Review of "Automated Map Production Workflows"

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This ESRI-employee produced paper on the history of automation in mapping was a precursor to the release of the arcpy package with ArcGIS 9.4 (later renamed to 10.0). It provided a very brief insight into the history of automation in mapping from the 1950s and some predictions made regarding the future of automation—"[it] is here to stay."

The article points out very clearly that in order to consider automating a workflow, the user must prepare by obtaining an understanding of the data, including "accuracy, … currency, .. copyright, cost, etc." in addition to metadata such as projection, extent, and scale.

The automation workflows introduced by Arc/INFO, requiring knowledge of AML (Arc Macro Language) even to produce simple maps contrasts very strongly with today's implementation of ArcGIS Desktop where users can drag-and-drop data from catalog and produce simple maps with little or training. Integrated tools such as model builder make the job of automation fairly simple and straight-forward for novice users.

As python has matured with the arcpy library, ESRI continues to add great functionality to assist with automation. A recent implementation for the Alaska Gasline Development Corporation has enabled GIS Analysts to post an mxd, receive an analysis, and if it passes quality control, it will automatically be published as a map service. I continue to be impressed by the strides that ESRI makes in providing tools for automation.

Original article available: https://raw.github.com/jtroe/GEOG-590/master/PaperReview/Automated%20Map%20Production%20Workflow.pdf