



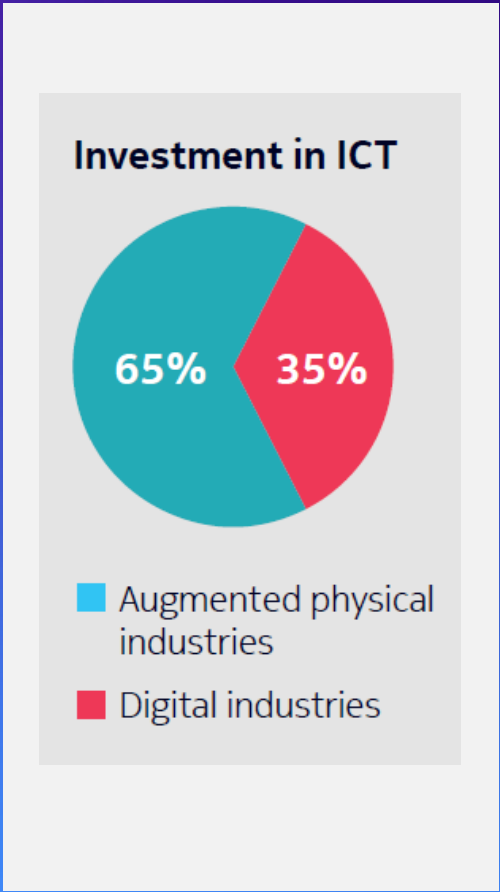
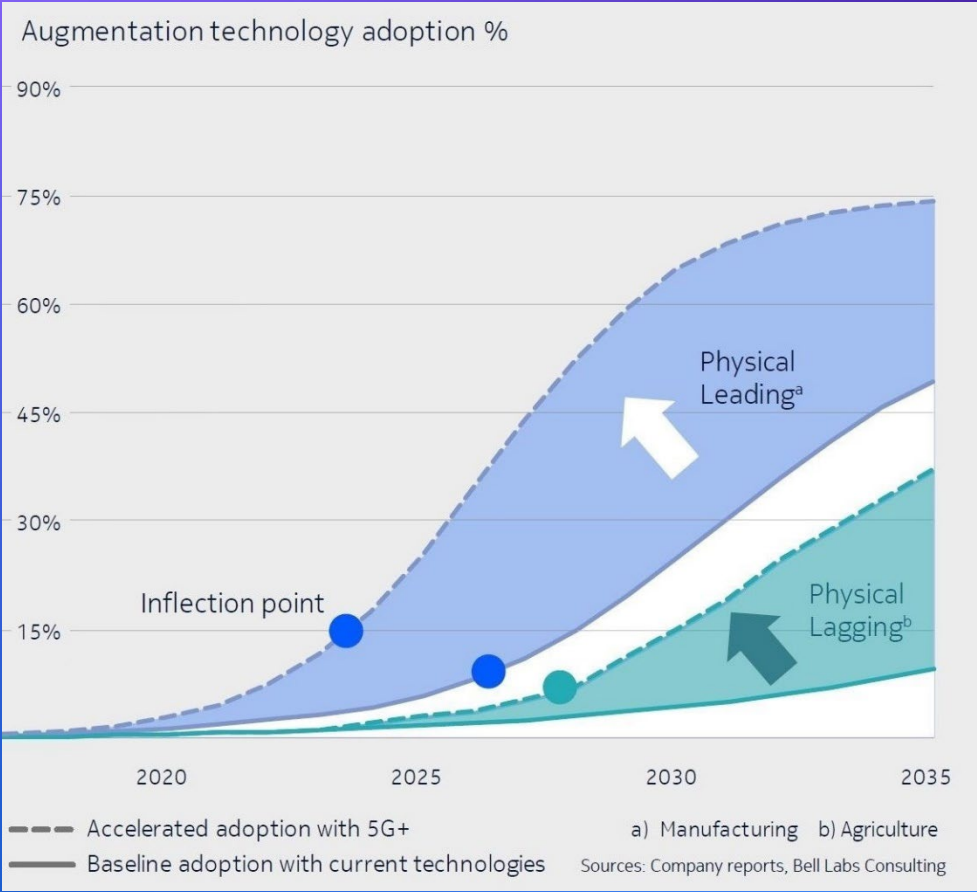
