

# How to Stay in Control In The Ever-Changing World of Technology

Presented by:  
Maria Fiorini



# Maria Fiorini

Technology & data enthusiast, sucker for convenience and efficiency, digital marketer, mac and cheese lover!



# Key Takeaways

- **Love it or loath it:** reasons behind rapid technology advancements
- **The Essential Eight:** tech your Emerging Technologies Strategy needs to consider
- **Parking technology road maps:** upcoming advancements in various parking tech
- **Preparing for advancements:** how to prepare your business for tech breakthroughs



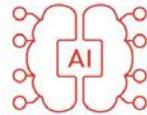
# For starters

Here's how fast technology is growing...



**38.6 Billion**

Smart devices will be collecting, analyzing, sharing data by 2025.



**\$89.9 Billion**

Global AI market worth, spending at about \$7.3 billion/year.



**70%**

Of all tech is expected to revolve around cloud services with 46% of businesses integrating cloud APIs.

# By the Numbers

Here's how fast technology is growing...



**\$103 Billion**

Data growth is expected to reach this amount by 2027.



**90%**

Of the world's data has been generated in the past three years.



**Oh...**

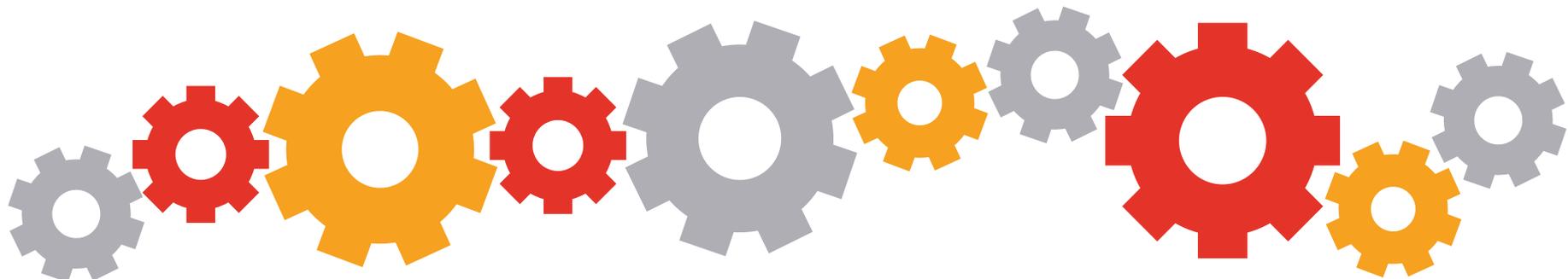
And we have the means necessary to enter a virtual world— the metaverse.

# Love it or Loath it

Technology continues to advance.

1. Cheaper access to technology
2. Globalization of technology
3. Increased comfort with technology
4. Competitive advantages of technology
5. Multiplier effect of technology





# The Multiplier Effect of Technology

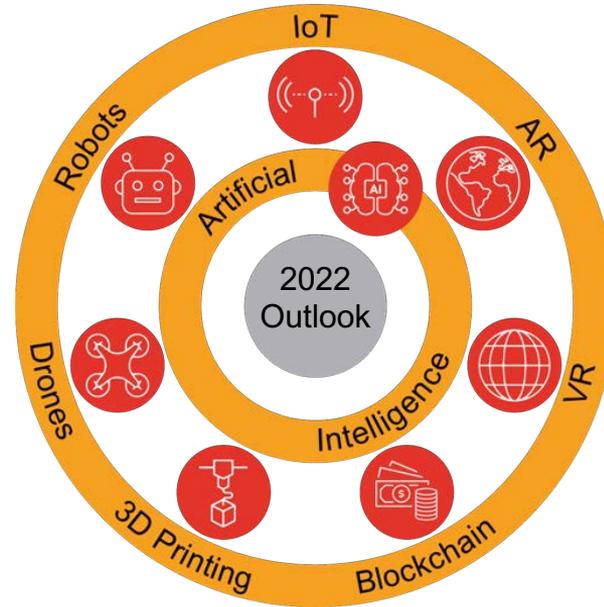
Independent technologies build and amplify one another.



