

MAP MODELLING AS MORE THAN WEIGHTING AND RATING

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Geographic information systems have traditionally used simple forms of map compositing techniques involving simple weighting and cumulative adding of each variable to develop some type of spatial analysis. Too often users of these tools violate the simple mathematical rules of levels of measurement. Users also make unintentional mistakes by disguising these fallacies under the name of decision analysis or some similar technique. As geographic information systems and automated mapping techniques become easier to use, less expensive, and diffused throughout the various professions, potential problems exist. Users with minimal training in both cartography and spatial analysis need education in these disciplines. This paper will review some of the common techniques used by most systems, their potential pitfalls, and ways of overcoming these problems.