Integration of R into Wikis [1]

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Wikis for Teaching.   The creation of the master and bachelor programs will increase the mobility of students within europe. Therefore we can not expect in the masters programs in economics or pedagogics that the statistics knowledge of the students is equivalent to the knowledge of the students which have visited the bachelor program at our faculty.

We utilize the Wiki technology to build up two wikis: (1) StatWiki, a wiki as an interactive statistical dictionary (in german) and (2) TeachWiki, a wiki for final theses in statistics of the students in our statistics lectures (in english). The StatWiki is currently based on Zope, Zwiki and LatexWiki and the TeachWiki is based on the MediaWiki which used for the Wikipedia.

Use of R. For statistics we need to integrate graphics and tables. We decided to utilize the programming language R and developed for Zope and the MediaWiki plug-ins which allow us to integrate R programs. The R plug-in allows to integrate raw R output (e.g. `<R output="text">1:10</R>`), HTML output generated by our `outHTML` command in R for tables and multi-page graphics into the wiki.

Graphical output is written as PostScript to a file and the ImageMagick package is used to convert the graphics to JPEG. Further work may include the utilization of forms to allow for further interactivity in the MediaWiki.

Weblinks
StatWiki - an interactive statistical dictionary for teaching:
    `http://statwiki.wiwi.hu-berlin.de`
TeachWiki - a wiki for final theses in statistics lectures:
    `http://stirner.wiwi.hu-berlin.de/mediawiki/teachwiki`
Zope - a open source content managment system: `http://www.zope.org`
Zwiki - a wiki plugin for Zope: `http://www.zwiki.org`
LatexWiki - a latex plugin for ZWiki: `http://mcelrath.org/Notes/LatexWiki`
MediaWiki - the wiki of the Wikipedia: `http://www.mediawiki.org`
Wikipedia - the free encyclopedia: `http://www.wikipedia.org`