



# The Future of Telematics in Trucking

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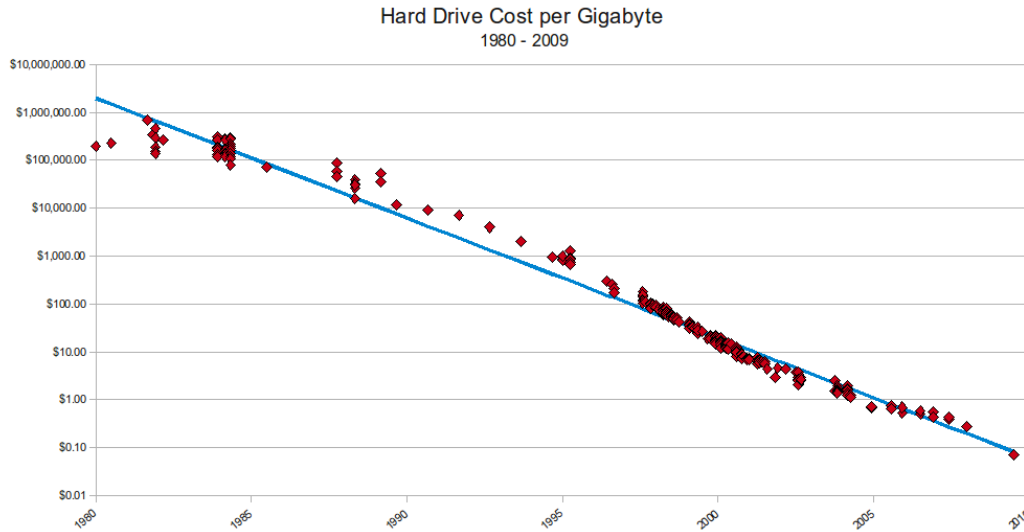


# Trucking Telematics History

- Fleets have been using Telematics Systems for over 25 years
- Expensive Systems typically installed in Aftermarket
- Limited data sent and received because of high cost
- Mostly about Fleet Logistics and Driver management
  
- But things are now changing very rapidly



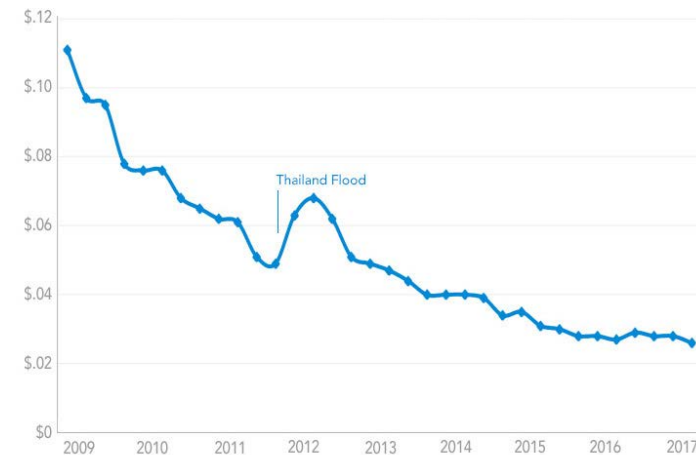
# Hard Drive cost per Gigabyte



Unit	Value	Size
<b>bit (b)</b>	0 or 1	1/8 of a byte
<b>byte (B)</b>	8 bits	1 byte
<b>kilobyte (KB)</b>	$1000^1$ bytes	1,000 bytes
<b>megabyte (MB)</b>	$1000^2$ bytes	1,000,000 bytes
<b>gigabyte (GB)</b>	$1000^3$ bytes	1,000,000,000 bytes
<b>terabyte (TB)</b>	$1000^4$ bytes	1,000,000,000,000 bytes
<b>petabyte (PB)</b>	$1000^5$ bytes	1,000,000,000,000,000 bytes
<b>exabyte (EB)</b>	$1000^6$ bytes	1,000,000,000,000,000,000 bytes
<b>zettabyte (ZB)</b>	$1000^7$ bytes	1,000,000,000,000,000,000,000 bytes
<b>yottabyte (YB)</b>	$1000^8$ bytes	1,000,000,000,000,000,000,000,000 bytes