# The Essential Eight

Technologies that impact every industry...including parking & mobility.

1. Artificial intelligence (AI)
2. Augmented reality (AR)
3. Blockchain
4. Drones
5. Internet of things (IoT)
6. Robotics
7. Virtual reality (VR)
8. 3D printing



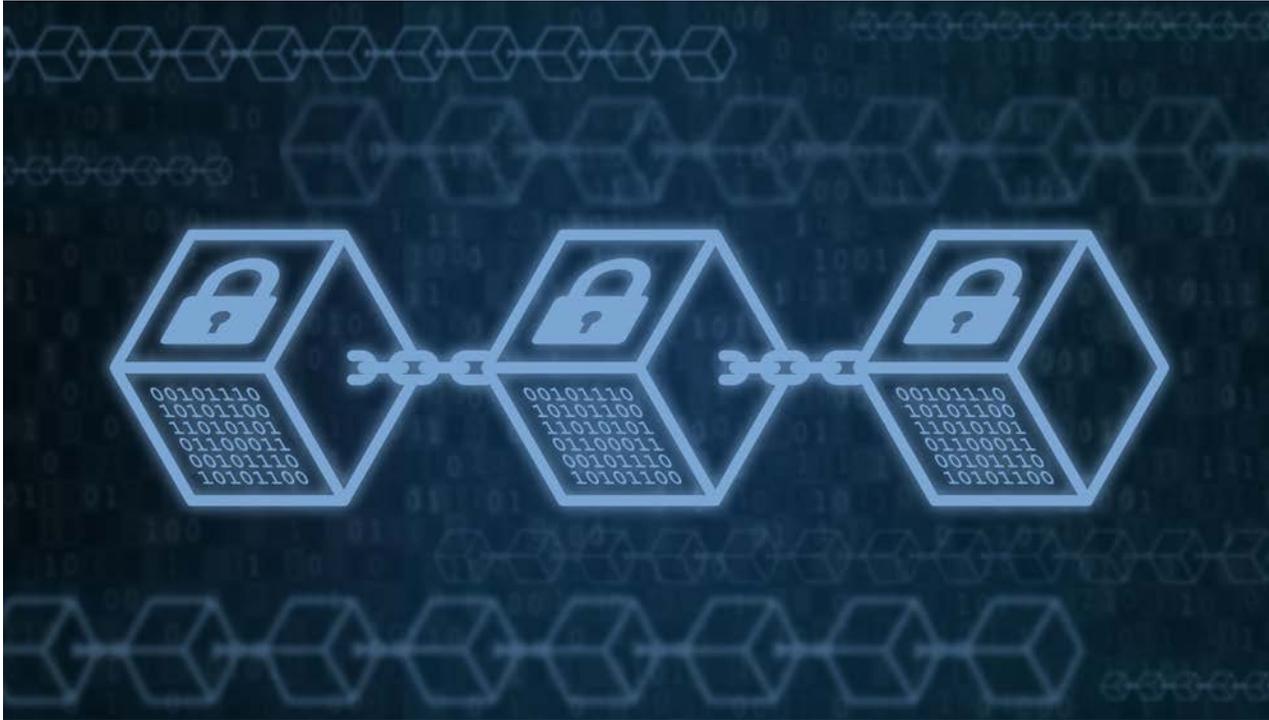
# Artificial Intelligence (AI)



# Augmented Reality (AR)



# Blockchain



# Internet of Things (IoT)



# Drones



# Robotics



# Virtual Reality (VR)



# 3D Printing



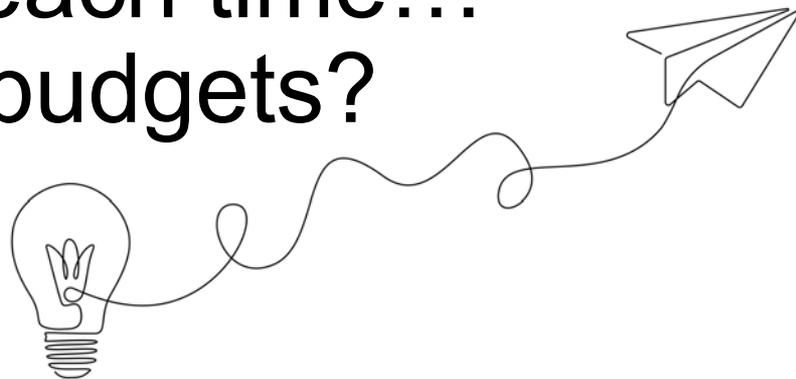
## THE PARKING MINDSET

How do we keep strategies updated...

