



2019 스마트시티 주요 트렌드와 핫 이슈

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목차

- 들어가며
- 스마트하지 않은 스마트 시티 정의
- 글로벌 스마트시티 성공사례에서 배우는 교훈
- 스마트시티 트렌드 2019, 스마트시티 2.0
- 생각해 봅시다



박서기IT혁신연구소의 연구 분야

What's the Next Big Thing?

- 동국대 MBA <4차산업혁명과 최신 정보기술>
- KAIST MBA <미국 VC가 주목하는 차세대 비즈니스모델>
- 경희대 디지털MBA <CEO가 주목하는 글로벌 디지털혁신 사례 연구>
- 중앙대 경영경제대학 <디자인씽킹> <4차산업혁명 시대의 e비즈니스>
- 성균관대 MBA <아웃사이드인·디자인씽킹 기반의 비즈니스 혁신>



New Business Model

왜 구글은 차량용
Programmatic Ad 회사인
Firefly에 3000만달러를
투자했나



New Business Model

버거킹이 식물성 단백질로 만든 'Impossible Whopper' 사업을 확대하는 이유는?



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- 4차산업혁명 시대 왜 스마트시티를 주목해야 하는가
- 글로벌 스마트시티 성공사례에서 배우는 교훈
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스마트시티, 4차산업혁명은 유행어?

4TH industrial rev...
검색어

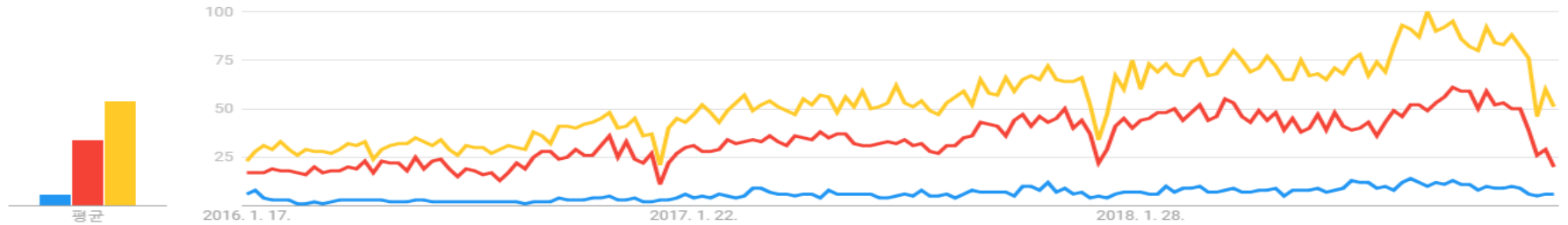
industry 4.0
검색어

digital transformat...
검색어

+ 비교 추가

전 세계 ▾ 16. 1. 13.~19. 1. 13. ▾ 모든 카테고리 ▾ 웹 검색 ▾

시간 흐름에 따른 관심도 변화 ?



smart city
검색어

+ 비교

전 세계 ▾ 지난 5년 ▾ 모든 카테고리 ▾ 웹 검색 ▾

시간 흐름에 따른 관심도 변화 ?



스마트하지 않은 스마트 시티 정의

- "A smart city brings together technology, government and society to enable the following characteristics: smart cities, a smart economy, smart mobility, a smart environment, smart people, smart living, smart governance." <Institute of Electrical and Electronics Engineers>
- "The concept is not static, there is no absolute definition of a smart city, no end point, but rather a process, or series of steps, by which cities become more 'liveable' and resilient and, hence, able to respond quicker to new challenges." <Department for Business, Innovation and Skills, UK 2013>
- "We identified eight key aspects that define a Smart City: smart governance, smart energy, smart building, smart mobility, smart infrastructure, smart technology, smart healthcare and smart citizen." <Frost & Sullivan 2014>

