MSB Online Mapping Program

# Measuring Success

There are a couple of different angles to get at measuring success of a project. This documents summarizes the different ways an Online Mapping Program project should be measured for success.

# Internal Metrics

This type of measuring for success is already implemented by IT. Regardless of the hosting option chosen for the data service or web application there is analytic software installed on the servers to track metrics such as number of visits to the application, time spent at the site, and data response times. When a new application is created the analytic software will recognize it, and the data layers it references, and begins tracking metrics on usage.

These metrics are important because they can be used to report on application use and hardware performance. Currently IT is using Geocortex Analytics for this monitoring. In addition, as part of the Online Mapping Program, other options and/or additions are being researched and considered for inclusion in the internal metrics logging toolbox for MSB.

**System Monitoring Tools**

[Geocortex Analytics](http://www.geocortex.com/products/geocortex-analytics/) – currently in use

[System Test by Esri Professional Services](http://www.arcgis.com/home/item.html?id=e8bac3559fd64352b799b6adf5721d81)

[Esri System Monitoring](https://systemmonitoring-emcs.esri.com/)

[Vestra GeoSystems Monitor Enterprise](http://www.vestra.com/gis/products/geosystems-monitor/) and [Vestra GeoSystems Monitor for ArcGIS Online](http://www.vestra.com/geosystems-monitor-arcgis-online)

Metrics obtained in this manner can be requested of IT. In addition, if there is a problem with high usage or slow performance IT will notify the analyst on the project.

# Customer Defined Metrics

The requirements gathering process was developed to include questions about what defines project success from the customer perspective. I.e., how does the customer see success for this project? For example, for the recent trash web application, the customer is interested in measuring tonnage of garbage collected. Customer measures of success may include quantifiable metrics but most likely will be more qualitative in nature. Qualitative data is descriptive and not numerical – it can be observed but not measured. As it pertains to the Online Mapping Program it includes the answers to the questionnaires and customer surveys. Quantitative data on the other hand is numeric and can be measured this includes metrics from system monitoring and number of staff hours.

The following question numbers are references to the questionnaires and are questions that get at customer defined metrics.

#17-18 – Reporting requirements. Depending on what the reporting requirements are, these questions could get at quantitative or qualitative metrics.

#19 – Who the project benefits. The who of this question is qualitative but the number of people the project benefits is a quantitative metric.

#20-21 – Problem resolution/project success. As the customer defines success for them, document their responses. Their answers to the questions may not be a metric in itself but in assessing their answers try to glean measurable outcomes.

#22-23, 42 – Metrics. These questions are trying to get from the customer perspective specific, quantitative metrics.

# Implementing Metrics Gathering and Tracking

GIS Analyst Tracking – For most projects tracking success in the Product Information Document will suffice; there is a section specifically to address documenting measures of success. The metrics gleaned from the questions asked during requirement gathering should be documented there. For more complex projects and/or specific requests for larger scale success measuring a custom documentation method will need to be created that supports the request and would equate to an Excel spreadsheet and/or Word document detailing metrics tracked and progress/change over time.

Customer Tracking – If it is up to the customer to track metrics for the project, facilitate and check in regularly to ensure follow through. Obtain initial results from the customer for inclusion into the Product Information Document.

# Reporting on Success

It is important not to just gather and track project metrics but to also report on your findings. It will be important to report to the customer, your manager and the Web GIS Committee because it is these people that will use that information to decide whether to continue support of the project or not. And how often metrics are reported will depend on the nature of the project. Using the previous trash web application example, the customer was provided with a Dashboard that allows them to see cumulative trash tonnage and sites are cleaned up and reported on so no reporting from the analyst is needed as the customer can access that measure of success themselves. Do expect to provide the customer with a survey at the conclusion of the project – answers to these questions will help to inform how often metrics are reported. For example, are there pre-identified concerns about usage, response times, and interest in seeing number of hits per day?