Without restarting each time...

Or surpassing our budgets?

We'll cover this shortly...





# Parking Management Redefined

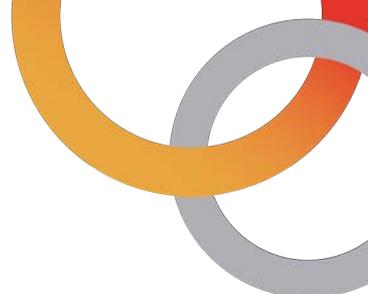
Traditional parking management services are no longer sufficient on their own.

Traditional parking management

Relies on the performance of people.

Today technology supplements...

- *Parking enforcement*
- *Marketing services*
- *Customer assistance*
- *Permit management*



# People used to fuel technology. Today it's the other way round...

Technology let's accomplish more, in less time, more efficiently.

# The Division No Longer Exists

More and more parking tenders are seeking one solution...



# Managing Parking with Technology

Is a win-win— businesses and consumers want the same things.



Management. Anywhere. Anytime.



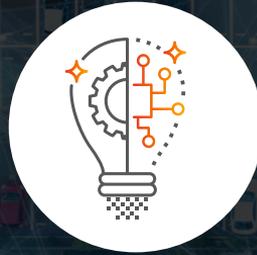
## FINANCIAL

- Do you save me money?
- Do you give me added value?



## TIME

- Do you save me time?
- Provide me with ease and convenience?



## LEARNING

- Do you enhance my experience by providing relevant information?



## SAFETY

- Do you make me feel secure?
- Both data and physical interactions?



## COMMUNICATIONS

- Do you share relevant information that is worth my time?

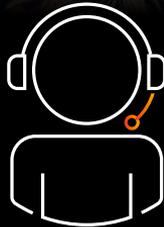


# So how do we accomplish this?

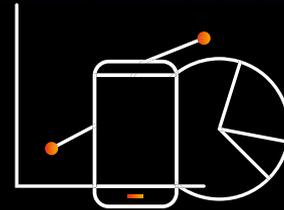
Managing parking with technology boils down to four core elements...



**SMART  
HARDWARE &  
SOFTWARE**



**DIGITAL  
CUSTOMER  
SERVICE**



**SELF  
MANAGEMENT  
TOOLS**



**CREATIVE  
DIGITAL  
MARKETING**



# Parking Technologies

From an Essential Eight perspective.

# Virtual Customer Service

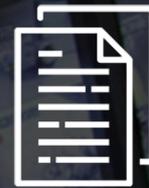
For effective assistance that meets consumer expectations.