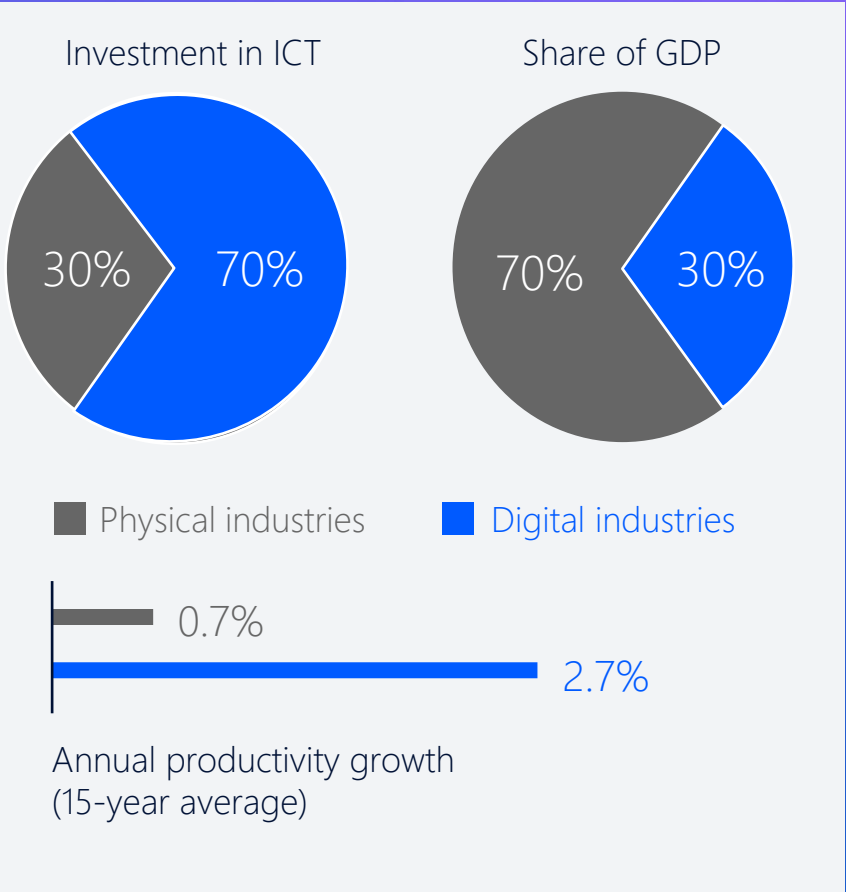
Lets Get Physical!