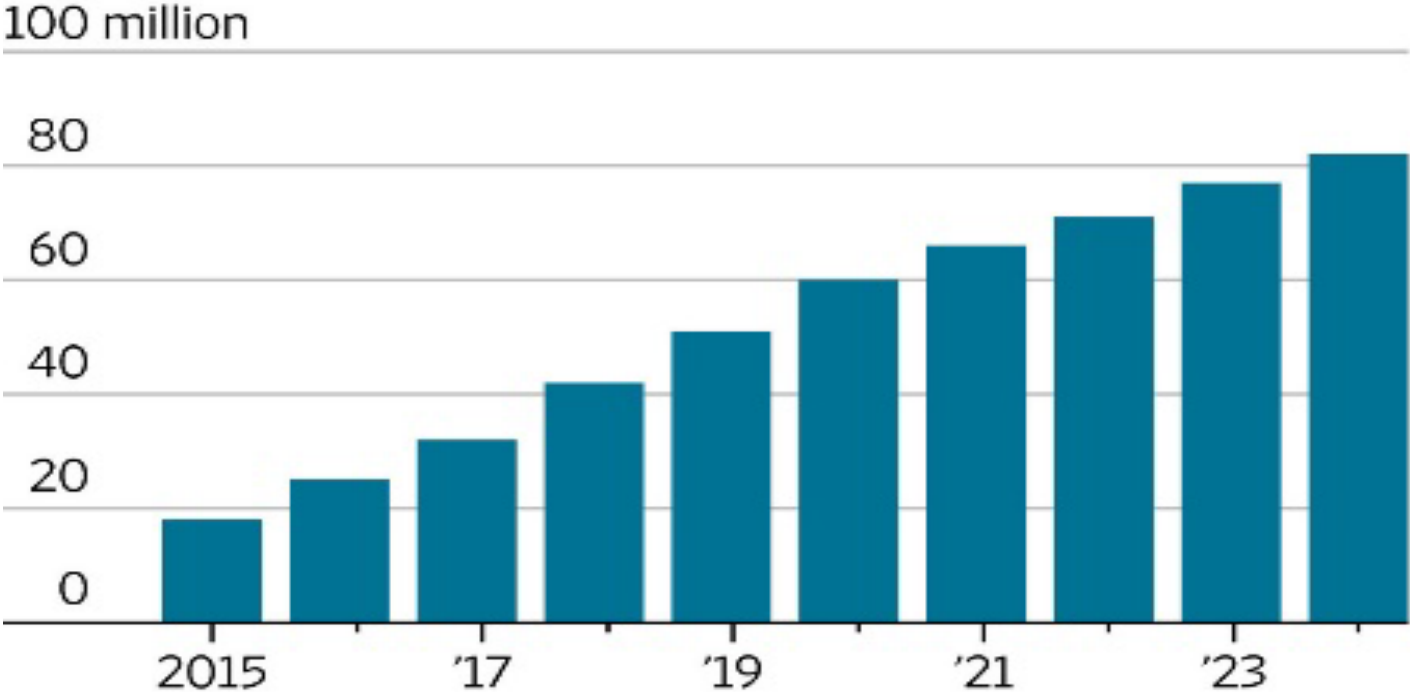
## Backblaze Average Cost per GB for Hard Drives