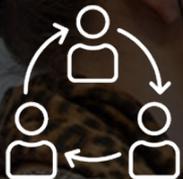
**24/7/365 IMMEDIATE  
RESPONSE**



**MULTI-LINGUAL  
RESPONSE**



**SITE SPECIFIC PROTOCOLS  
& PROCEDURES**



**SERVICE AND  
COVERAGE FLEXIBILITY**

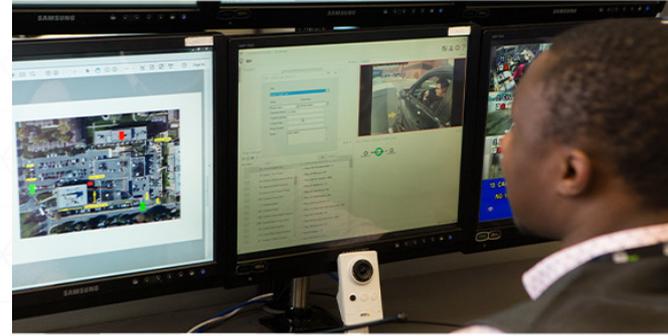
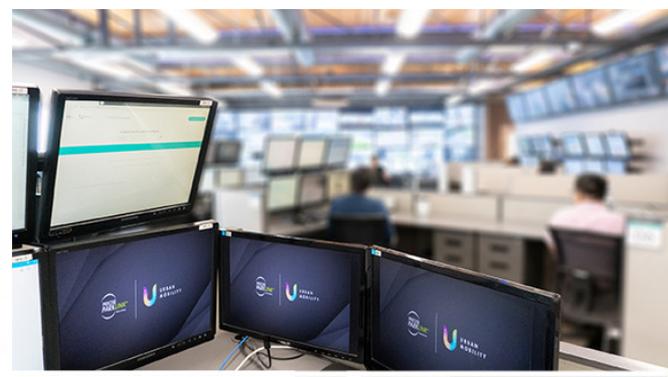


**ONSITE STAFF  
SUPPORT**



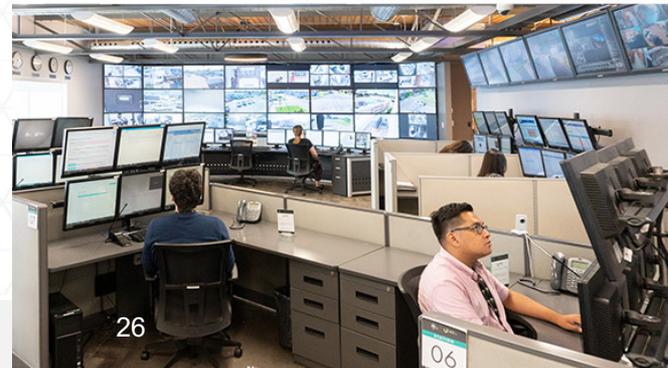
**TWO-WAY  
AUDIO & VIDEO**





# Virtual

Live Customer Agents





# Virtual

Live Customer Agents

5th Edition



CPA+ACS

Québec city 2022

CONFERENCE & TRADE SHOW OCT 16-19

# Facetime for parking?



# Intelligent Chatbots

Fuelled by Artificial Intelligence and Augmented Reality.



**ONLINE  
CHAT BOT**



**HOLOGRAM  
ASSISTANT**

# Scan-for-Assistance

Display customer service QR codes on signage throughout your parking facility, giving customers access to a complete digital FAQ menu.



# LPR-Based Enforcement

Improves patrolling accuracy and reduces dispute rates.



## LPR ENFORCEMENT BY CAMERA

- ALPR-equipped vehicles patrol aisles and scan license plates
- Automatically generates violation for operator to issue
- Mount fixed cameras throughout facility with post-billing violations for cost savings and passive enforcement

## LPR ENFORCEMENT BY FOOT

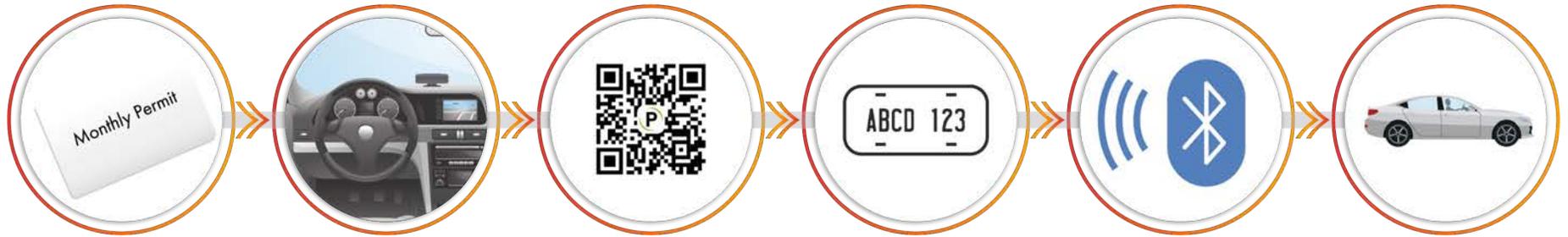
- Visible nature for security conscious
- Patrollers access ALPR tech on mobile device by capturing license plate with software
- Real-time verification of authorized vehicles
- Electronically “chalks” vehicle to monitor movement

But who's to say that one day parking tickets won't be issued by drones or robots?



