

Achieving Sustainable Asset Reliability through Your #1 Asset – People

Bob Munro MBA PMP CMRP

GHD Executive Advisor

11th February 2019

People – Your #1 Asset for achieving Reliability

- **People** are an organization's most important asset
- **Without people** nothing gets designed, built, operated, maintained or managed
- **Human performance** plays a significant role in asset reliability
- **Transformation** from transactional, Activity Based Maintenance (ABM) to a Results Focused Organization (RFO) is a critical success factor
- **Digital Disruption**, Requires that People and Technology must interact like never before



What is Asset Reliability?

Ensuring that physical assets continue to do what their users want them to do



A Robust Process and Methodology

- To identify and mitigate risk of catastrophic failure by
- Establishing countermeasures to address, operational, safety, environmental and quality risks in order to
- Preserve the current operating context.



GHD
Advisory

Achieving Asset Reliability Through People

From Traditional Maintenance

- Rearward facing (Lagging)
- If it Ain't Broke Don't Fix it
- Time Based Maintenance
- Belief that Failure is Mainly Age Related

- React to functional failures

To Reliability Focused Maintenance

- Forward facing (Leading)
- Planned and Measured approach
- Condition Based Maintenance
- Understanding how failures occur and developing proactive countermeasures to mitigate risk
- Leverage proactive maintenance to predict and prevent functional failures

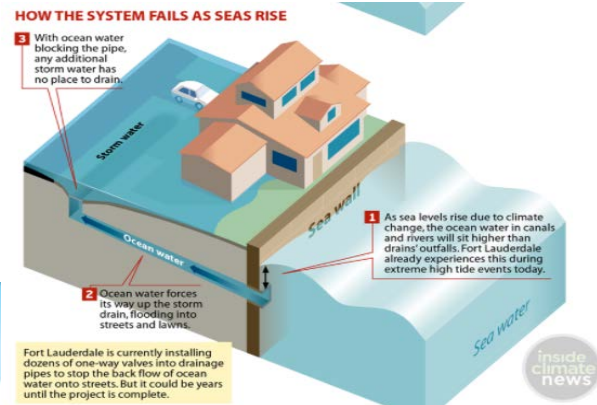


Challenges to Achieving Reliability Through People

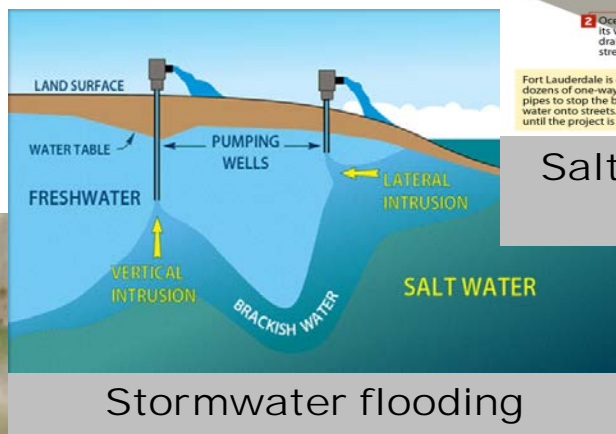
Environmental Challenges Facing Southeast Florida Utilities Require Resiliency Preparation

'Today, the City of Fort Lauderdale and the surrounding South Florida region are areas considered among the most vulnerable to climate change in the world.'

Source: City of Fort Lauderdale: Why Resiliency Now



Salt water intrusion to the water supply



Stormwater flooding



Extreme weather events

Asset Management Challenges Facing All Industries Today

Financial asset constraints

- Tax Revenues
- CIP approvals
- Capex spend
- Opex spend
- Unplanned expenditures

Physical asset constraints

- Aging infrastructure
- Defect Elimination on new infrastructure
- PM Optimization to improve wrench-on-bolt
- Reliability Centered Maintenance/Design to achieve Resiliency

Human asset constraints

- Transition from Baby Boomer to Millennials
- Labor succession and retention
- Limited training

Information asset constraints

- Lack of Data Integrity
- Multiple legacy systems
- Effective Information management and use