By Quarter: Q1 2009 - Q2 2017



# Calling All Cars

Global shipments of vehicles with embedded cellular modems



Source: Strategy Analytics

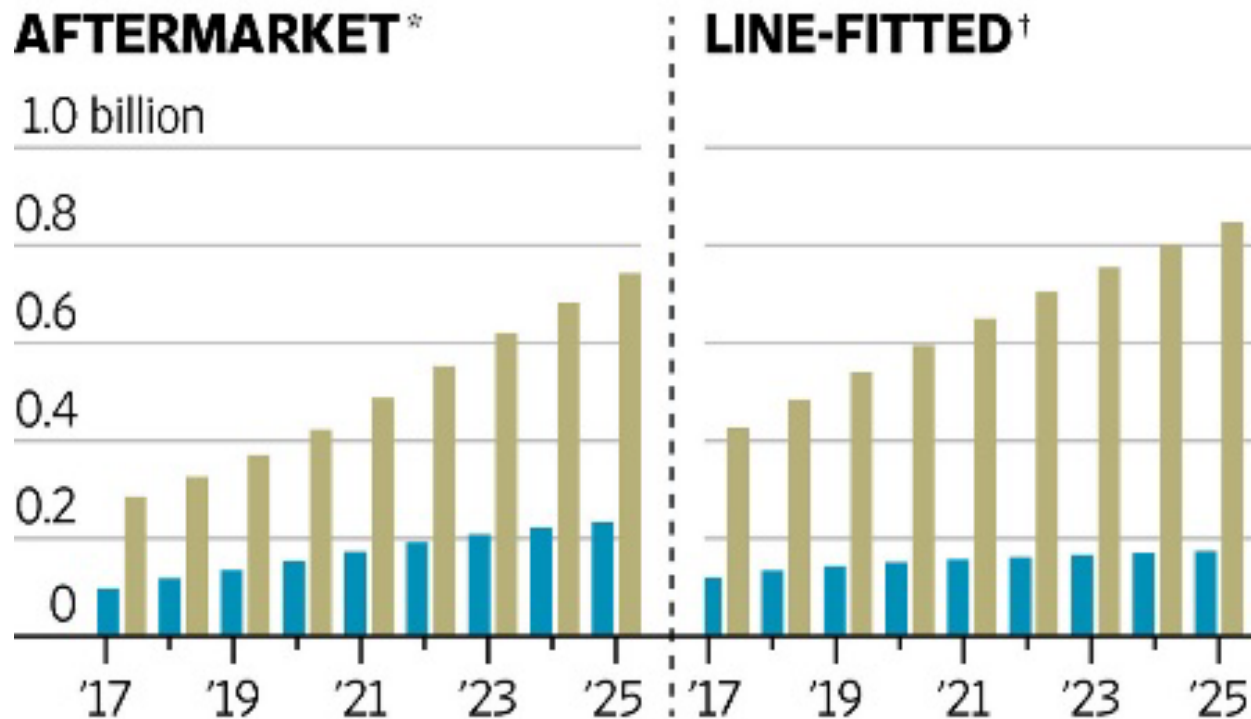


# Source Wall Street Journal 9/18/2017

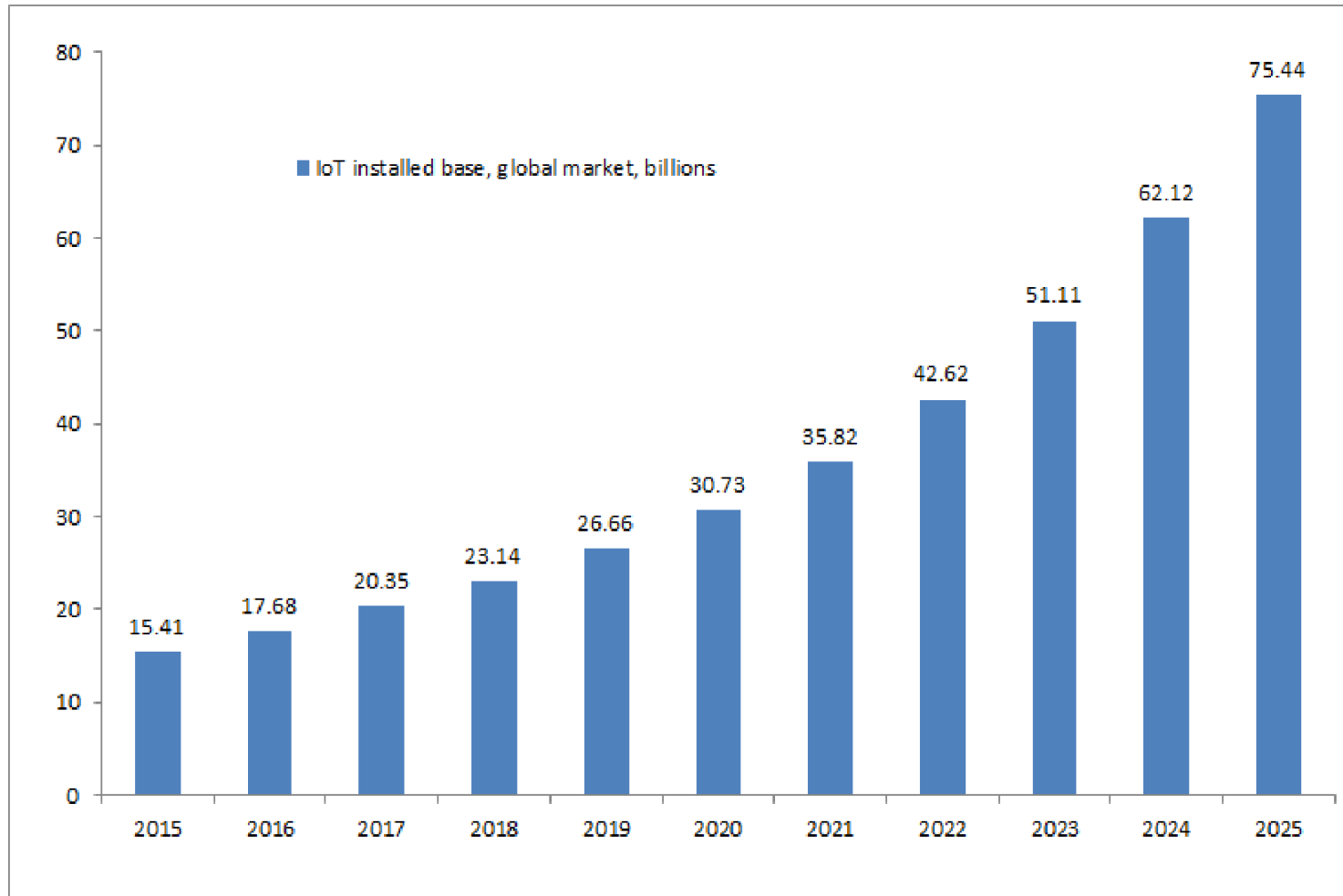
Internet connectivity in vehicles, including buses and heavy-duty trucks