Accelerating OT Digitisation

Andrew Cope, 25th Oct 2024



The “Big Inversion” was always going to take time...



We already see Industry and enterprise metaverse is not a fad

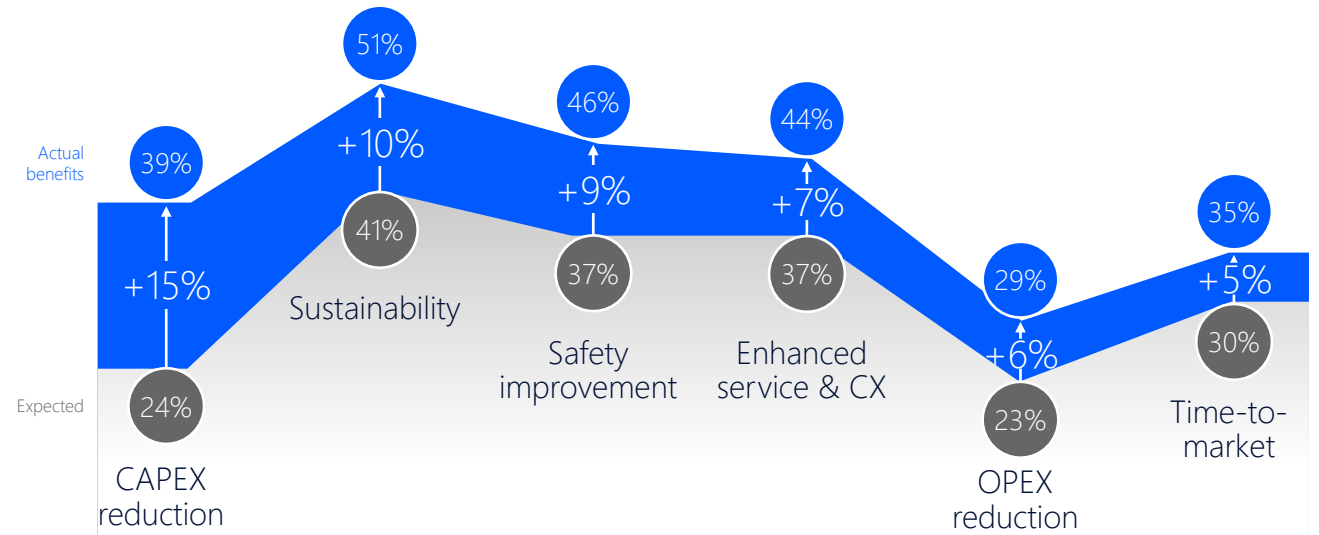
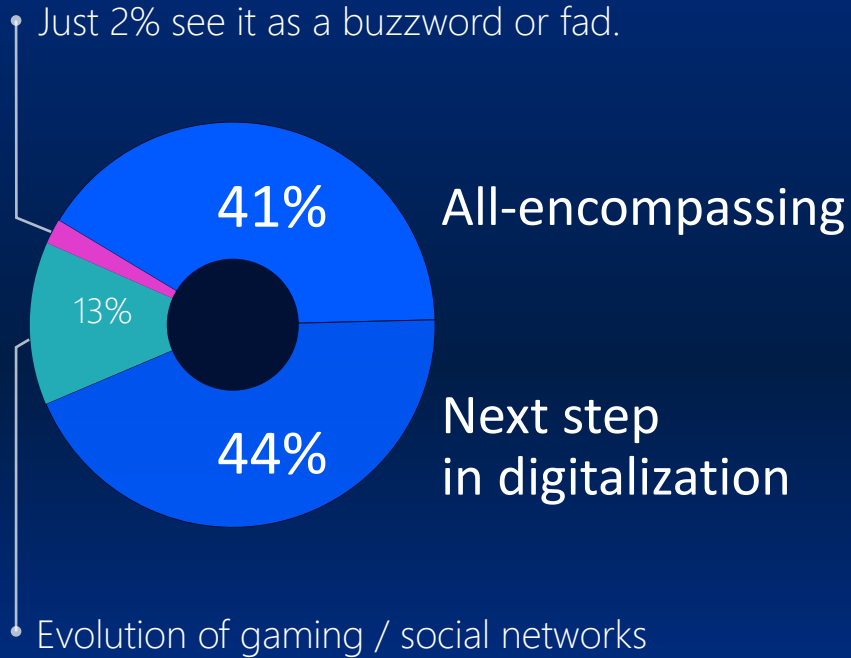