# Smart Access and Permit Parking

The evolution only continues.



**HID CARD  
ACCESS**

**VEHICLE  
TRANSPONDERS**

**QR  
CODES**

**LICENSE PLATE  
RECOGNITION**

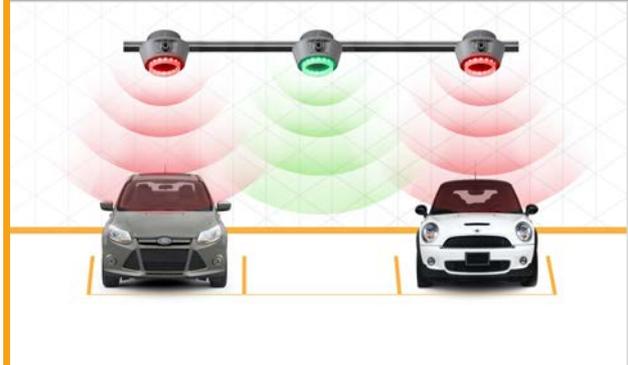
**BLUETOOTH  
LOW ENERGY**

**DIGITAL VEHICLE  
SIGNATURE**

# Smart Sensor Technology

Fueled by automatic license plate recognition.

- ✓ Parking guidance systems have LPR cameras in every stall sensor
- ✓ Camera's record license plates parked in stall
- ✓ Find your car function by submitting license plate into kiosk / mobile device
- ✓ Improved traffic flow by 37%
- ✓ Enables dynamic pricing models fueled by rich data and analytics



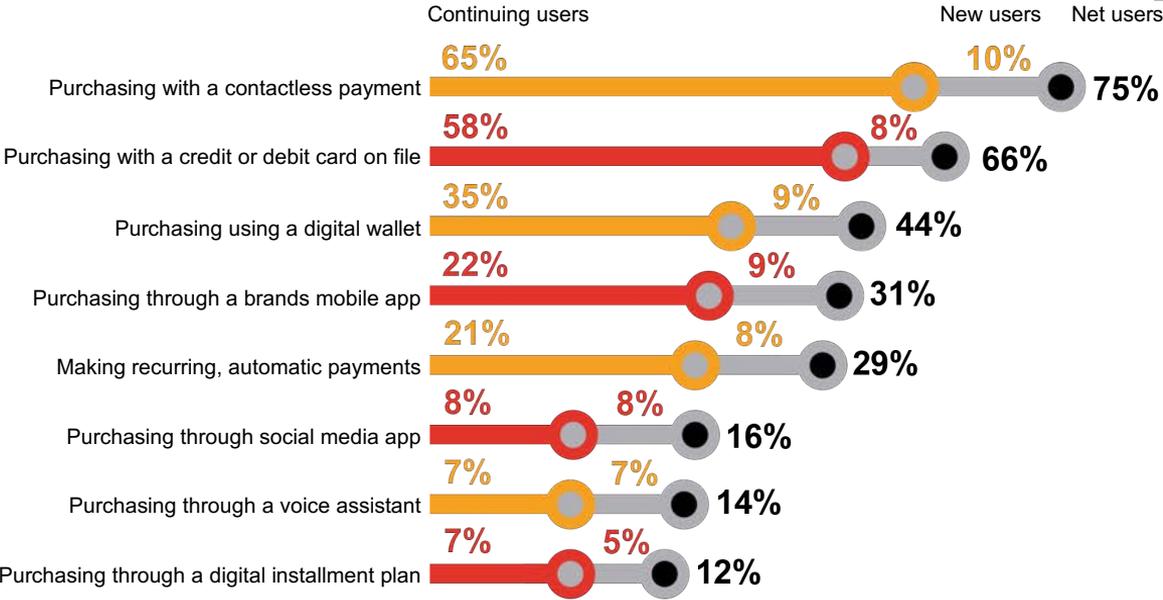
But who's to say that illuminated sensors for parking guidance won't be replaced with holograms?



