

Insight-Based Evaluation of a Map-Based Dashboard

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Abstract : Map-based dashboards are used for data exploration every day. The present study used an insight-based methodology for evaluating a map-based dashboard that presents research findings of water management and ecosystem services in the Amazon. In addition to analyzing the insights gained from using the dashboard, the evaluation method was compared to standardized questionnaires and task-based evaluations. The result suggests that the dashboard enabled the participants to gain domain-relevant, complex insights regarding the topic presented. Furthermore, the insight-based analysis highlighted unexpected insights and hypotheses regarding causes and potential adaptation strategies for remediation. Although time- and resource-consuming, the insight-based methodology was shown to have the potential of thoroughly analyzing how end users can utilize map-based dashboards for data exploration and decision making. Finally, the insight-based methodology is argued to evaluate tools in scenarios more similar to real-life usage compared to task-based evaluation methods.

Keywords : visual analytics, dashboard, insight-based evaluation, geographic visualization

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