Industrial and enterprise metaverse use cases



It's happening now









... with better-than-expected results



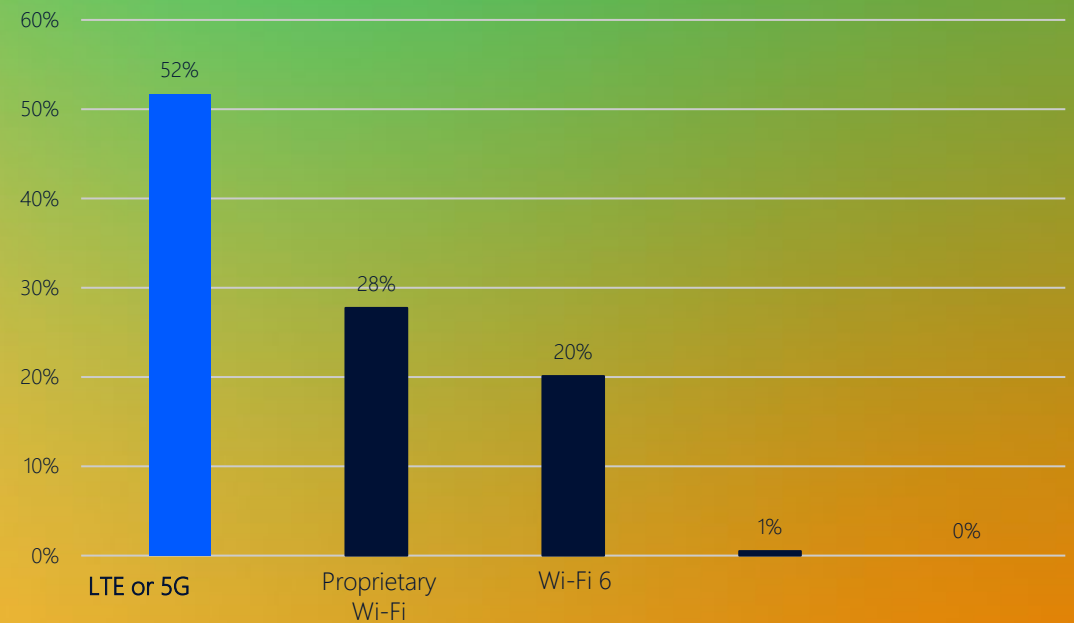
It typically starts with 1 use case...



With multiple connectivity options

Employees mobile services   Public 4G/5G	Business applications   LAN & Wi-Fi
Business critical apps   SLA based nationwide MO / IoT mobile networks sharing	Mission critical apps   Private networks

And while LTE/5G is the preferred choice for business/mission critical connectivity*