Or better yet, by vehicle heads up displays that instruct or guide us?



# Financial processing during the pandemic



**33%**  
 One third of consumers have tried at least one new payment method since the onset of COVID-19

But who's to say that the world won't move to blockchain models?

# BLOCKCHAIN



# Accessible Pay Stations

Interactive and multi-functional digital parking pay stations.



Skiosk Smart



Skiosk Lite



Skiosk Slim

# What makes a pay station accessible?

An accessible device class includes:

## TOUCH OPERATION

- Height controls
- Cashless payment options
- Barcode RFID readers
- Automated insert functionalities
- Hand wave instead of buttons

## INTERACTIVE SOFTWARE

- Assistive Listening (AFILs)
- Audio headphone plug
- Virtual customer service with remote control
- Self serve options: Redeemable reservation/ validation/ prepaid codes

## DISPLAYS

- Full-touch display
- Scroll bar + adjustable screen heights
- Glare-free surfaces
- High resolution & HD
- Audible and visual prompts
- Zoom in function

## INSTRUCTION PROMPTS

- Braille and tactile decals
- High colour contrasts
- Legible font size and types
- International symbols
- Illuminated prompts

But aren't pay stations disappearing due to the mobile age?



# The pay station continues to live on...

- Sense of familiarity
- We're tight for time
- Severe app fatigue



Accurately manage your patrolling schedules, pricing, and creative strategies...

# Business Intelligence and Data Collection

Lets us understand activity in our parking lots without physically being onsite:

- *Who enters and exit*
- *Where, when, and for how long they park*
- *Peak days and times*
- *High-demand parking areas*
- *Frequency of visits and repeat customers (loyalty programs)*
- *Where visitors are from (e.g., out of province license plates)*
- *Make and model of vehicles (e.g., understanding demographics)*
- *Validations, reservation, and permit types used*



# Utilize Dynamic Pricing

Adjust rates based on supply and demand.



**Time of day.**



**Date / time of year.**



**Customer types.**



**Parking stall location.**

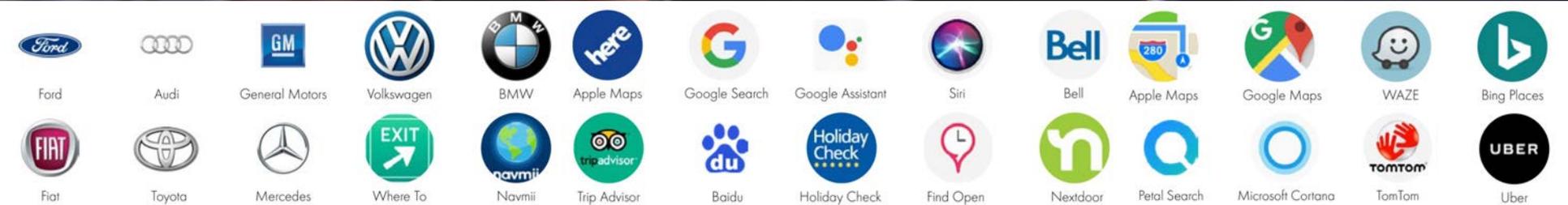
# Curb Management & Monetization

Monetizing your curb management program starts with data collection.



# Online Map and In-Car Navigations

Capture as much as the market as possible.



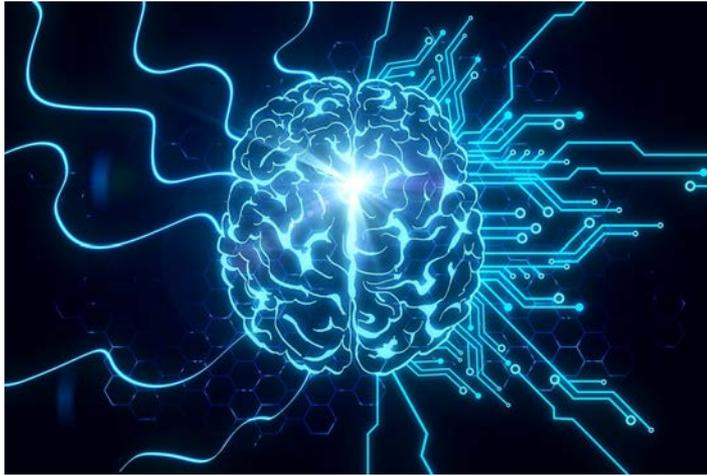
# Optimizing for online marketing is key. But what about the metaverse?

