



Bachelor-, Master- und Doktorandenseminar  
des Instituts für Informatik

## A Novel Web Publishing System Architecture for Statistical Data using Open Source Technologies

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Web applications have become the primary source of information and transactions over the internet, which has led to high demand for continuously evolving within it. The number of statistical research organizations, with focused interests in publishing result data on the web, is increasing rapidly in recent years.

Statistical report publishing is not similar to general web data publishing. Statistical reports are published by either national statistical research institutes or government organizations to use for policy and decision-making purposes, as these reports present important socioeconomic preface. As a result, there has been an important need for publishing and integrating those reports in a transparent and reusable way. In this study, we examine different web publishing frameworks and effects of saturation trends that appear during implementation.

In this thesis, we present a simple architectural model that describes the basic steps and overall model to publish statistical reports coming from tabular data sources or relational databases on the web. Finally, we describe the implementation of such a model and indicate what technologies can be used to enforce it in order to increase productivity and work quality when comparing it with other solutions.

Our proposed architecture is a scalable, adaptable and maintainable concept that can be applied to create modifiable publishing web applications with reusable design components. By offering a flexible model, our architecture reduces the time spent on reasoning over framework options and, in turn, channels the saved time into actual development.

Mittwoch, den 13.01.2016, 16 Uhr s.t. im  
Besprechungsraum 106, IfI, Julius-Albert-Straße 4