Team 6 APS1012

Future of Smart Cities: Innovation

1. Executive Summary

The world today is a vastly complex system with so many moving parts and important components. From the first settlements to the grand metropoles that exist, humanity has only found more information, more methodologies and techniques to explore all possibilities and maximize efficiency. The next step to improve society further is to intertwine all of its components and this can be done using the Internet of Things (IoT): scanners, detectors, and computers to analyze the data. With this movement, there are certain circumstances and changes that have to be embraced, and sacrifices to be made. Citizens of the smart city should acknowledge that this type of technology will be invasive in some ways and will challenge the status quo of daily living, but that it is essential for providing maximum efficiency. With this in mind, it was found that everyone should remain aware of the policies related to smart city infrastructure and demand the information be protected. The government has to develop policies to preserve the data, to mediate the relationship between the people and IoT companies. Analysis of the smart city revealed that innovator companies implementing these IoT systems have to apply exhaustive ethics and safety measures to protect the data. With all these roles fulfilled, the future is promising. This type of technology has practically no limit to application. The first step is to set the stage, and provide context to why and how circumstances have come to be as they are. The Internet of Things is then thoroughly explained, and described in the context of transportation and housing industries. The final task is then to consider the ethical and social concerns regarding this technology. It is the future, but has its set of complications. As a result, we have used the analysis of different dimensions of the smart city to provide the reader with an actionable four step conceptual framework that any stakeholder can use to implement a smart city project. These stakeholders can be policy makers, regulators or even developers, business owners and citizens that feel compelled to become change agents. By using the proposed framework, more time will be allocated to the upfront phase while mitigating the fuzziness in the front-end, allowing better management of smart city projects with respect to technology, policy and organizational deployment.