## METAVVERSE TEK TALK

*Managing Parking Without Boundaries*

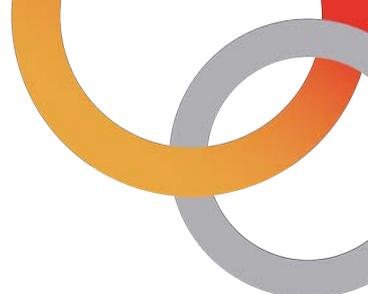
Thurs, Oct 27, 12pm EST  
via Zoom





# How do we prepare our business for technological breakthroughs?

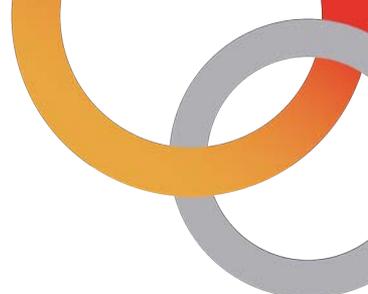
Helping you on your technology  
journeys.



Remember...

# Technology is not here to replace us.

- It makes us more intelligent
- It makes us more efficient, accomplish more, in less time
- It simplifies experiences
- Creates new career sectors and opportunities



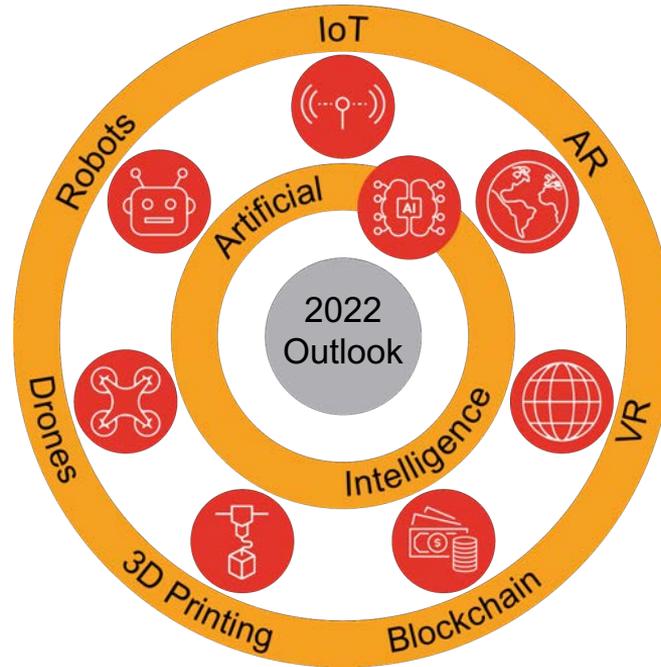
Remember...

# You're not on your own.

- Partner with innovative technology companies
- Rely on industry expertise to help educate you and remain in compliance
- Think strategically— know and weigh your options
- Develop your road map together
- Leverage existing investments. Save money with upgrades
- Be the first to explore new innovative technologies

# Emerging Technology Strategies

Every company strategy must have one.



# Ask The Right Questions

Ensure your parking management strategy is set for success.

- How does X technology breakthrough's impact my business?
- What areas of business should we explore or pilot new technologies?
- What technologies should we invest in?
- How do remain current?
- How do we reduce associated risks and failures?
- How are we integrating the essential eight into our strategy?
- Have we quantified the impact of new technologies? If not, how can we do that?
- Do we have an emerging technologies road map? If so, are we keeping it up to date?
- How can I prepare my infrastructure so it's easy to build on / upgrade instead of replacing entirely?
- What are the risks associated? Prepare for risks





ParkingIndustry.ca



# Questions?



**MARIA FIORINI**

Precise ParkLink  
Marketing & Communications Manager