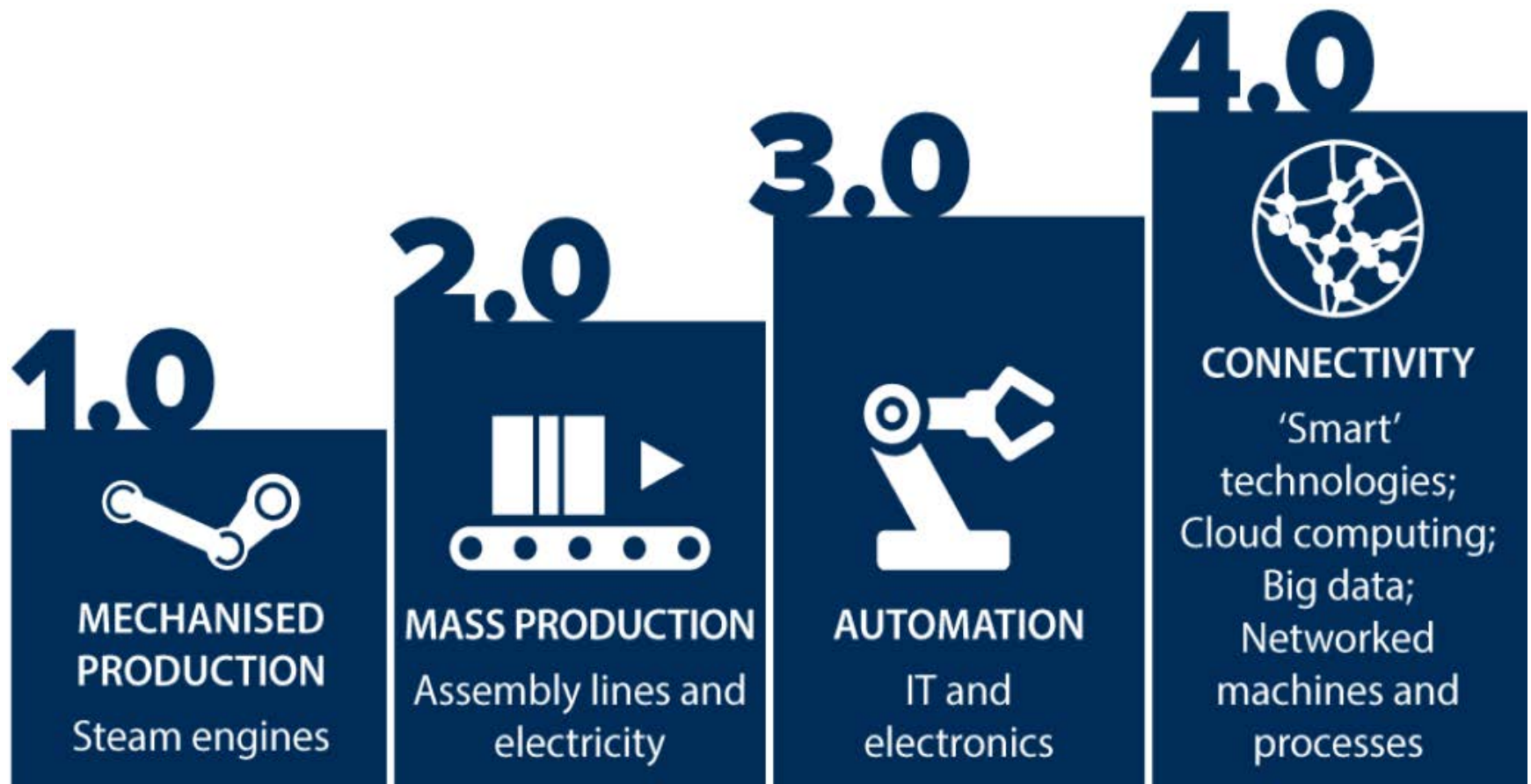


Demand for talent to replace those retiring from the workforce exceeds supply

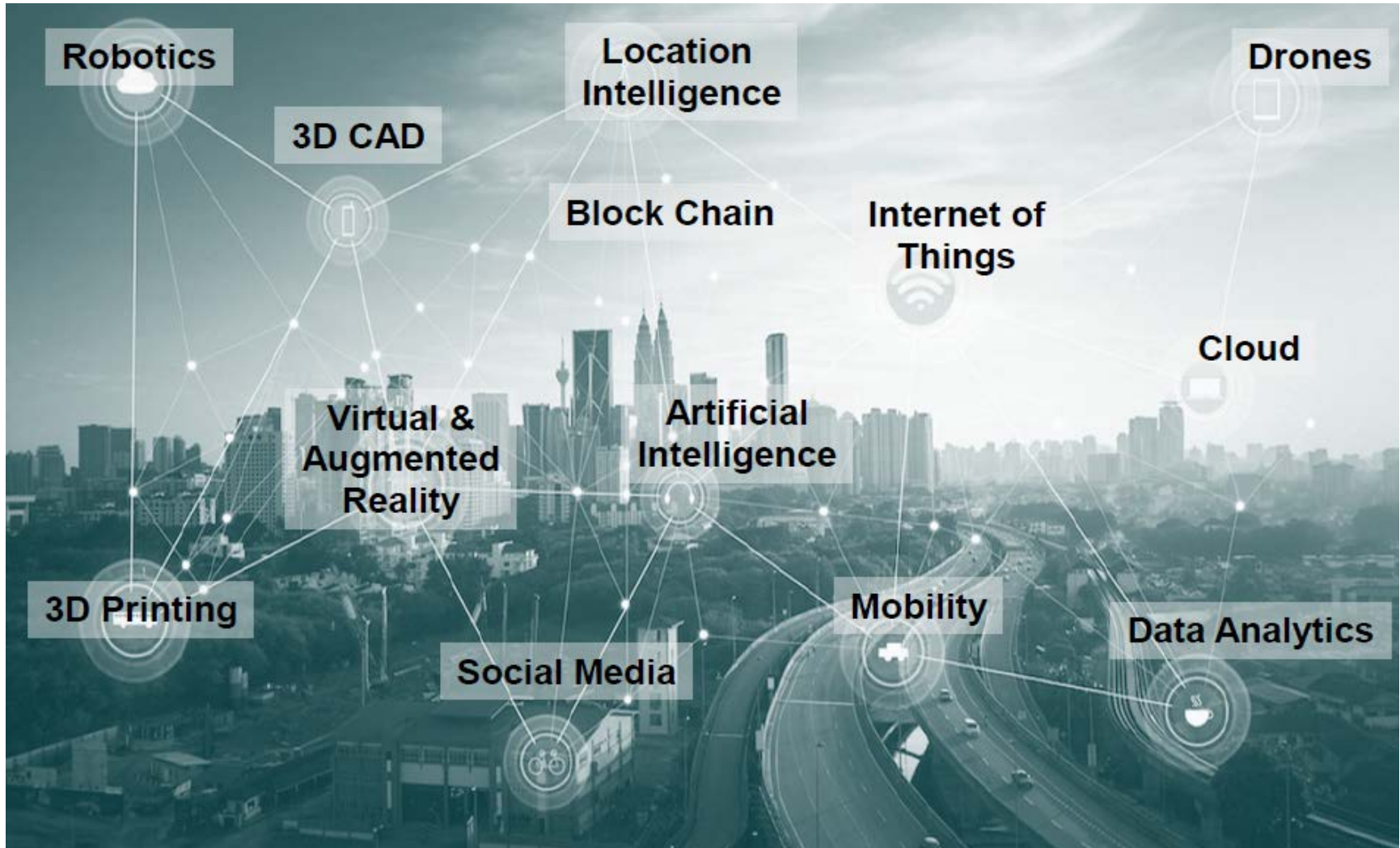
This creates:

