towards various data sources shall be developed.

¹ <https://www.ltkt.lt/en/about-us>

Aim of the second phase: to develop a coherent system for the process monitoring and analysis of cultural and artistic projects by streamlining and increasing the efficiency of the processes for submission and gathering of data.

Project task: to develop SAMS and implement the functionality for submitting, process monitoring, analysis and gathering of data on the implementation processes of cultural activity, as well as data on the activities of cultural and artistic projects.

The implemented analytical innovations within the processes of cultural and artistic projects would allow for greater flexibility towards the specialists, researchers and artists employed within the cultural and artistic sectors. Evaluation criteria and indicators within the cultural and artistic sectors would allow for greater flexibility towards the decision makers in looking for innovative solutions in order to increase the efficiency of cultural and artistic processes, as well as operation of the institutions.

Problems for which the Project has been drafted.

The main problem to be solved by the drawn up project: inefficient gathering, processing and analysis of data and information on cultural processes and activities of the cultural and artistic projects. Currently, there is a lack of a centralized and modern tool for gathering, processing and publishing of data employed on a national level allowing for the performance of a more in-depth analysis and ensuring that the indicators would be received on time and of required quality. Problems to be solved following the implementation of the project:

- ◆ Inefficient gathering, processing and analysis of data and information on cultural processes and activities of the cultural and artistic projects.
- ◆ Functionality of the LCC portal not meeting the requirements for the publication of data.
- ◆ Inefficient activity processes of LCC employees.

Project target groups.

The following target groups shall benefit following the implementation of the Project:

- ◆ LCC employees: persons employed at LCC and performing processes on gathering and analysing of data, drawing up and submitting reports.
- ◆ Employees of other institutions and decision makers: persons employed at other institutions and submitting data towards LCC, receiving reports and data within other formats from LCC, decision makers adopting decisions regarding the formation of the cultural policy within the Republic of Lithuania.
- ◆ Society: Every person within the Republic of Lithuania and abroad.

Direct and indirect benefit of the Project.

Direct benefit ²	Indirect benefit ³
Reduction of the number of manually performed processes, optimization and automation of processes for gathering and processing of data in order to reduce the administrative burden for specialists and employees working with data, as well as reduction of mistakes occurring due to human-error.	Increased justification and focus for the formation of strategic objectives and programmes aimed towards state and individual sectors, increased objectivity for defining and prioritizing activities to be performed by the institutions within the cultural sector by use of changing cultural indicators that will be of better

²Direct benefit shall be understood as a benefit towards the persons employed within the LCC and other institutions, as well as decision makers.

³Indirect benefit shall be understood as a benefit towards the society.

Direct benefit ²	Indirect benefit ³
	quality, published in a more comprehensive and easy to understand manner.
The possibility to allow for independent and diverse analysis of the cultural data to be performed both at the level of their institution and the Republic of Lithuania shall allow for the increase of qualification of the employees employed within the external institutions.	The possibility to easily access the tools within the electronic space for monitoring of results (indicators) and their change on the performance of the operation of the institution, shall allow for more objective decision making in order to optimize the operation of the institution by use of the aforementioned results (indicators).
Saving of costs reducing paper document use, storage and maintenance.	
On time submission of data (reduction in delays) by use of automated reminders for data providers and streamlined IT tool for ensuring of efficient communication.	
Easy and fast repeat use of data by use of open data format and creating added value towards interested parties by enabling the aforementioned parties the possibility to provide their input on cultural sector.	
Increased employee satisfaction on performed activities, increased employee efficiency due to elimination of technical processes.	

Digitised analysis of the operation processes.

Having regards to the aims of the Project and the needs of the LCC, a digital tool for process monitoring and analysis of the cultural and artistic projects shall be created during the Project implementation phase.

Change	Description	Current situation	Significance of the change
Development of the modelling system for process monitoring and analysis of the cultural and artistic projects (SAMS)	Development of SAMS that would allow for efficient gathering, processing and storing of data for process monitoring and analysis of cultural and artistic projects. Findings of the performed analyses shall be publicly available and easy to access for the entire society.	To this day, the activities for process monitoring and analysis of cultural and artistic projects has been inefficient and required a lot of time for gathering of the required data. Moreover, the gathered data is not stored at a centralised archive; therefore, there is a lack of streamlined tools for the performance of the required analysis and processing of the aforementioned data. The aforementioned technical limitations also inhibit the processes for the publication of the results towards the society.	Storing the gathered data within a centralised archive would allow the employees of LCC to efficiently perform process monitoring and analysis of projects. The indicators required for the performance of activities shall be gathered using simple and reasonable means that would shorten the time required for entering of the aforementioned data. SAMS developed during the Project implementation phase shall broaden the possibilities for the performance of analysis and means for submission of received results. Moreover, the aforementioned results shall be publicised towards the society using modern and more attractive means.

