




**Why Connected Worker NOW?**


**nagarro**


# The world around us...


Scaling from  $10^3$  to  $10^{12}$

 Real Time Monitoring


 Process Management


 Home Automation


 Open A Door

 Anytime Anywhere Service


 Take A Flight

 Logistic Management


 Product Inspection


 24x7 Surveillance


Thousands of use cases


 Statistical Process Models


 Digital Twin

 Virtual Assistant


 Shopping Apps

 Connected Data


 Monitoring App

 Wearables App

 AR App

 Artificial Intelligence App

Millions of apps

 Home Owners

 Managers


 Car Drivers


 Airline Passengers

 Consumers

 Factory Workers

 Support Staff


 Factory Supervisors

 Product Installers

Billions of users

 Doors

 Aircraft engine


 Home Appliances

 Industrial Machines

 Lights

 Routers

 AR Headsets

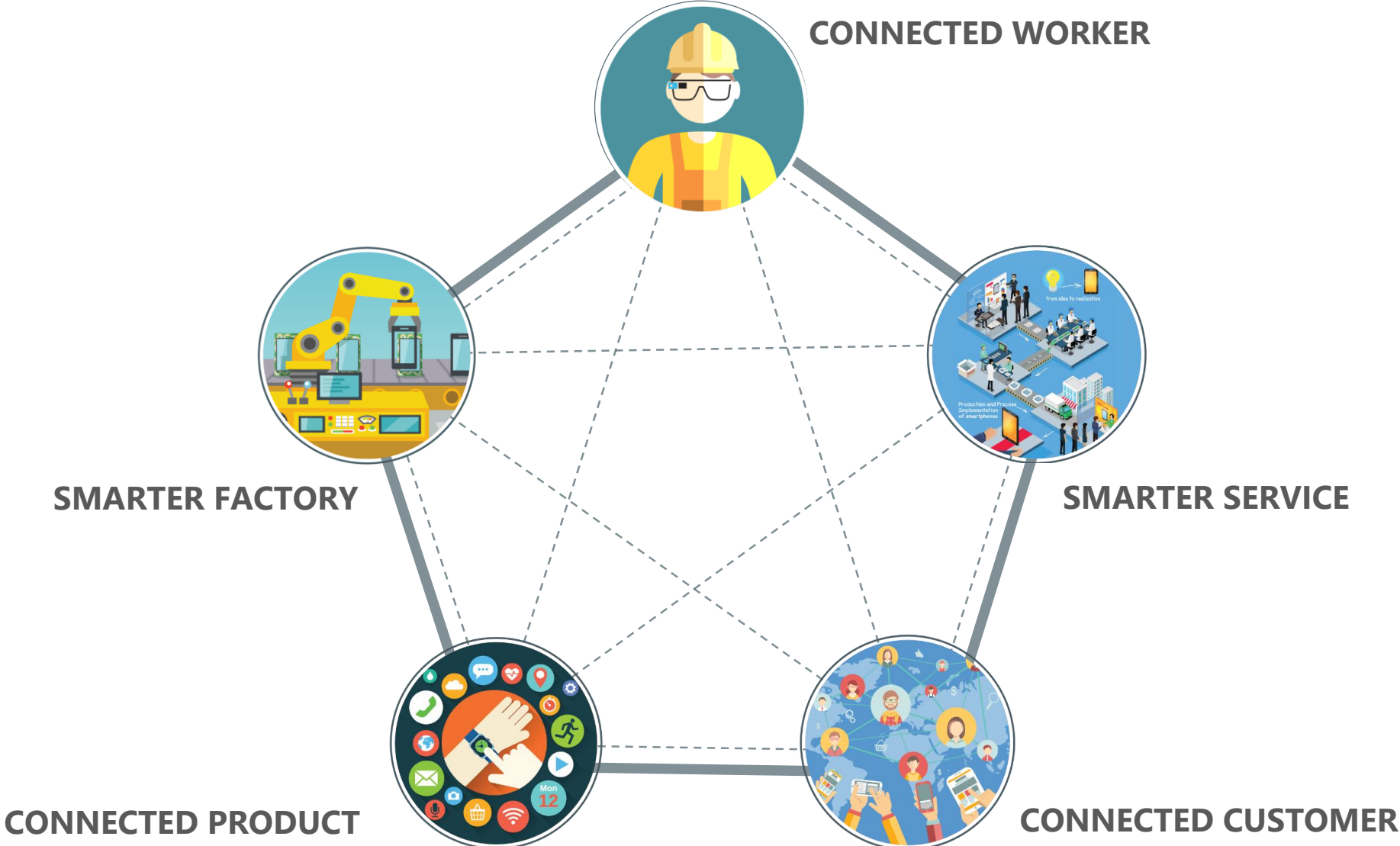
 Elevators

 Cars

Trillions of things

# Connecting Industry 4.0 *Use Cases to Things* is rapidly creating an interconnected and interdependent ecosystem

Connected Worker 4.0 for Industry 4.0 is a key element of this ecosystem



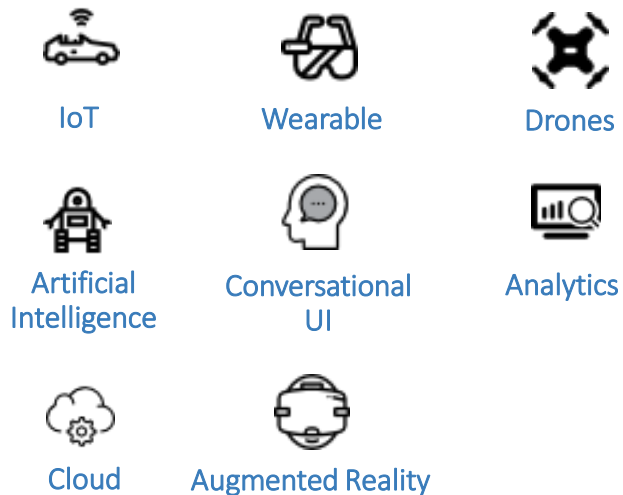
# Connecting the workers has been an enterprise goal for more than a century. The speed of this change has increased...