- **Competition** for new hires between all private and public sectors
- **Unfilled vacancies** within the organization that can be hard to fill
- **Increased pressure on compensation packages** to attract new employees and retain existing staff
- **Reliance on overtime** and/or use of contractors
- **Risk of burnout** and increased safety incidents

Technological Complexity Requires New Methods to Achieve Asset Reliability

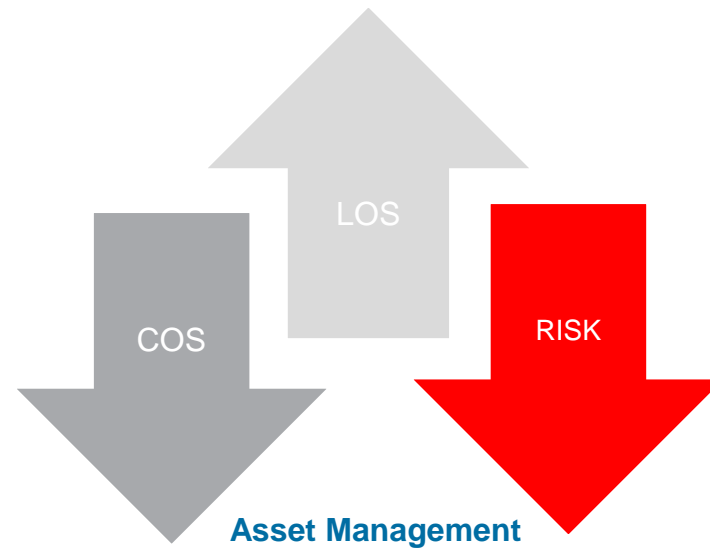


Digital Disruption will change the way we do business



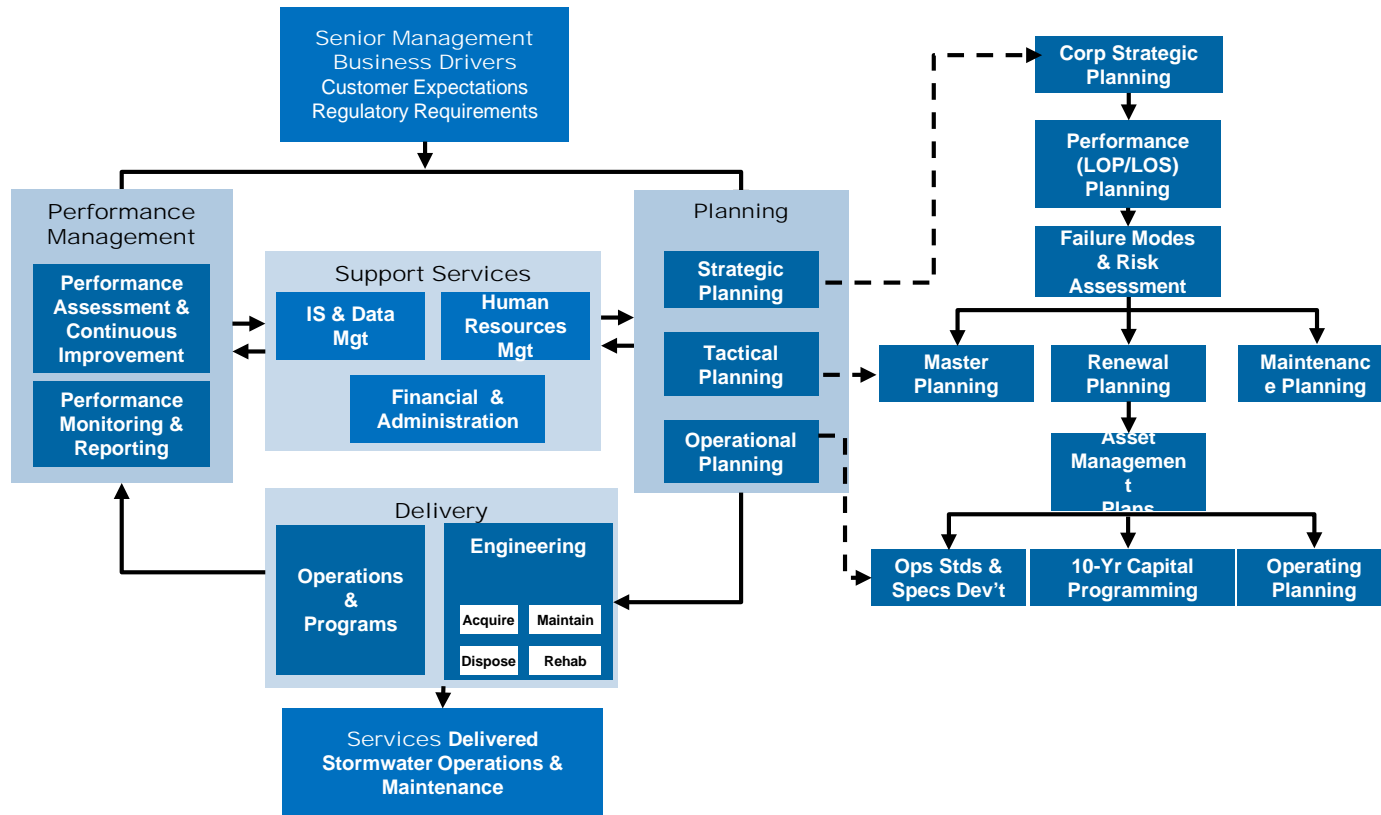
Approaches to Achieving Reliability Through People

