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## THE SYSTEM OF EVALUATION OF USER DEMANDS IN STATISTICS LITHUANIA

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## I. INTRODUCTION

The Strategy of Statistics Lithuania 2008–2012 emphasises the process-oriented management structure and customer relations. Among its key objectives the Strategy foresaw development of the system for evaluation and follow-up of individual user needs and adjustments to be made to divert to rendering of more individual services.

To monitor changes in customer satisfaction, better understand, serve and meet individual user needs as well as develop and offer targeted products and services, two characteristics have been identified, worked out and made operational: Customer satisfaction level and Customer satisfaction index. The methodology for calculation of the above characteristics was approved in January 2008 and is based on provisions of the System of Customer satisfaction surveys. It permitted to monitor changes in customer satisfaction as the survey results are comparable.

# II. CUSTOMER-RELATED PROJECTS IN STATISTICS LITHUANIA

## A. The System of Customer satisfaction surveys in Statistics Lithuania

#### (a) How we approached it?

The need to meet user demands and follow trends made Statistics Lithuania (SL) resort to customer satisfaction surveys, analysis of results and improvement of products and services in 1999. Initially such surveys were irregular, approached some specific point or customer group, organised by volunteering employees of Statistics Lithuania, with a few questions posed, not covering the country, its population, etc. and thus, incomparable in terms of methodology, time, user group and results. This lead to just rough understanding of trends, while no deeper analysis of individual needs or major improvement activities were possible.

In more recent years, with the new dissemination policy turning topical in 2005, the basis of which was availability of statistical information free on the web, irregularity and general nature of surveys as well as ad-hoc questions hindered the structural and timely coping with emerging user demands and appearing new tools to serve the customers.

Even more importance to user demands and their feedback was attributed when introducing the Total Quality Management (TQM) system and analysing principles embedded in the European Statistics Code of Practice (CoP).

The emerging challenges as well as listed drawbacks evolved into targeting at reorganisation and advancement of the dissemination system and more customer-oriented culture in Statistics Lithuania. Thus, Customer satisfaction surveys were treated as an effective means to better respond to customer needs and improve quality of products and services as well as exploit the System as a marketing and statistical literacy raising tool. To this end, customer and dissemination related concepts were embedded in the Strategy of SL 2005–2007.

The Strategy of Statistics Lithuania 2005–2007 stated, that SL committed itself to "…improve and develop provision of information services and satisfy the user needs for statistical information". The key objective was to reorganise and further advance the uniform statistical information dissemination and promotion system, taking into account ever-changing needs of national and international users.

## (b) General description of the system

Therefore, to hit the target, in 2006 Statistics Lithuania documented procedures for conducting Customer satisfaction surveys according to the TQM provisions as well as issues of the national interest and defined the System of Customer satisfaction surveys. This enabled objectivity of replies, more detailed analysis of target user groups and the survey coverage based on sampling principles.

All surveys have been planned and started on a regular basis.

- All surveys follow a **uniform structure, approach and described procedure** (1. Survey objective; 2. User-group surveyed; 3. Periodicity; 4. Survey programme, data collection means and form; 5. Anticipated results and their application; 6. Feedback with users).
- All surveys maintain a regular block of uniform questions (covering 4 principles of the CoP): clarity, sufficiency, reliability, relevance and of national interest (awareness and quality-related) as well as ad-hoc questions relevant to a specific surveyed target group or opinion on topical emerging events.
- Regular target user groups have been identified (1. Students and school children; 2. R&D community; 3. Media; 4. Politicians; 5. Business community (respondents); 6. International organisations; 7. Embassies; 8. Public administration institutions (inc. municipalities); 9. NGOs; 10. General public) and surveyed.

#### (c) Web-related surveys

The System encompasses **three web-related user surveys** (1. Web accessibility – monthly, quarterly; 2. Users registered to the Alert-me web services – monthly, quarterly; 3. Opinion survey of web visitors – monthly), the objective of which is to define and follow web visitors, information flows, top pages, themes and modules, extractions from databases and e. publications, services requested, prompt opinion on developments and new services offered, etc.