■ USA ■ Worldwide

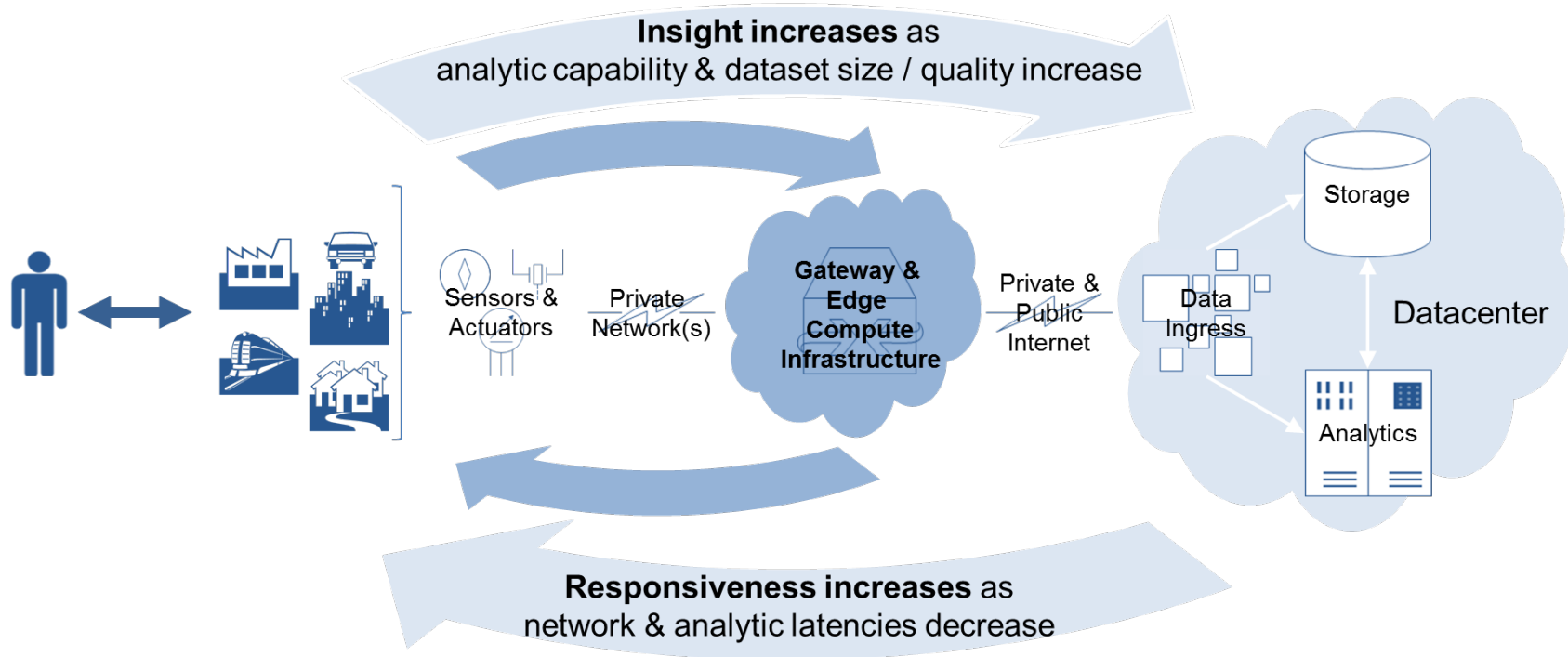
NUMBER OF VEHICLES IN USE EQUIPPED WITH TELEMATICS SYSTEMS