Examined alternatives.

The following alternatives shall be examined in the feasibility study:

- ◆ Alternative No. 1 “Status quo”: the development of the modelling system for process monitoring and analysis system is not required.
- ◆ Alternative No. 2 “Implementation of the Project and development of SAMS” (Hereinafter referred to as Alternative No. 2): development of the new information system (SAMS) for the LCC employees performing process monitoring and analysis of the cultural and artistic project processes is required. The present alternative shall highlight means for gathering the majority of data using structured data forms and enable the import of the aforementioned forms in to SAMS.
- ◆ Alternative No. 3 “Implementation of the Project and development of SAMS and a separate data portal” (Hereinafter referred to as the Alternative No. 3): development of the new information system (SAMS) for the LCC employees performing process monitoring and analysis of the cultural and artistic projects is required. The present alternative is identical to Alternative No. 2 except a sole difference: the basis for the gathering and storing of data would be achieved by the use of an external portal allowing for all of the employees within responsible authorities for the access towards the portal with the ability to submit the required data.
- ◆ Alternative No. 4 “Renting of intangible assets”: achievement of the Project aim by renting intangible assets.

Having regards to the fact that in case of Alternative No. 1, the Project implementation would not be possible, the identified problems would not be resolved and the efficiency of the activities performed by LCC would remain at the same level or would increase at a very slow pace, Alternative No. 1 “Status quo” was not subject to consideration during the performance of the financial and economic analysis.

During the drawing up of the feasibility study, the possibility for renting information technology solutions that would allow for the functionality to perform process monitoring and analysis from service providers operating within the market was not identified; therefore, Alternative No. 4 was not subject to further considerations or comparisons with other alternatives.

Positives (strengths) of Alternative No. 2:

1. Development of a single and unified technological system SAMS allowing for gathering and storing of data required for further process monitoring and analysis.
2. The administration of structured forms to be used for gathering and storing of data shall be streamlined and shall provide for the possibility for flexible editing of the aforementioned data upon the change of needs and shall not require for the creation of additional forms.
3. In case of change of needs regarding the gathered data sets, the time required for editing of data within the system shall be shorter.
4. Having regards to the fact that the need for additional data channels, administration and supervision of the aforementioned channels shall not be required, the implementation of the Project shall be streamlined and require for less funds.

Negatives (weaknesses) of Alternative No. 2:

1. Entry of data within the system requires for additional time due to the need to import of the receipt data.

Positives (strengths) of Alternative No. 3 “Implementation of the Project and development of SAMS and a separate data portal”:

1. More efficient means for data gathering by allowing the employees of LCC to enter data without importing the structured data forms that have been filed in by external institutions within the system. The initial investment would be much higher, but would save the time of the employees of LCC in the future by eliminating the need to import structured data forms within the system.

Negatives (weaknesses) of Alternative No. 3 “Implementation of the Project and development of SAMS and a separate data portal”:

1. Administration and supervision of the external portal for entering of the required data by the employees of external institutions requires for appropriate skills and competence. In case of breakdown of the portal, difficulties for delivery of the required data would arise.
2. Legal difficulties arising during the provision of data by the external institutions by use of an information system operated by another institution (LCC).
3. Development of an external portal as a main channel for gathering data would make the implementation of the Project more difficult and would require for additional funds.

Results of the financial analysis.

The following table highlights the summary of investments needed for each alternative based of the type of the investment costs.

Required investment for the implementation of the Project, EUR		Alternative No. 2	Alternative No. 3
1.	Drawing up of the technical specifications for the development and installation of SAMS	11 979,00	11 979,00
2.	Technical supervision services for the development of SAMS	19 360,00	19 360,00
3.	Services for drawing up of the technical description of SAMS for the validation of the system within the legal framework.	3 025,00	3 025,00
4.	Services for the development and installation of SAMS	193 600,00	229 900,00
5.	Salary	28 294,03	28 294,03
6.	Direct costs, in total	256 258,03	292 558,03
7.	Indirect costs (19 percent of direct costs)	48 689,03	55 586,03
IN TOTAL		304 947,05	348 144,05

Operation of the acquired and developed assets during the Project implementation period shall be subject to additional operation costs required for the maintenance and upkeep of the software in the future. Additional costs shall be counted following the end of the 3-year warranty period: on average, an annual cost of 9 % of the initial price for the development and installation of the software.

Operating costs	Alternative No. 2	Alternative No. 3
Average expenses for annual maintenance, upkeep and development. EUR/per year.	17 424	20 691

In terms of financial indicator admissibility, both alternatives are financially viable; however, the financial indicators for investments for Alternative No. 2 are more favourable. It should also be noted that neither of the alternatives might be considered as financially viable.

Results of the economic and social analysis.