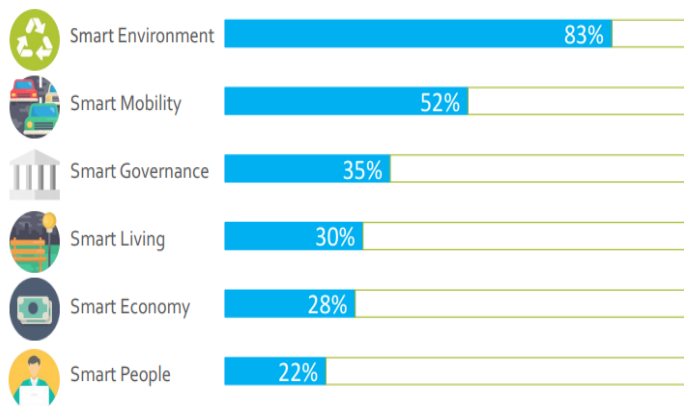
스마트하지 않은 스마트 시티 정의

- 첨단 정보통신기술(ICT)을 이용해 도시 생활 속에서 유발되는 교통 문제, 환경 문제, 주거 문제, 시설 비효율 등을 해결하여 시민들이 편리하고 쾌적한 삶을 누릴 수 있도록 한 '똑똑한 도시'
- Smart Town Planning, Smart Transportation Mobility, Smart Water Sanitation, Smart Infrastructure, Smart Energy, Smart Healthcare, Smart Education, Smart Building, Smart Governance, Smart Security
- 모든 도시가 다르고, 도시마다 해결해야 할 과제와 도전이 상이하다. 따라서 도시마다 고유의 스마트 시티 비전을 확보해야 한다.

왜 지금 스마트시티를 주목해야 하는가

EU Smart Cities Focus On Environment & Energy Usage

Among the 264 EU Smart Cities in 2014, how many present these characteristics?



Source: 2014 EU research project



SMART CITIES: THE NEXT BIG THING



1.6 BILLION CONNECTED DEVICES WERE USED BY SMART CITIES IN 2016, UP 39% FROM 2015



SOURCE: CTA/UPS The Evolution of Smart Cities and Connected Communities, January 2017

JAN 8-11, 2019
LAS VEGAS, NV

SMART CITIES

CES is the only place to experience the entire connected ecosystem that brings together the technologies, solutions, players and audiences in the smart city sector from around the world.

혁신

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- **글로벌 스마트시티 성공 사례에서 배우는 교훈**
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TOWN PLANNING

What: A modelling system to simulate a city's built environment and its impact on the natural environment, people, resources and costs

Who: HDB, Electricite de France, Veolia

Uses: Among other things, show how different land uses affect amenities and transport networks; how to design new housing blocks to get ideal wind flow; where best to build cycling paths

Status: Research collaboration / prototype stage

WATER QUALITY AND LEAKS

What: A network of wireless sensors that monitors water quality and detects leaks in real time

Who: PUB, Singapore-MIT Alliance for Research and Technology, Visenti

Uses: Allows PUB to repair leaks faster and reduce water loss

Status: About 300 sensors installed by end-2015

NOTE: Artist's impression

GRAPHICS:
MIKE M DIZON and DAVID EE

ERP II

What: A satellite-based electronic road pricing (ERP) system that can use an on-board monitor to charge motorists according to distance travelled



The Merkle

The Blockchain Can Help Us Clean up Our Act

themerkle.com

SECURITY

What: A public-private Safe City Test Bed that produced, for example, a mobile app for commanders to track security forces in real time

Development Board, Affairs, AGT International, d Space, NCS,

commanders respond to ickly and precisely completed

Building a SMART CITY

A slew of initiatives are taking place islandwide, the goal of which is to sharpen the Government's response to city issues and hence improve people's day-to-day lives.