The importance of the web-related user surveys reached its peak in 2005–2006, when the free web dissemination policy was introduced; the new website of Statistics Lithuania was developed and launched. Later on, major improvements followed from the results of the monthly opinion surveys of web visitors. However, meanwhile the interest of users to such surveys has been diminishing and

the key information on web visitors and their breakdown is extracted from the Web visitors' engine, specially programmed for the Website of Statistics Lithuania to enable thorough analysis of customer behaviour. On the other hand, although the number of respondents to the monthly opinion survey of web visitors forms only a very small share of unique visitors per month, we consider this feedback as opinions expressed by the most interested and active web users.

In addition to that, due to swift changes in web-based tools, the web services are frequently advanced, so the practice of ad-hoc focus group testing new solutions has been introduced. This aids in checking the impact of improvements on web-friendliness, clarity and handiness for individual user groups, therefore, it is reasonable to incorporate them into the uniform System of Customer satisfaction surveys.

## (d) Outsourced Public opinion polls

Web-related surveys are followed by **six traditional surveys, two** of which are **outsourced** (1. General public opinion poll on Image perception (annual); 2. Specialised selected target user group (2 surveys per year on rotation, repeated after 2-3 years for the same group). The objective of the 1<sup>st</sup> one is to be aware of the opinion of the Lithuanian public at large on Statistics Lithuania Image perception and importance of statistics for the population. The objective of the 2<sup>nd</sup> survey is to identify opinions of specialised user groups on products and services offered by Statistics Lithuania, more individual needs of these target audiences as well as to get the notion of their future expectations.

To stimulate more objective and open replies, obtain full territorial coverage, exploit professional advice of opinion poll companies the annual General public opinion poll on Image perception and specially selected target user group surveys have been outsourced and carried out by Public opinion poll companies, selected by means of public tender.

During the strategic period of 2005–2007, three annual General public opinion polls on Image perception were run, 1 Public administration survey (inc. municipalities) held in 2005, 1 R&D community survey organised in 2006, 1 Secondary school survey and 1 Business community held in 2007.

The importance of both types of outsourced surveys has been significantly growing, pointing to the need to filter the respondents to those actually using statistics.

As not all target user groups have been approached yet, to grasp an objective opinion and expectations of the media, an outsourced Media opinion survey has been launched to be carried out in 3Q 2008. According to the set system, the regular annual General public opinion poll on Image perception was continued in July 2008 and a repeated Public administration (inc. municipalities) survey is due in 4Q 2008.

Introduction of one more principle "Usability" has been considered and tested in the July 2008 General visibility and image opinion poll. Three additional questions have been formulated to observe the inter-relationship among frequency of use of statistics, its usefulness in private life and decisions taken in job-related activities.

The annual General public opinion poll on Image perception as compared to the previous practice will more closely concentrate on and filter opinions of the population actually using statistics as depending on their opinion Statistics Lithuania can envisage improvements of products and services, monitor their understanding and correct interpretation of statistics for decision-making, organise promotional and training events.

It should be noted that not only Statistics Lithuania benefited from user ideas expressed in the outsourced Customer satisfaction surveys, but also the target groups surveyed themselves, as the level of co-operation with them expanded and more pointed services have been offered:

- Public administration knows about the scope of services they can expect, are trained to use databases of Statistics Lithuania and Eurostat;
- R&D community stimulated primary data usage and expression of opinion on the Population census objectives and questions; co-operation to be continued for the Agro census;
- Secondary school teachers and students learnt about the survey process, key definitions, can find data on the web, draw graphs and tables and use for their projects;
- Business community gets an active feedback from the subject matter divisions and is able to extract data from the web for analysis and decision-making.