Applied effects for the performance of the analysis:

- ◆ Reducing the time needed for users of SAMS for entering of data by use of a streamlined software (working time value). Reduction of the average time taken to complete a single operation. Following the completion of the Project, the time taken for data gathering, processing, converting to required formats, preparation and opening of metadata shall be reduced. The above shall be achieved by developing of streamlined and flexible tools during the Project implementation phase.
- ◆ Reduction of time and costs by allowing for access to the electronic contents (working time value). The above value is comprised by the reduction of the time required to access data. The publication of the data on the LCC portal shall save time of the representatives of the society, researchers and decision makers that it would have taken them for searching, receipt of data, processing, adoption and preparation for the performance of the analysis.

The following picture highlights the economic benefits generated by the Project. The said benefits are identical for both alternatives.

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
EUR	49 339	50 674	52 553	54 481	56 508	58 584	60 760	62 984	65 308	67 681	70 202	72 773	75 443

The difference between the level of economic cost of alternatives: average economic cost for a period of 12 months would be higher by selecting the Alternative No. 3. The difference between the level of economic cost also determines the difference between the alternatives by comparing their net economic benefits which is equal to the difference between the accumulated economic benefit (which is identical) and the level of economic level cost (which is different). All of the economic effect indicators of Alternative No. 2 are more favourable in comparison to the indicators of Alternative No. 3.

Selected alternative.

Having regards to the aforementioned justification and performance of the financial and economic analysis for selecting the right alternative, Alternative No. 2 has been selected for the implementation of the Project: to develop a new information system (SAMS) enabling the employees of LCC to perform process monitoring and analysis of the cultural and artistic projects based on the gathering and storing of data in structured forms for importing the aforementioned data within SAMS for future use.

Tasks of Alternative No. 2:

- ◆ To acquire Business intelligence (Hereinafter referred to as BI) software for entering/import/receipt of data and allowing for the development of the access for unlimited data sources (databases, data sets, API, etc.) in order to process and analyse the gathered data (formation of tables, charts, reports and review of data using different cross-sectional review methods, etc.) and publication of the drawn up information (reports, charts, etc.). (Preliminary number of concurrent BI software users: 10);
- ◆ To develop and prepare a database for storing of SAMS data;
- ◆ To process data structures, dimensions metrics by use of the BI software;

- ◆ To develop structured forms for entering of data indicators and future import of the aforementioned data within the BI software (preliminary number of structured forms: 50, including the possibility to edit the created forms and create an unlimited number of new forms);
- ◆ To develop the required interface, including internal and external information systems, registers and databases for the receipt of data indicators (preliminary number of integrated data sources: up to 10, including the possibility of adding an unlimited number of connected data sources in the future);
- ◆ To develop harmonised and unified LCC report forms by use of the BI software (preliminary number of reports: 10, including the possibility for editing the created reports and adding an unlimited number of new reports);
- ◆ To adapt the selected website of LCC for publication of reports, charts, tables and other information drafted within SAMS;
- ◆ To implement SAMS within the infrastructure specified/defined by LCC.

Key functions of the system:

SAMS functionality	SAMS functions
Data gathering functions	<ul style="list-style-type: none"> ◆ Manual entry of data; ◆ Import of structured data forms; ◆ Receipt of data using integrated data sources.
Data gathering functions	<ul style="list-style-type: none"> ◆ Review of entered and received data; ◆ Processing and managing of data.
Report and data analysis functions	<ul style="list-style-type: none"> ◆ Review of data by use of different means; ◆ Administration of indicators, metrics and dimensions; ◆ Formation of drawn up reports; ◆ Creation and managing of required reports.
Data publication functions	<ul style="list-style-type: none"> ◆ Publication of the drawn up information towards external users; ◆ Sending of reports to target recipients.

Overall planned budget for the implementation of the Project: 304 947,05 EUR.

Project implementation duration: 25 months.

Conclusions.

Having regards to the Project aims and tasks, as well as having regards to the following key problems: inefficient gathering, processing and analysis of data on cultural processes and activities of the cultural and artistic projects, LCC data portal and functions not meeting the criteria for data publication, inefficient operation processes of LCC employees, the proposed alternative for the implementation of the Project shall be the Alternative No. 2.

The above alternative foresees for the development of a new information system (SAMS) allowing the employees of LCC to perform process monitoring and analysis of cultural and artistic projects. The implementation of the above alternative would allow for the development of the required software tools (a unified database, analytical tool, etc.) and streamlining of operational processes of LCT for the performance of process monitoring and analysis.

The completion of the Project shall not only have a direct economic benefit measured during the evaluation of the social economic effect, but would also allow the society to benefit from benefits that are not measured within the market, i.e., more justifiably and targeted strategic goals and programmes of the state and separate sectors, more objectively defined priorities of the institutions operating within the cultural sector and increase in the activities performed by the establishments within the cultural sector.