## Connected Worker 4.0

### Who is a connected worker?



### Future of connected worker



**4 Why NOW?**

Technology      Affordability

### How is Connected Worker 4.0 different?

	Device	Data	Decision
Industry 2.0 (1900-1970)	Calculator, Mainframe	Magnetic Tape/Drum,	Spreadsheet (Batch, LANPAR)
Industry 3.0 (1970-2010)	Mainframe, Desktop, Laptop, Mobile	Floppy, Hard Disk, CD ROM,	Relational Database
Industry 4.0 (2010 to now)	Mobile, Wearables	Big Data, Cloud	Advanced analytics, Artificial intelligence



# We align Industry 4.0 use cases to Connected Worker 4.0 using a framework with focus on 3 dimensions of Device, Data and Decision

Few samples from our work from among 1000s of use cases

## Use cases

Field Maintenance

Complex Assembly

Complex Manufacturing

Inspection & Quality

Training

Logistics

## Step Change: Productivity, Cost, Quality

### What is the Device?



Paper



Desktop



Laptop



Mobile



Tablet

Evolution of  
medium



Mobile



Tablet



Smart Glasses



Wearables

### Where is the Data?



Monolithic



RDBMS



Data  
Warehouse

Evolution of  
strategy



Cloud



Data  
Lakes



Data  
Factories



Single  
threaded /  
core



Central  
processing



Multi  
threaded /  
core



High  
speed  
processing

Evolution of  
execution



High  
speed  
processing



Distributed  
processing



Processing  
on demand



GPU  
processing

### Enablers for Decision making?



Static  
reporting



Problem solving  
approach

Evolution of  
analysis



Advanced  
analytics



AI / Machine  
learning

# Our best in class partnership is driving innovation

## Solutions for Connected Worker 4.0

### Consulting, Implementation and Integration

**nagarro**

Delivering Technology Enabled Innovative Solutions

- Full lifecycle software development
- Digitization for connected world
- Transformation & modernization
- Innovation for next generation

### Foundation Technology

**Google**

Edge to Cloud Technology Enabler

- End to end coverage in technology
- Industry leading enterprise IoT, cloud platform & smart glass hardware

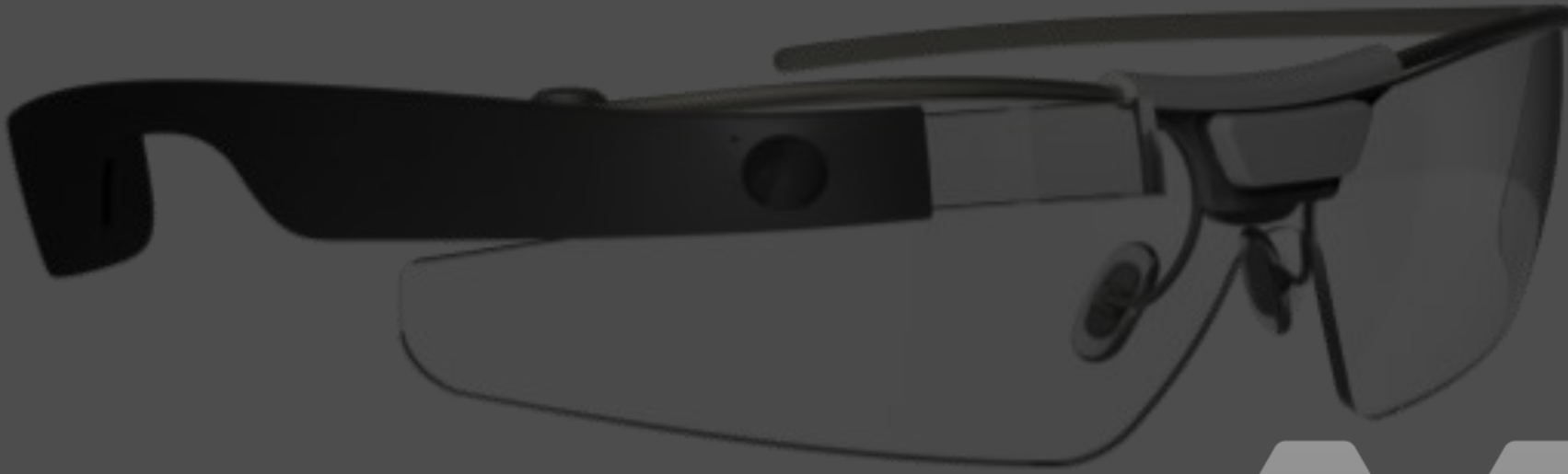


### Enterprise Grade Wearable Platform

**UP SKILL**

Industry Leading  
Wearables Specialist

- Scalable and flexible device agnostic software platform
- Best practices and secondary support
- Product alignment with Google



Umang Garg  
Director – Industry & Automation  
Nagarro

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Connected Worker 4.0

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