Understand Your Risk is the heart of Asset Management



**Balance between Levels of Service
(LOS), Cost of Service (COS), and
Acceptable Risk**

Understand Your People working together to achieve Results



Understand Your Organization Maturity Level

Current Situation

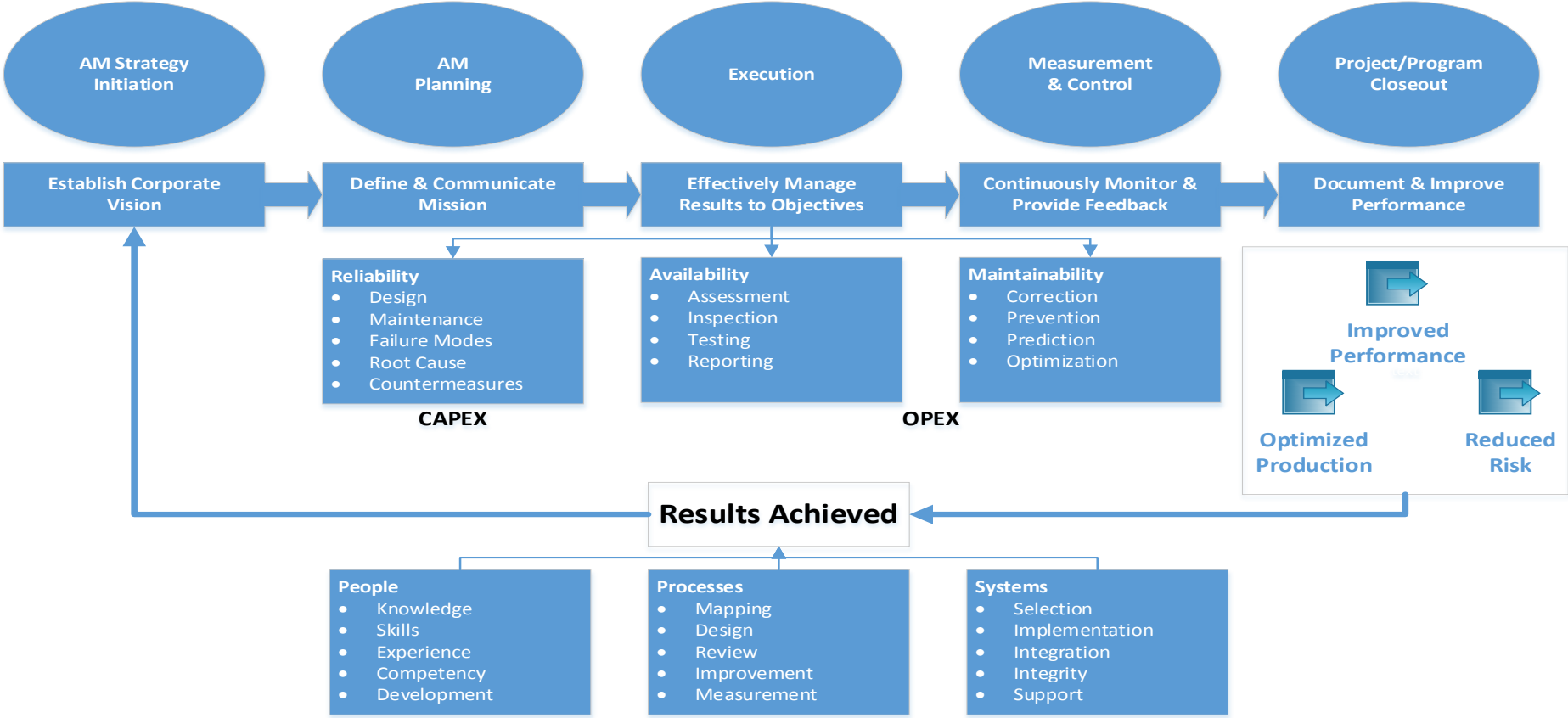
Vision for the Future



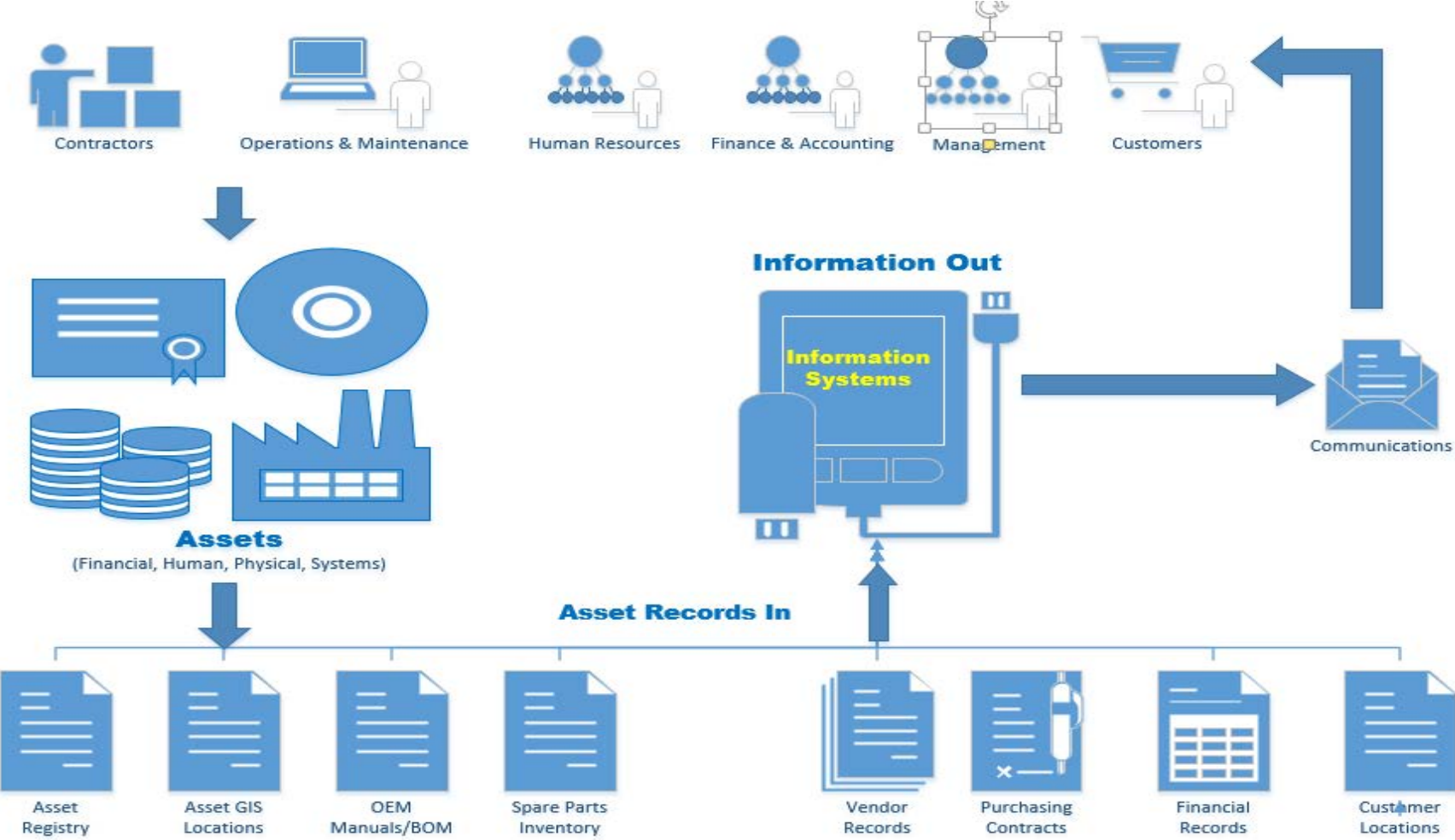
Maturity Level 0	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4	Maturity Level 5
The City has not recognized the need for this requirement and/or there is no evidence of commitment to put it in place	The City has identified the need for this requirement and there is evidence of intent to progress it	The City has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place	The City can demonstrate that it systematically and consistently achieves relevant requirements set out in the IAM Anatomy	The City can demonstrate that it is systematically and consistently optimizing its asset management practice, in line with the City's objectives and operating context	The City can demonstrate that it employs the leading practices and achieves maximum value from the management of its assets, in line with the City's objectives and operating context

