

A woman with long dark hair, wearing a light-colored jacket, is walking away from the camera down a city street. The street is lined with modern buildings and has string lights hanging across it. The scene is brightly lit, suggesting daytime.

UPTAKE

Data Science is Redefining How We Create Smart Cities

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Smart cities—they've long been depicted as a world filled with autonomous cars and intelligent robots. The reality, however, is that very few cities have had the resources – or the political willpower – to place such bold bets on the future.

But new breakthroughs in data management and data science have ignited a change that will build the smart cities of tomorrow. And with Uptake, it starts right now.



The Lifeblood of Smart Cities

The lifeblood of smart cities will be sophisticated technology platforms that are powered by data science. Why? Because meaningful, actionable insights can now be unlocked and extracted from information that was previously impossible to analyze at speed and scale.

Uptake is creating unprecedented efficiencies in how core industry and infrastructure operate. How? By using machine learning to harness mountains of data that are widely underutilized and sometimes entirely overlooked.

Uptake's platform lets workers on the front lines do their jobs better, and the vehicles, equipment and tools they use perform better. The results show promise of improving the quality of life for city residents, workers, commuters, tourists and more.

Uptake's predictive analytics can spot potential issues lurking around corners and pre-emptively solve them before they become full-blown problems.

Getting Ahead of The Curve

Having actionable intelligence flow freely within and between municipal entities gives life to a single, holistic understanding of how they're functioning and performing – not just in the moment, but in the future.

Uptake's predictive analytics can spot potential issues lurking around corners and pre-emptively solve them before they become full-blown problems. These insights deliver tangible outcomes like significant cost savings and decreased downtime for equipment repairs. On the front lines, city workers can make better decisions faster, and city assets can be optimized for greater productivity.

For example, today, Uptake is working with the Rhode Island Public Transit Authority (RIPTA) to review their bus data and with the goal of helping them improve their maintenance schedules and optimize their parts inventory forecasting, and reduce avoidable expenses – all leading to a better experience for their workers and riders.

Today, RIPTA-operated equipment generate valuable data that can be harvested to do more of the good (e.g. preventative maintenance) and less of the bad (e.g. catastrophic breakdowns). With this data and Uptake's data science engines, workers can prevent imminent breakdowns by fixing city buses before they even leave the station, instead of when they're stalled on the street. Setbacks like exorbitantly expensive repairs and busloads of stranded passengers can be bypassed altogether and processes can be streamlined to eliminate redundancies that drain taxpayer dollars and frustrate citizens.

In our connected world, when breakdowns do happen, the failures aren't just rooted in mechanics, but in technology as well.



Software as a Backbone

Software as a Service (SaaS) is laying the foundation for smart cities by applying data science to democratize data, transforming it into an asset that's quickly analyzed and easily understood in context.

Uptake's SaaS-based data platform - combined with world class data science, data security, sensors and proven processes - offers the speed and agility that are necessary to shepherd the evolution of the smart city. From predicting what's about to happen under the hood of vehicles, to prescribing new traffic patterns for alleviating congestion in inclement weather, to unifying operational data from disparate sources for a single version of the truth - the possibilities are endless and finally, in reach.

As the story of the smart city continues to unfold, Uptake's data management platform of SaaS-based products and data science will play a formative role in connecting systems, collecting and analyzing data, extracting insights, recommending actions, realizing new gains in efficiency and productivity, and continually challenging what's possible.

Though it might not read like a science fiction novel, the future starts now.