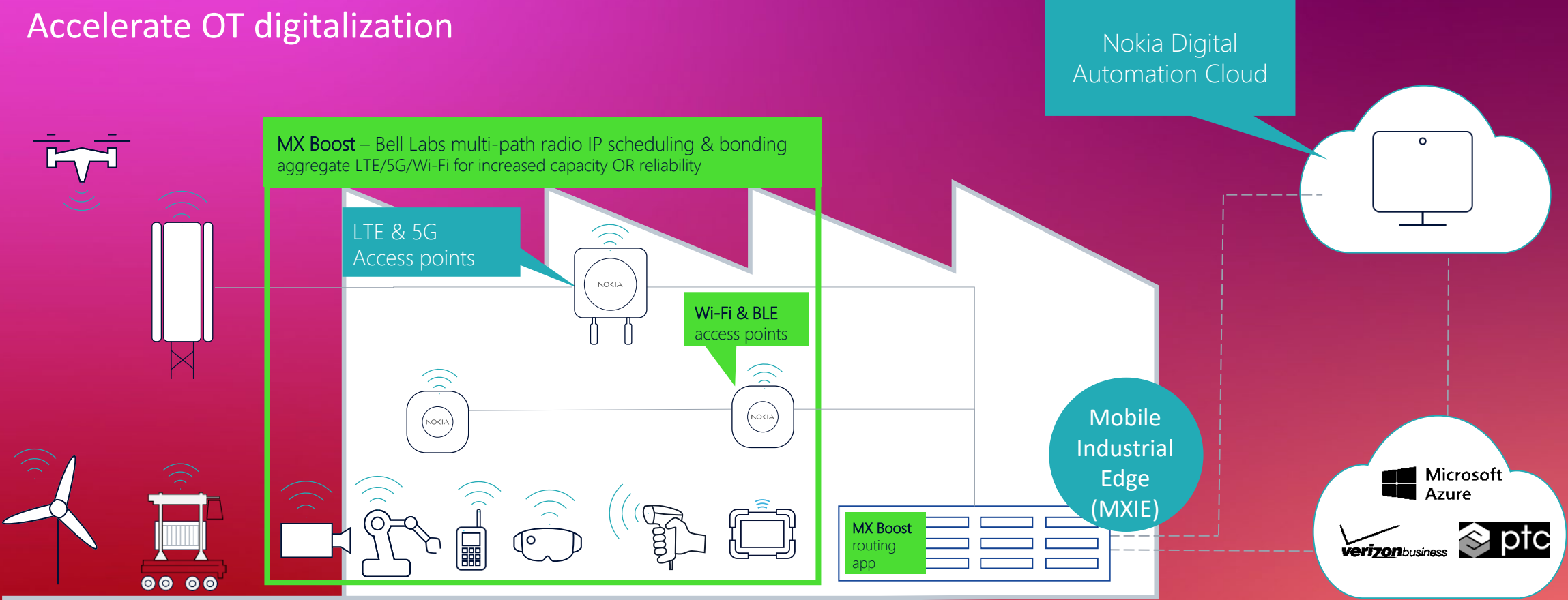


It's still only half the market.

* 2021 Nokia-ABI research, 600+ manufacturers survey

Nokia Digital Automation Cloud

Accelerate OT digitalization



Reliable & deterministic wireless connectivity for digitalisation of OT assets, workers, and autonomous/AI/ML actions.

MX Industrial Edge, LTE/5G NSA/SA, Wi-Fi controller & Industrial Apps


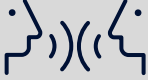











3P apps, Webscale & Industrial Connectors, API



Rich set of digitalization enablers

Nokia Industrial Application Catalogue

● Nokia ● Partner

<p>Wireless connectivity</p>  <ul style="list-style-type: none"> Nokia Digital Automation Cloud (DAC) Nokia DAC Wi-Fi Nokia CBRS domain proxy Nokia MX Boost 	<p>Comms</p>  <ul style="list-style-type: none"> Nokia Team Comms Nokia Group Communications* 	<p>O&M</p>  <ul style="list-style-type: none"> Nokia Network Digital Twin Nokia Industrial device management 	<p>Worker Safety</p>  <ul style="list-style-type: none"> Portalify Smartview Secapp
<p>Video analytics</p>  <ul style="list-style-type: none"> Eviden Quality Inspector 	<p>Tracking & positioning</p>  <ul style="list-style-type: none"> Nokia High Accuracy Indoor Positioning (HAIP) Nordic ID Svarmony-aryve HERE HD GNSS 	<p>Robotics & mechatronics</p>  <ul style="list-style-type: none"> Nokia Drone Networks 	<p>Pre-configured industrial applications accessed from the catalogue</p> <hr/> <p>Automated provisioning and life cycle management for apps on MXIE edge</p> <hr/> <p>Includes Nokia and 3rd party applications – offering growing</p> <hr/> <p>Applications brewing within many categories such as Security, IIoT and digital twin and Robotics & mechatronics</p> <p>Nokia Industrial Application Catalogue</p>
<p>Connected worker & XR</p>  <ul style="list-style-type: none"> Taqtile Manifest Nokia MX Workmate 	<p>Enterprise security</p>  <ul style="list-style-type: none"> Zscaler Private Access Palo Alto NGFW 	<p>Industrial connectivity</p>  <ul style="list-style-type: none"> Siemens MindConnect Software Agent 	
<p>IIoT & digital twin</p>  <ul style="list-style-type: none"> Nokia Integrated Operations Centre (IOC) Litmus Edge Crosser Node 	<p>Video enabler</p>  <ul style="list-style-type: none"> Smart Mobile Labs EVO 	<p>Cloud connectivity</p>  <ul style="list-style-type: none"> Azure ARC Azure IoT Edge 	

Nokia Focus Segments

Manufacturing



Ports/Logistics



Mining, oil, and gas



Utilities



Rail/Transportation



Public Safety/First Response



Collaborating with entire ecosystem to drive Industry 4.0



Service provider partners

Expertise in building & operating mobile network or public clouds, spectrum partners



Industrial bodies and ecosystem partners

Kick starting the industry with more LTE and future 5G industrial connected things

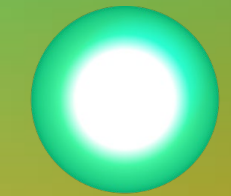


System integrators & Consulting

Deeper industry expertise and specialised channel to market
Broadening the sphere of influence



ANZ's Digital Backbone



NOKIA