# Internet of Things (IoT)

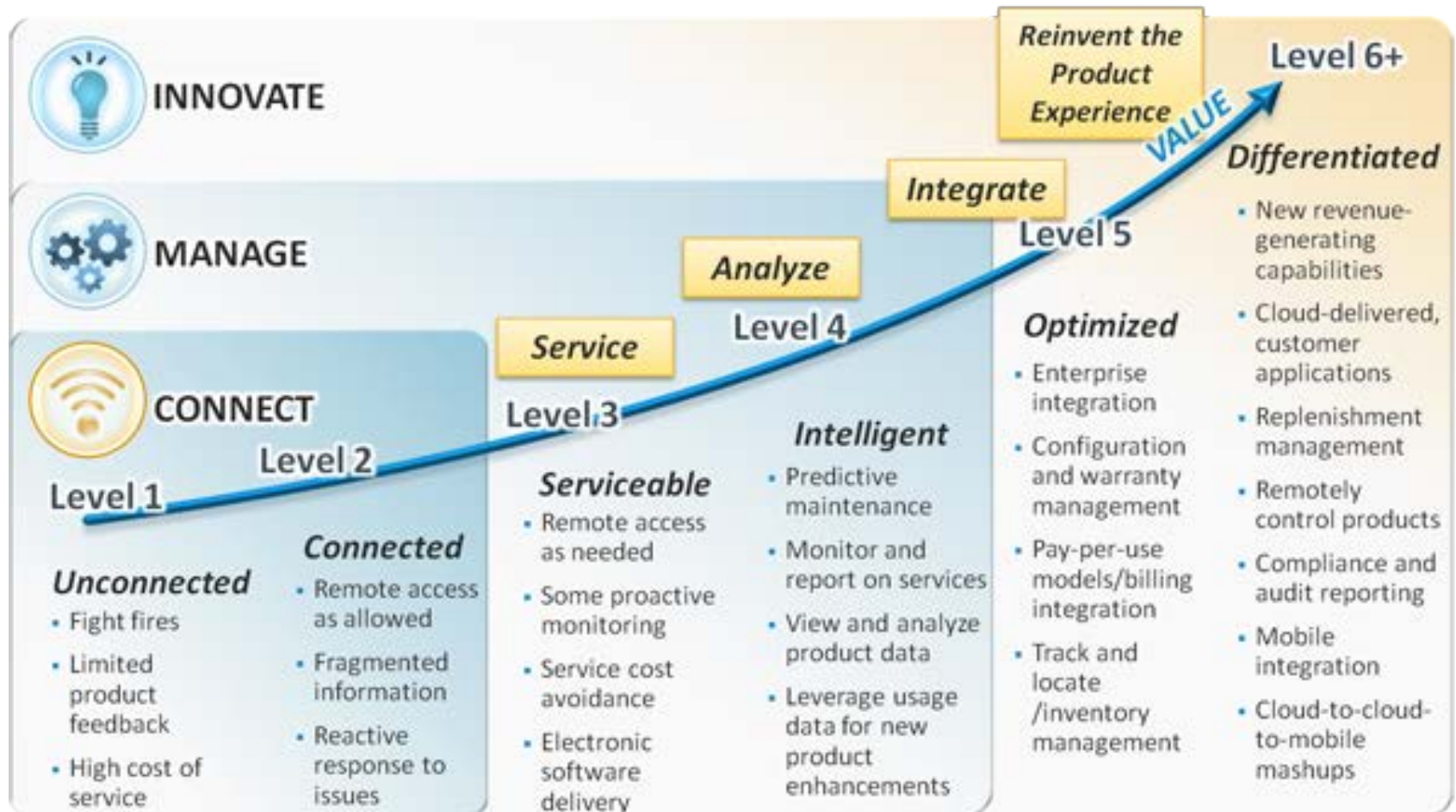


# Internet of Things and Edge Computing



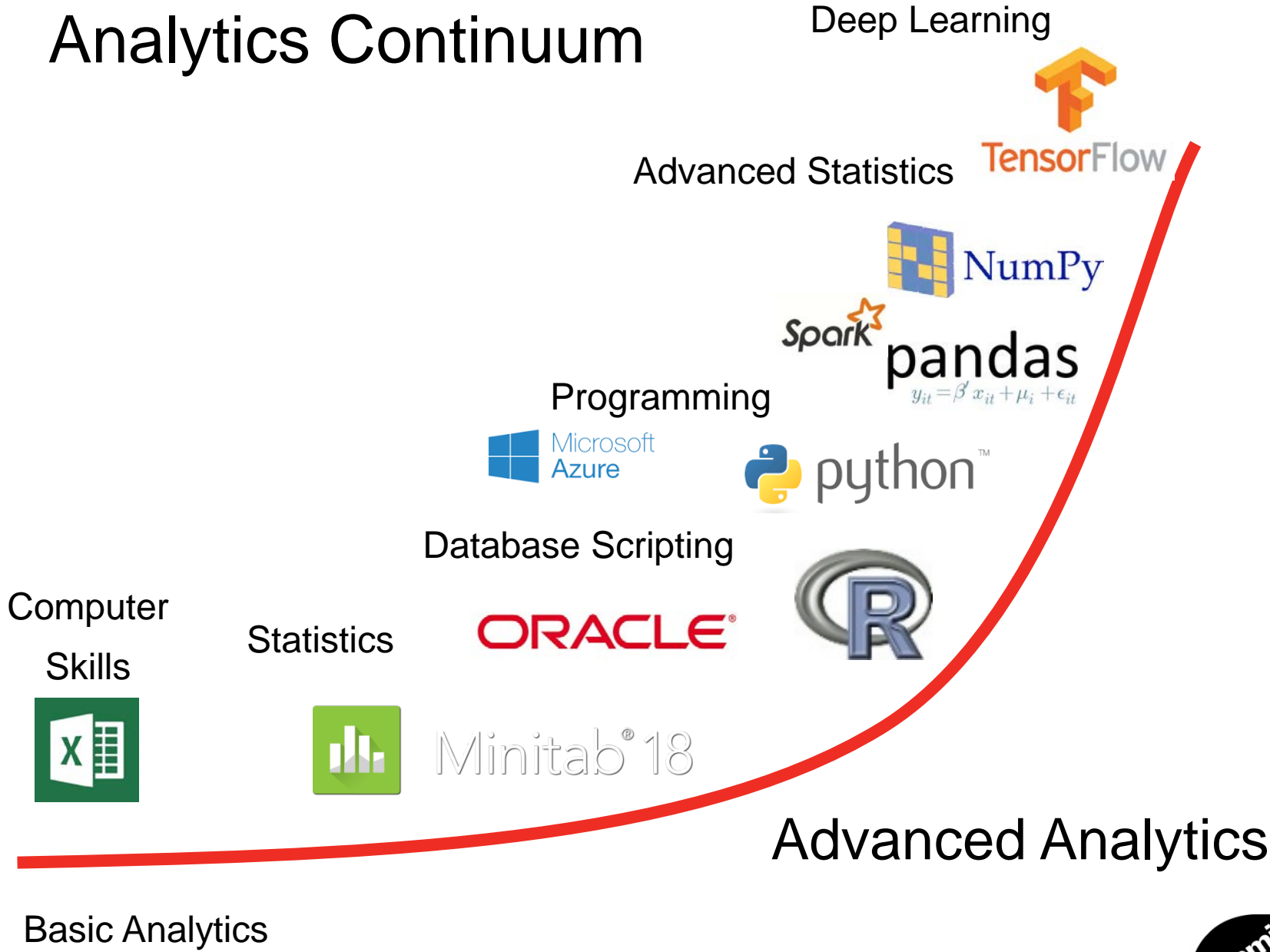


# Sequential Nature of Capability / Solution Development





# Analytics Continuum



# Commercial Vehicle Telematics with high volume data

- Reduce time to solve Current Product issues
- Reduce/Eliminate Service Trouble Shooting time and Increase repair right first time
- Enables Prognostics to reduce unplanned downtime
- Improve Truck Quality at Launch
- Reduce Truck Cost
- Optimize Truck Performance based on actual duty cycle