## (e) Routine surveys

The remaining **four surveys** are carried out by employees of Statistics Lithuania (1. Eurostat data users (ESUS) (quarterly); 2. Visitors at the Library-bookshop and Visitors' corners in Regional statistical offices (quarterly); 3. Incoming user-requests (quarterly); 4. Opinion on statistical publications (annual)).

Generalising all of the routine surveys, the objective is to become aware of customer opinion about products and services, their quality and expectations met or not satisfied. This covers Eurostat products and services, services rendered by the Library-bookshop, Visitors' corners in Regional statistical offices, and requests placed by users via different media.

Some of the surveys are diminishing in importance (e.g. due to the falling number of customers coming to the Library or Visitors' corners in regional offices) and some of the surveys will be carried out automatically when the CRM system turns fully operational and this information will be extracted directly from the system.

The growing or diminishing importance of some surveys encompassed by the System and traced over the years leads to consideration about purification of target audiences concentrating efforts on two very diverse user blocks: 1. persons not using statistics – how to stimulate the usage by means of promotion of services and statistical literacy, and 2. target groups using statistics – how to offer them more individualised services, improve quality of products and services and encourage them to correctly interpret and use statistics for decision-making.

Resorting to the complex of all the mentioned Customer satisfaction surveys, visibility of SL activities, usability and access to data as well as confidence in statistics has grown. Through regular Customer satisfaction surveys user groups have been approached and guided to use statistics. Thus, Customer satisfaction surveys are also exploited as a means to improve quality of products and services as well as a marketing and statistical literacy raising tool.

#### B. Development of statistical products and services as a result of Customer satisfaction surveys

Key improvements of the **2005–2007 strategic period** stemming from the survey results dealt with:

 Products and services developed by Statistics Lithuania have been standardised, rules for the entire system created, approved, followed and monitored;

- Customer and dissemination related processes and flows have been defined and mapped to meet the ISO 1901:2001 standard requirements;
- Provisions of the CoP have been analysed, taken into consideration, tested and constantly improved;
- Statistics Lithuania website has been revamped with a more dynamic user interface, meeting psychological aspects of users navigating websites. Free .PDF publications have been made accessible on the web. Registration to Alert-me services for Publications and Press Releases has been programmed, the RSS function for presentation of topical News Releases launched, additional modules relevant to subject matter statistics leading to metadata, methodologies, quality reports, EU statistics, etc. developed and introduced. The website has turned disabled-friendly, an Opinion poll module has been introduced to receive prompt user feedback, an e-shop developed for tailor-made services and paper publications, dynamic infobanners introduced, automatic mailing of News releases via the web made operational. A specialised web site of Eurostat products and services for the national users has been developed and launched. All statistical information is available on the web free of charge, the Output Database was launched with 820 datasets, websites for 5 Regional statistical offices bearing a similar structure and meeting the general requirements set by the Government for the websites of Public administration institutions have been programmed and launched:
- A dynamic Advance Release calendar incorporating News releases, Pre-defined tables, indicators in the DB and Publications has been introduced permitting filtering by topic, type of release and period with the actual link to a relevant product has been programmed. Pre-conditions have been formed for all new information to be released daily at 11 a. m.;
- Statistical literacy project has been organised, gaps in understanding and interpreting statistics identified, schools approached, targeted products developed and etc.

The user-oriented culture has continued in the current **Strategy of Statistics Lithuania 2008–2012**. The **key objectives** embedded in it are:

- 1. To develop the system for evaluation of individual user needs and adjust it for the development of individual services;
- 2. To ensure that users can access all official statistics on the basis of a single contact point principle, i.e. by means of linking statistical information produced by other institutions of Lithuania into one website (Portal);
- 3. To systematically shorten statistical information preparation and release time;
- 4. Through securing confidentiality to provide conditions for scientists and researchers to use primary data for analyses;
- 5. To expand the circle of statistically literate users, capable of understanding and application of statistics.