3D MAPPING

What: Mapping the country in 3D from the air by using light planes equipped with lasers and cameras

Who: Singapore Land Authority

Uses: PUB could use the map to model flood patterns, while the Civil Aviation Authority of Singapore could plan more efficient landing paths for planes

Status: Expected to be completed by 2016

DISEASE AND HYGIENE

What: Computer models that use sensors and mobile apps to help detect and forestall dengue and food poisoning outbreaks

Who: National Environment Agency (NEA), IBM

Uses: For example, if people complain on Facebook or Twitter of being sick after eating at a particular restaurant, the system would alert NEA officers

Status: Research collaboration

IMPROVING PUBLIC TRANSPORT

What: Analysing CCTV video feeds and anonymised location-based data from mobile subscribers to learn commuters' travel patterns

Who: Land Transport Authority, SMRT, StarHub, IBM

Uses: Help agencies respond better to unplanned incidents on the train and bus network, such as breakdowns or emergencies

Status: Research collaboration

PROTECTING THE SEA

What: Eight buoys along coastline with sensors that test waters for pollutants and send real-time updates wirelessly to the NEA

Who: National Environment Agency (NEA)

Uses: Early detection of oil or chemical spills

Status: In place

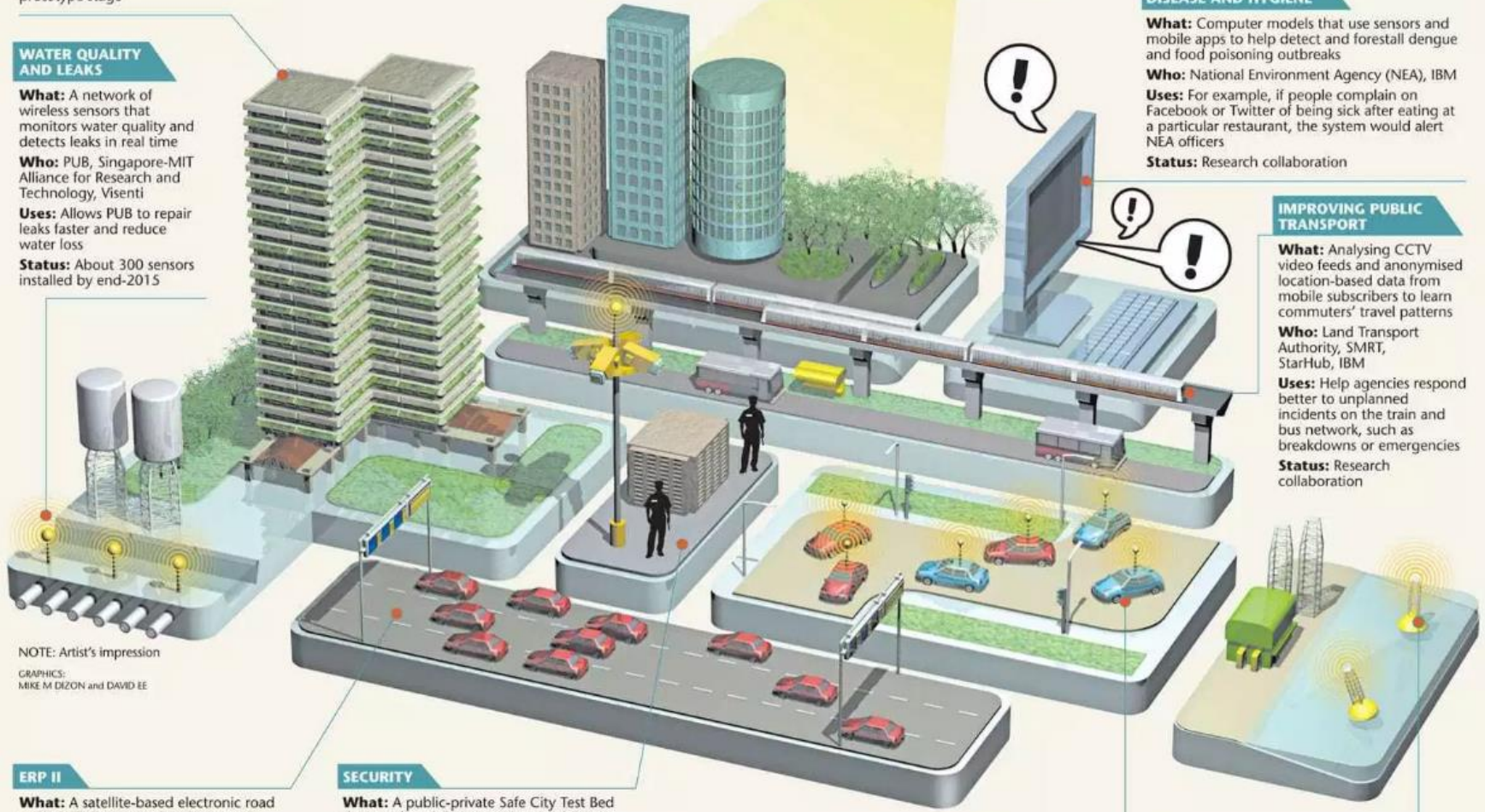
JURONG LAKE DISTRICT - 'SMART CITY'

