Internal Software for More Productive Companies
(Technical Report)

The Smart Cities Controversy
(STS Research Paper)

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by

Nathaniel Gonzalez

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Preface

How may digital systems best optimize sociotechnical systems? While digital systems have valuable and diverse sociotechnical applications, many have complex and controversial implications.

How can internally facing software increase organization-wide productivity? Companies use internal tools to streamline operations. In the summer of 2022, as an intern at Yext in Arlington, VA, the author implemented login redesign and searchable dropdown enhancements for an internal chrome extension. Because the dropdown enhancement reduced task execution time from 2 minutes to 2 seconds, employees resumed using the extension, reducing operational overhead and improving workflow.

How are advocates and critics of smart cities competing to advance their respective agendas? Proposals for smart cities, in which sensors collect data to automate and optimize city services, are controversial. Proponents contend that smart city systems improve city services and operational efficiency, thereby saving money and improving residents' quality of life. Critics, however, warn that smart cities tend to bypass representative processes, diminish accountability for public services, collect and monetize personal data, and serve private companies and investors to the detriment of public interests.