With this in view, key blocks of **improvements** of the **2008–2012 strategic period** stimulated by the survey results and **implemented** by September 2008 are:

- 1. The structure of the Business management system, a Customer Relationship Management (CRM) module being its integral part, has been analysed, schemes and information flows with users identified, the structure of reports on customers by different breakdowns set;
- 2. A concept of a Portal of official statistics encompassing all official statistical information produced by different institutions has been developed and feasibility analyses started;
- 3. Advancement of web services has continued: more user-friendly .PDF publications offered, the search engine improved to extract information by the key word from .PDF, Excel, Word

and other formats, the advanced web Opinion poll engine with interactive user feedback programmed and available on the web, the generation of Pre-defined tables from the Output Database simultaneously at the Press release time started, the Personal Inflation calculator launched to respond to the topical issue of increasing inflation, the release time for indicators shortened from 23 in 2007 to 22 days in 2008 for monthly, from 59 to 57 days for quarterly and from 212 to 205 days for annual indicators following the reporting period;

- 4. The order and procedures for R&D community to use primary data of statistical surveys for analysis and scientific purposes have been approved;
- 5. The statistical literacy project has been launched together with the development of a specialised web-corner "Statistics for schools", some visualisation and organisation of the system of user trainings started, etc.

## C. The Customer satisfaction index

The Methodology for evaluation of the general Customer satisfaction index (further on referred to as GCSI) and formulas for its calculation were produced and approved in January 2008.

Currently calculation of the general Customer satisfaction index relates to the annual General Public opinion poll on Image perception, which started in 2005 and evaluation of the GCSI is based on its results.

The target group surveyed each year covers approximately 1005 persons aged 18–65, residing in 95 territorial points in all regions of Lithuania, following the usual statistical spread of sociodemographic characteristics of the Lithuanian population. The survey is carried out in July; the method applied is Omnibus, standard interview run by a professional interviewer, who asks five constant questions to estimate changes in customer satisfaction, followed by more questions on quality and other relevant topical issues.

The constant survey questions are formulated to refer to the four CoP principles issues about:

- Relevance;
- Sufficiency;
- Timeliness and punctuality;
- Accessibility and clarity, and
- One question of a national interest, which entails both awareness, visibility and image perception, is also included and used for the calculation of the GCSI.

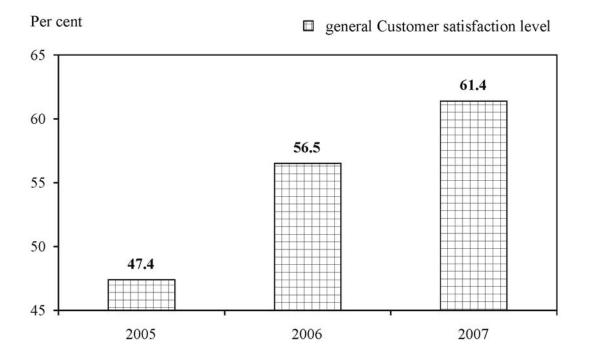
The underlying logic for the evaluation of the general Customer satisfaction index is as follows:

First of all, to calculate the index for each question, the Customer satisfaction level for each question is calculated.

When calculating the Customer satisfaction level of a reply to each question symmetric ranks of replies are used (positive and negative), and their weights are set from the survey results.

Then, the general Customer satisfaction level (the **weighted average** of the Customer satisfaction **level** for each question) is calculated. Weights of the criteria are set on an expert (a special group in Statistics Lithuania) basis – a higher weight is attributed to the criteria which is the most important

from the point of view of experts. Results of the calculation of the general Customer satisfaction level for the years 2005–2007 are presented in the diagram below.



Finally, the general Customer satisfaction index is calculated. It is equal to the **weighted average** of **indices** for every question. The same weights here are used as to calculate the general Customer satisfaction level. Since the beginning of the General public opinion poll in 2005, the GCSI has shown such changes: in 2006 compared to 2005 - 1.082 and in 2007 as compared to 2006 - 1.122. This fact demonstrates that customer satisfaction about Statistics Lithuania products and services has been growing.