What: A government vision for the area to use smart technologies such as driverless cars to improve liveability for residents

Who: Singapore Government, various partners

Uses: For now, driverless cars will ply the Chinese and Japanese Gardens later this year. Expected to be used at Jurong East MRT next year

Status: Ongoing



글로벌 성공사례에서 배우는 교훈



SMART CHICAGO

A CIVIC ORGANIZATION DEVOTED TO IMPROVING LIVES IN CHICAGO THROUGH TECHNOLOGY

Smart London

- 싱가포르 : 총리 산하에 SNPO 두고 스마트시티 사업 총괄. 단순 서비스보다 플랫폼 중심으로 꾸려 지속가능성 확보에 노력
- 시카고 : IoT 활용 도시 전체 데이터화 추진
- 런던 : 스마트런던프랜. 도시 지하지도, 쓰레기 문제 해결 등 추진
- 뉴욕 : 최악의 메가시티에서 데이터시티로 변신 중.
- 암스테르담 : 시민, 기업 참여해 200여개 프로젝트 진행중

am smart erdam
city

박서기IT혁신연구소



글로벌 성공사례에서 배우는 교훈

- 캐나다 토론토 스마트시티 프로젝트
- 구글 자회사인 Sidewalk Labs와 Waterfront Toronto의 제휴로 Sidewalk Toronto 구성.



Job Creation

Climate Positive

Affordable Housing

New Mobility

Data Privacy & Digital Governance

글로벌 성공사례에서 배우는 교훈

- 전세계 1000여개의 스마트시티 파일럿 프로젝트 중 500개가 중국에서 진행중. By Deloitte
- Five Chinese smart cities leading the way
 1. Hangzhou's "City Brain"
 2. Cloud platforms and smart parking in Shanghai
 3. Go cashless in Beijing
 4. Guangzhou, China's startup capital
 5. Managing migrations to Xi'an

