

## Smart Cities Literature Review

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### Summary of the Paper

The goal for this paper is more to explore the technology and challenges that come about when developing a smart city. Focus is put towards the methods cities can use to harness digital technology to tackle urbanization challenges like transportation, environmental sustainability, and public safety.

A really great review is done on many smart city technologies like autonomous vehicles, smart grids, and urban sensors. There are also some highlights that look at the major challenges these types of cities face like cybersecurity, data privacy, and integrating smart technology into already existing aged physical infrastructure.

### Identification of Gaps

There is some serious extensive coverage on technological advancements, but there is still a lack of discussion on social equity in smart cities, especially the digital divide between different socio-economic groups. With a shrinking middle class and largely expanding lower class, these smart cities may impact them differently, but this topic is not covered. Additionally, the paper references US cities, which is a decent way to shrink the scope, but there is no detailed case studies or any long term evaluation of smart city projects in a more global context.

### Analysis of Ambiguities

Some vague terminology include some very broad terms like smart city solutions and sustainability without really going in depth about how these concepts are operationalized, or measured in any different urban contexts. The paper also assumes that smart technology inherently benefits urban populations, but there is a generalization that the positive impact will outweigh the negative outcomes like displacement or exclusion of more vulnerable groups.

## Evaluation of Methodologies

Examples are plentiful within the paper, but a clear and concise methodological framework that analyzes the effectiveness of smart city technologies is less than existent in the research. Instead, the paper decides to focus more on trends and emerging a specific evaluation model that would assess success or failure. For example, using the Technology Acceptance Model (which evaluates to factors, Perceived Usefulness and Perceived Ease of Use) would help the research understand how users accept and adopt technology much better. It would help evaluate the social acceptance, adoption barriers, and challenges in integration.

## Discussion of Questions Raised

The main questions would be asking how smart city technologies address the issue of social inclusion, and if there are measures (if at all) in place to protect against unintended consequences of automation and surveillance in urban spaces. These questions are not only important but completely necessary as addressing the balance between technological advancements and social well-being is the key to a society that does not create inequality or privacy concerns.

## Critical Reflection

The paper is still a well thought out paper that has relevance for urban planners, policymakers, and anyone working to integrate digital infrastructure into city development. Some very compelling insights are offered into the potential of smart technology for transforming urban living. It is structured properly, with the only issue being that the technology trend focus does overshadow the ethical and social implication of these smart cities.

## Conclusion

The contributions the paper makes for literature on smart cities is well done. Smart cities are something that is the future, and this research outlines the necessary key technologies and challenges that they may face. Ignoring the lack of depth in societal implications, this should be a paper looked at when it comes to researching smart cities. The only caution to have is the lack of inclusivity and equity, a problem easily solved.

## Future Research Proposal

Ensure that the long-term impact of smart cities on urban inequality is more properly researched, since the livelihood of people is an important factor to consider when building these cities. Going down the rabbit hole of policies aimed at mitigating data privacy and security risks is also something to consider, since their effectiveness is a large chess piece in this development. Combining more insights from all sectors is an idea to follow as well, to ensure that a more comprehensive approach is taken as that ensures technology benefits all the urban residents equitably.

## Personal Insights

Honestly, they do raise some extremely good points. As I have interests in cybersecurity and data privacy, there are concerns I had that were shared with the paper. Data privacy is such an important factor to consider, and I think pivoting towards that direction is a great learning direction for me.