As the trade-offs between such CoP characteristics as Accuracy vs. Timeliness, Accessibility vs. Timeliness or Relevance vs. Accuracy are obvious, future Customer satisfaction surveys will introduce Customers' ranking of the characteristics, approached in the surveys, to aid in more thorough calculation of weights.

Starting with 2008, the same approach and formulas will be applied when calculating general Customer satisfaction indices for specialised target user groups, later using the results of repeated relevant surveys to monitor changes in user behaviour and satisfaction (e. g. in 4Q 2008 – a repeated survey of Public administration is due).

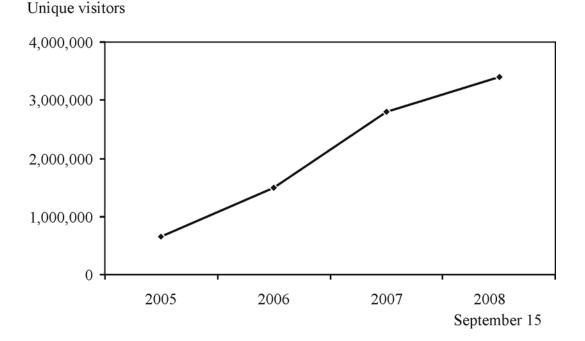
#### D. Monitoring of customer management and dissemination activities

To implement the Strategic provisions, Statistics Lithuania has not only to resort to tools enabling investigation of customer opinions and formulas for their evaluation, but also to undertake certain obligations on improvements in work with users of statistics.

Therefore, monitoring and performance criteria have been set and are based both on the CoP principles and national needs. The examples of the performance criteria are:

- Effect (e. g. Website average visitors per day);
- Result (e. g. Information spread and coverage by key national and regional press; Terms for submitting statistical information to users (Monthly information by Annual Press release calendar, Quarterly information by Annual Press release calendar, Annual Calendar of release of indictors on the Output Database); Average response time to incoming user-requests;
- **Product** (e. g. Datasets of statistical information in DB; Number of press releases by statistical domain; Number of publications by statistical domain, Methodology on the web brief and detailed; Quality reports on the web, etc.), and
- Additional sub-criteria for national needs (e. g. replies to customer requests in both headquarters of Statistics Lithuania and Regional offices per year by reception mode, type of user, statistical domain, visitors in the Library-bookshop and User corners in regional offices, etc.).

All the above have been embedded in the Strategy of Statistics Lithuania and aid in tracing developments is user-related performance, e.g. changes in web usability since the website has been revamped (2005), see below.



## Changes in usability of the website of Statistics Lithuania

#### **III. FUTURE DEVELOPMENTS**

As already mentioned, the **Strategy of Statistics Lithuania 2008–2012** envisages such **key** customer, communication and dissemination related **blocks of activities**:

1. To introduce the CRM system and make it operational; thus, efficiency of monitoring customers and analysis of their needs increased; to shorten replies to user requests to three

days on average; to increase the Customer satisfaction index to 10 percentage points by 2012; to start and follow calculation of Customer satisfaction index for specialised user groups; to develop and offer users more individualised products and services;

- 2. To create the Portal of official statistics, linking all official statistics produced by other institutions of Lithuanian into one website;
- 3. To release monthly information on average no later than 20 days, quarterly no later than 55 days and annual no later than 195 days following the reporting period; to increase annual media coverage cases to over 5000; to expand DB to 950 datasets;
- 4. To improve conditions for users of depersonalised primary data and start closer co-operation with R&D community;
- 5. To introduce structured statistical literacy activities for all user groups, etc.

Internal procedures of Statistics Lithuania foresee analysis of effects of the Strategy implementation on Customer satisfaction and usability of statistics and permit changes as well as introduction of novelties depending on topicality of issues, which are generated and proposed by customers, active in expressing their opinions and rendering feedback on products, services and operational culture of Statistics Lithuania.