GOVINSIDER



목차

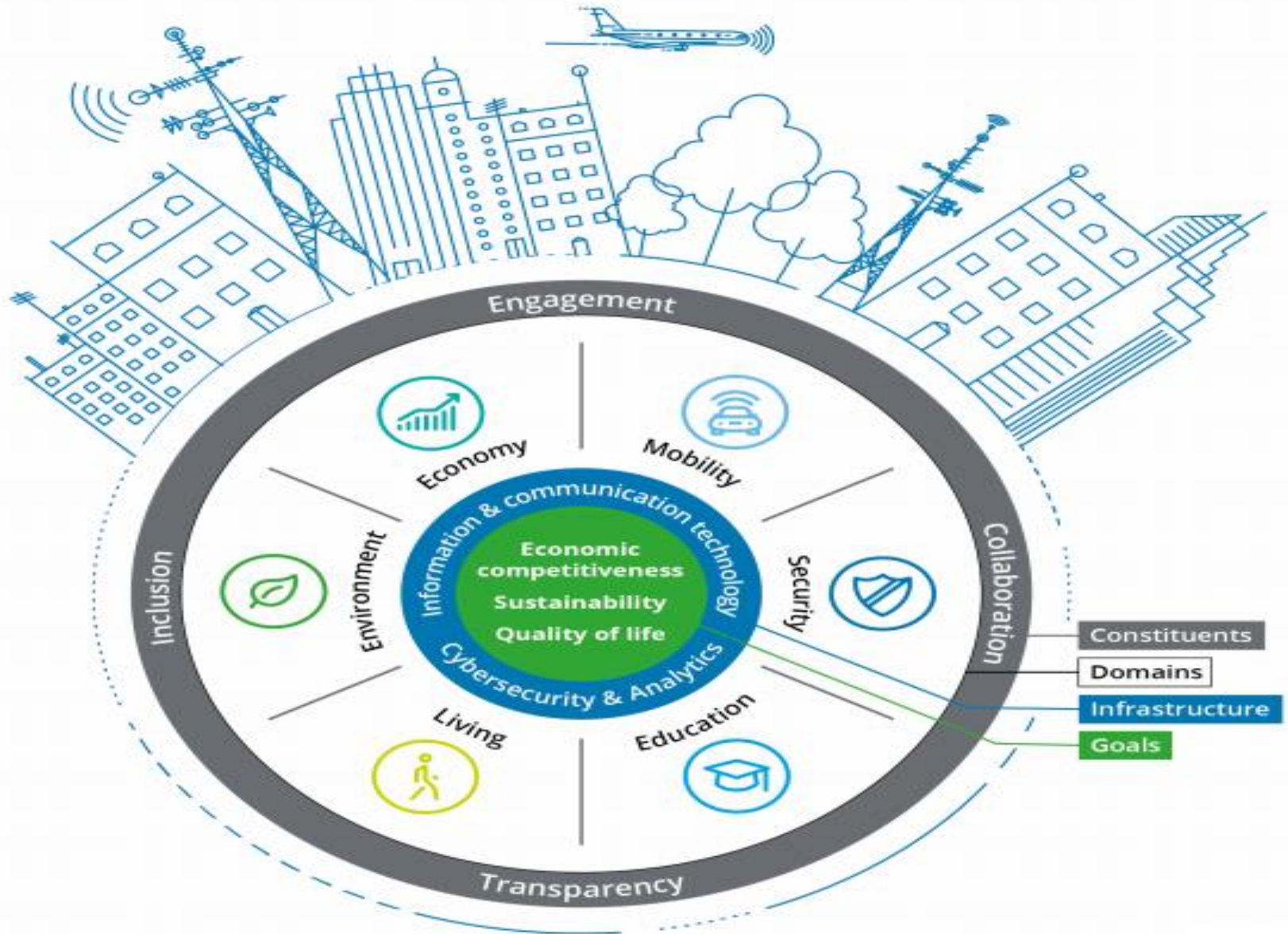
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Top 10 Smart City Trends for 2019



1. Not just for cities anymore.
2. A human-centric approach.
3. More intuitive processes.
4. Move from CapEx to OpEx.
5. Interoperability on the fly.
6. Increased citizen engagement.
7. Decentralizing control.
8. Increased government transparency.
9. Greater focus on revenue generation.
10. Use of low-cost IoT tech to enhance public safety.

Smart City 2.0



스마트시티 혁신의 주요 고려사항

Gartner Says Citizen Engagement Is Critical to the Success of Smart Cities

1. 명확한 문제 인식 및 우선순위 결정
2. 디지털 디바이드 염두에 둘 것
3. 오픈 데이터 전략에 기반한 투명명한 개발
4. 이해당사자들이 공유할 수 있는 KPI 활용할 것

생각해봅시다

- 무엇을 위한 디지털 트랜스포메이션인가?
- 혁신의 목적 vs 기술의 매력

감사합니다.

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