Develop Robust Processes – To Achieve Reliability Through People

GHD Advisory Roadmap to Successful Asset Management

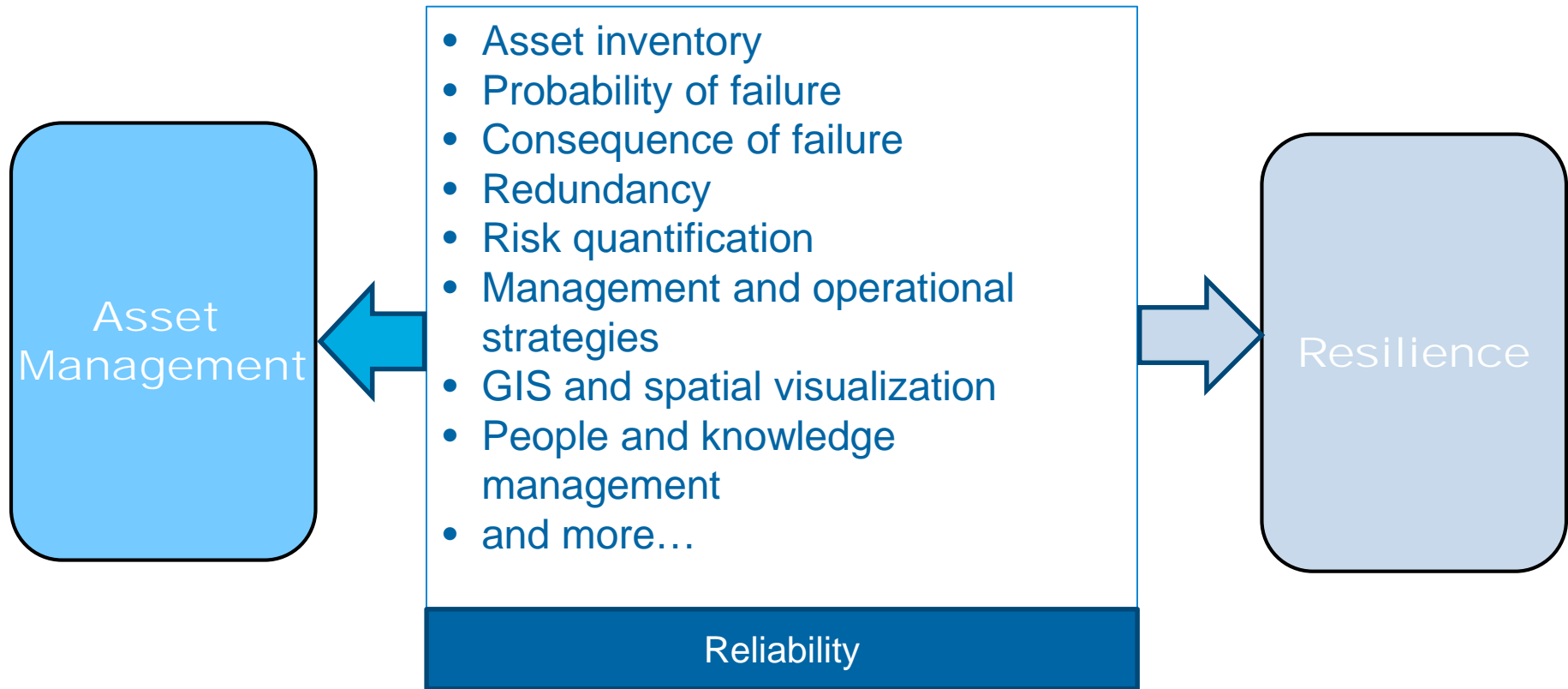


Integrate Systems to Manage Information and Support Reliability



GHD
Advisory

Achieve Asset Management and Resilience Through Reliability

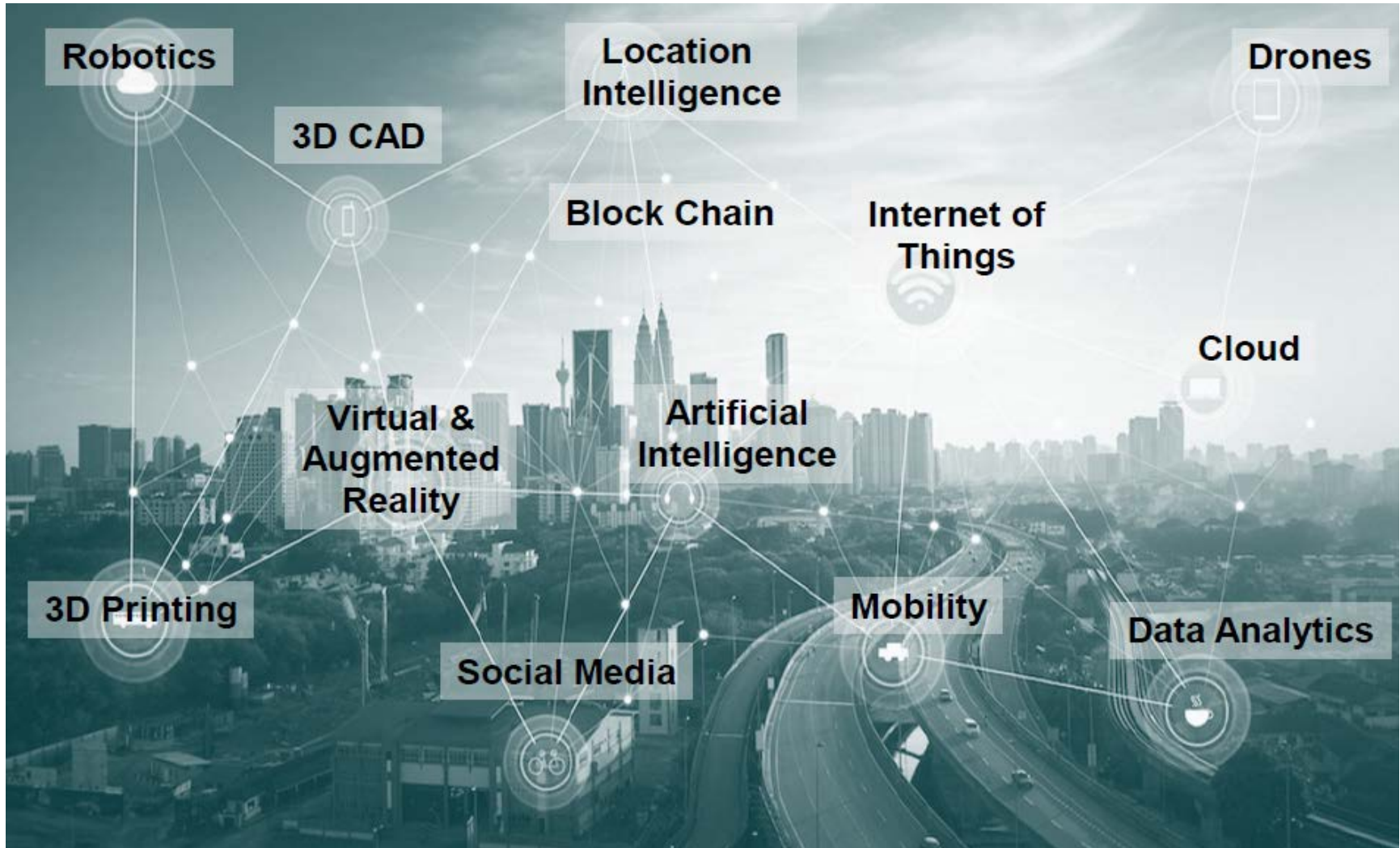




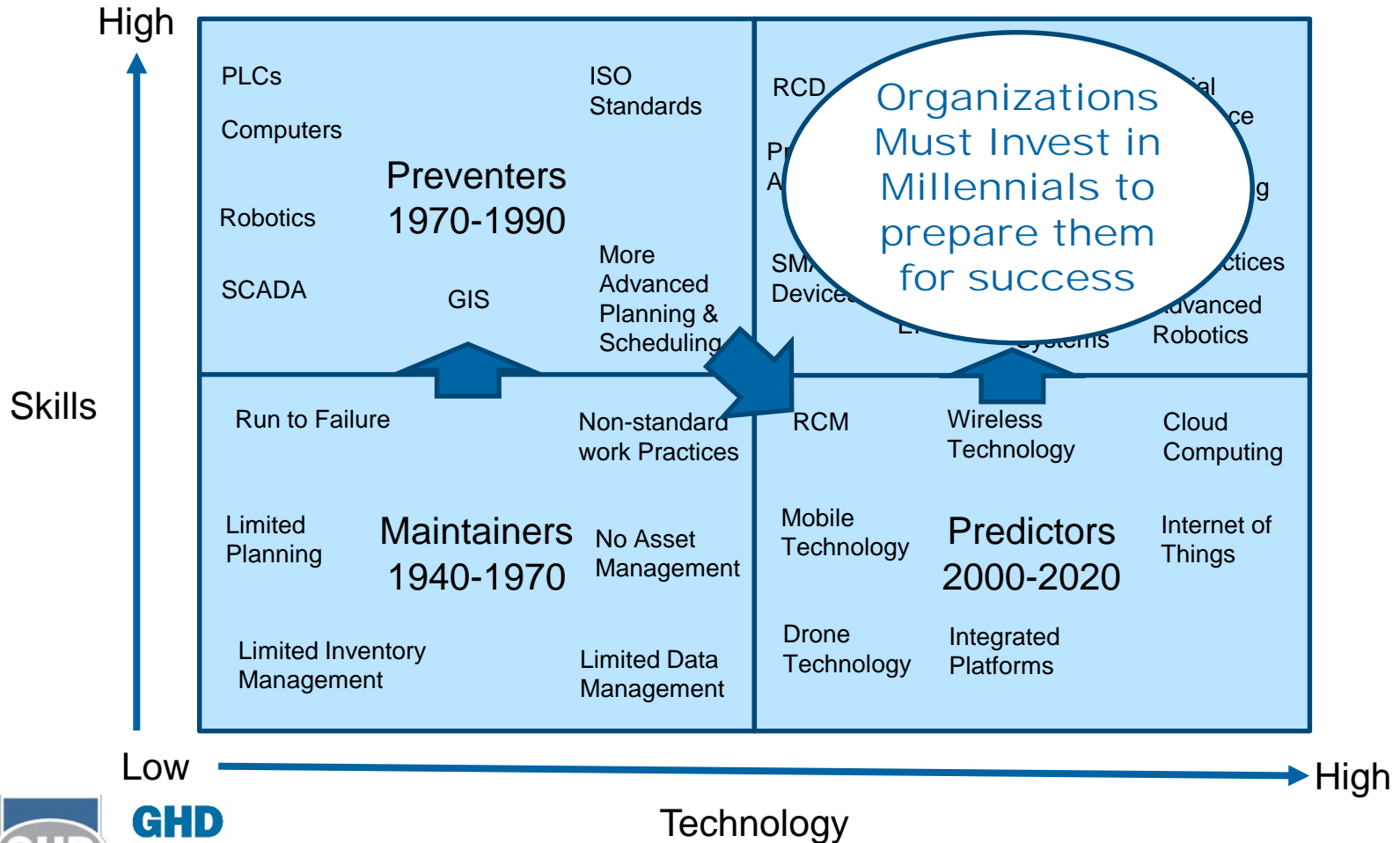
GHD
Advisory

Millennials – A Critical Success Factor to Sustainable Reliability

Digital Disruption will change the way we do business

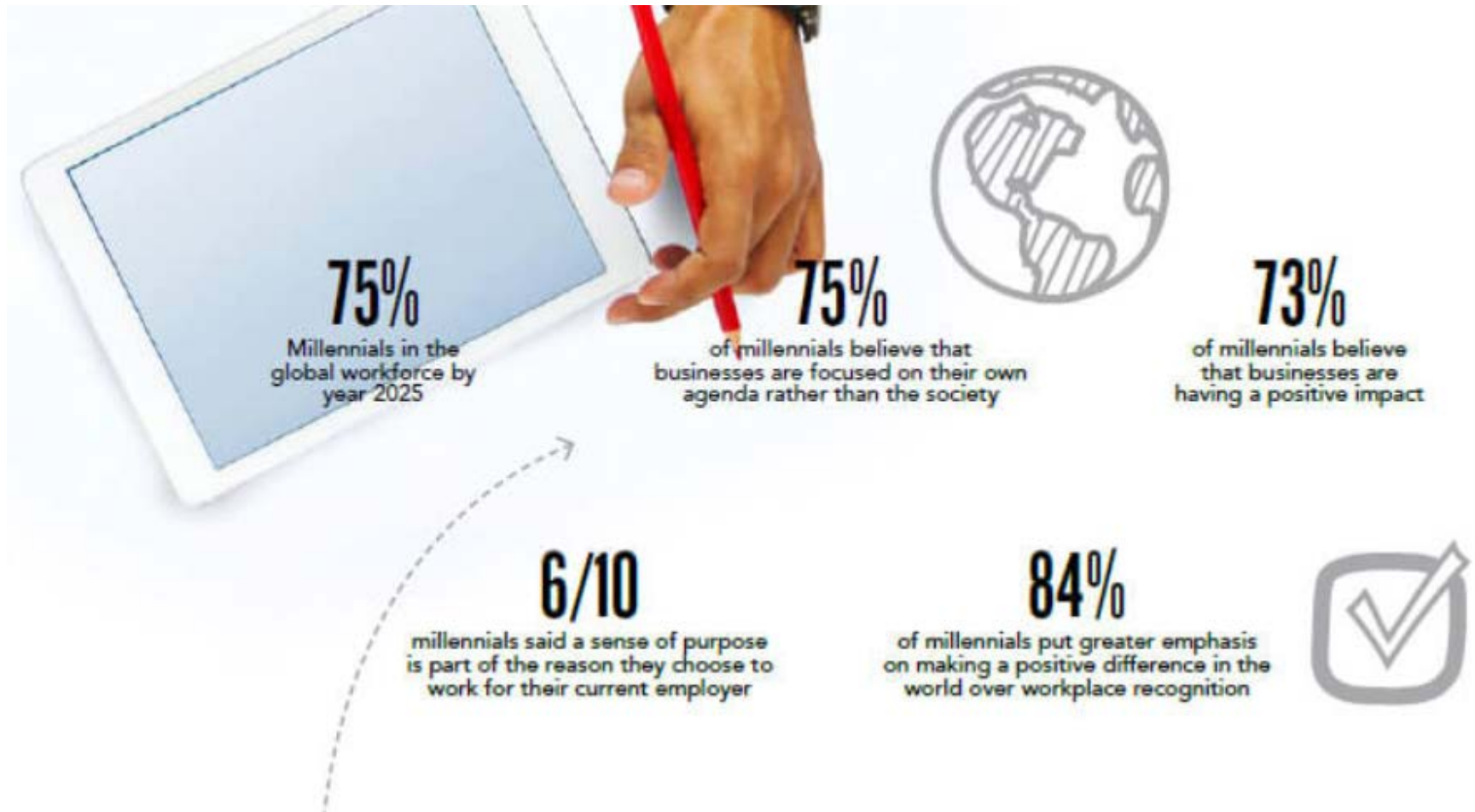


Technology Has Exponentially Increased the Probability of Asset Reliability through SMART Analytics



Understanding Millennials

Anyone born between 1981 and 1996 (ages 23 to 38 in 2019)



Millennial expectations place new demands on the organization

To retain Millennials, organizations need to provide:

- **Good work / life balance**
- **Opportunities to progress** and be leaders (this is important not just for attraction but also for retention, as many who stated they are planning to leave their company said they are doing so because of lack of leadership development)
- **Flexibility** (i.e., remote working / flexible hours)
- **Sense of meaning** from their work
- **Professional development** and training programs



Summary and closing

1

Your People are Your #1 Asset

2

Asset Reliability is a Critical Success Factor for Resiliency

3

The Era of Digital Disruption requires new approaches

4

Millennials will be a significant part of the workforce by 2025

5

Interactors using SMART technology will drive change

6

Embrace disruption and change on your terms



GHD
Advisory



Questions

Thank you!

Bob Munro MBA PMP CMRP | GHD Executive Advisor

bob.munro@ghd.com | 1 813 557 7926

www.ghd.com