

## An Extension of Gitlow's Methodology for Designing Abortion Clinics

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## ommunication

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## An Extension of Gitlow's Methodology for Designing Abortion Clinics

In [1] Gitlow presented a methodology for determining the optimal design of an abortion clinic, combining a simulation model with a steepest ascent algorithm. In his conclusion the author stated as a main limitation of his methodology: "... the necessary number of clinic configurations increases exponentially  $(2^n)$ , rendering the methodology impractical when considering a large number of variables". However, I disagree completely with the author's modesty! A large number of variables in so-called Response Surface Methodology (RSM) which includes the steepest ascent search algorithm, can be handled as follows: Do not simulate all  $2^n$  combinations, but select a much smaller subset, e.g. only n+1 combinations, applying statistical methodology of experimental design. Actually experimental design is a standard part of RSM; see [2], [3]. Experimental designs are also discussed in Gitlow's own references, Hicks and Mendenhall.

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