



Lorri Rowlandson
SVP, Strategy and
Innovation

Technically-led global integrated facilities management (“IFM”) provider focused on providing disruptive business solutions and assured outcomes to our clients, through a culture of caring, innovation and high-performance

Mission

“To deliver innovative business solutions for clients with real estate portfolios, continually creating value for their stakeholders, while ensuring a sustainable, safe and comfortable environment for all.”

Vision

- We are a **recognized leader** in the provision of Real Estate Management Services
- We are the role model for **sustainable** operating practices and portfolio strategy
- We are the **employer of choice** within our industry and a “Best Employer”

Enabling Innovation

420+
MILLION SQ FT

40,000+
LOCATIONS

8,500+
TEAM MEMBERS



FACILITY MANAGEMENT

PROJECT DELIVERY SERVICES

PROFESSIONAL SERVICES

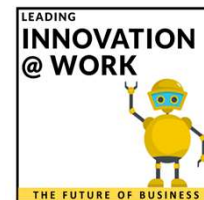
WORKPLACE SOLUTIONS

REAL ESTATE SERVICES

BGIS



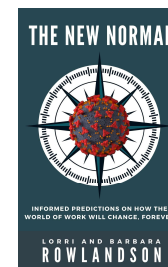
40,000+ FOLLOWERS



LEADINGINNOVATIONATWORK.COM

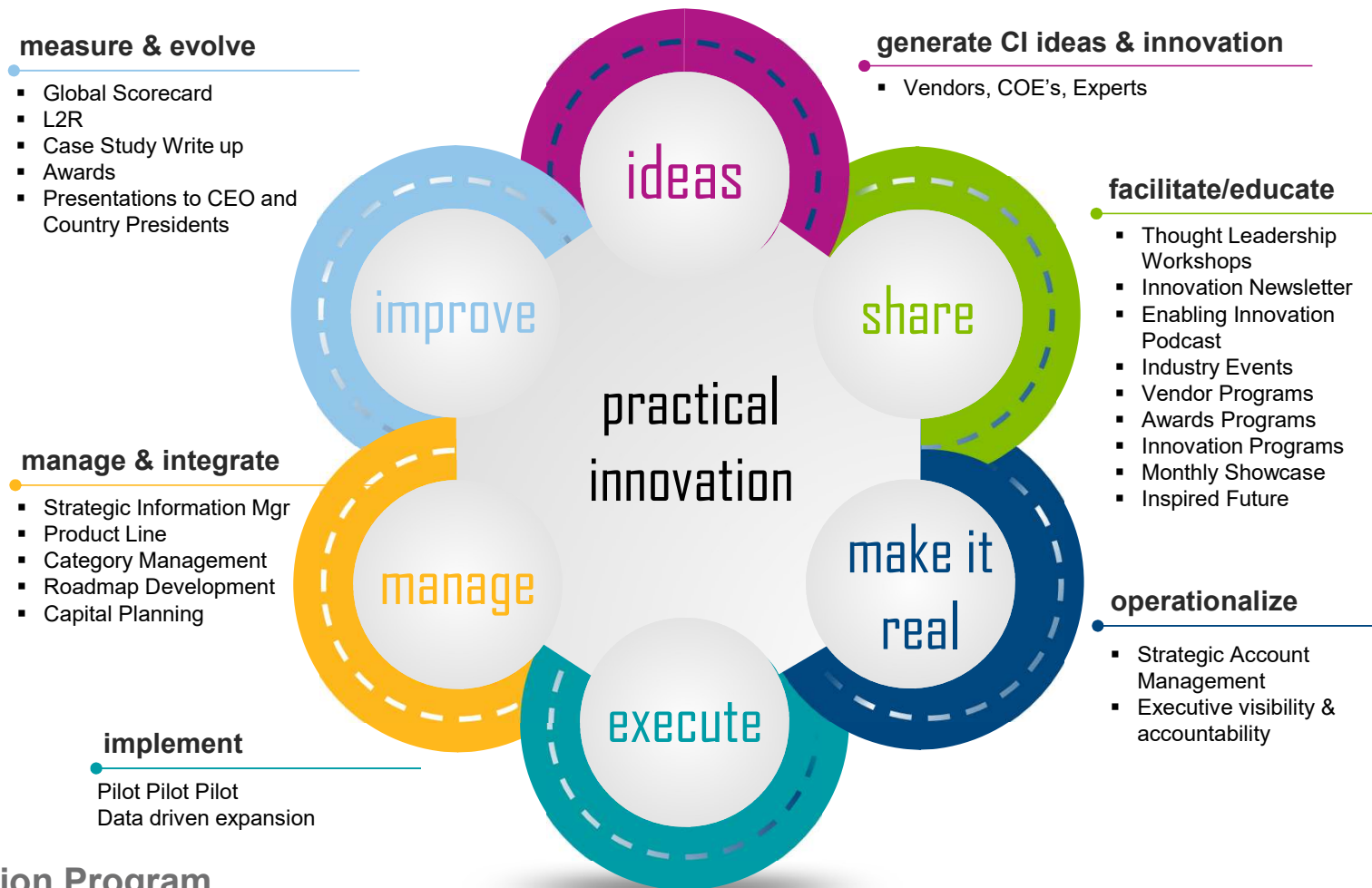


FROM THE ROOFTOP



LORRIROWLANDSON.COM

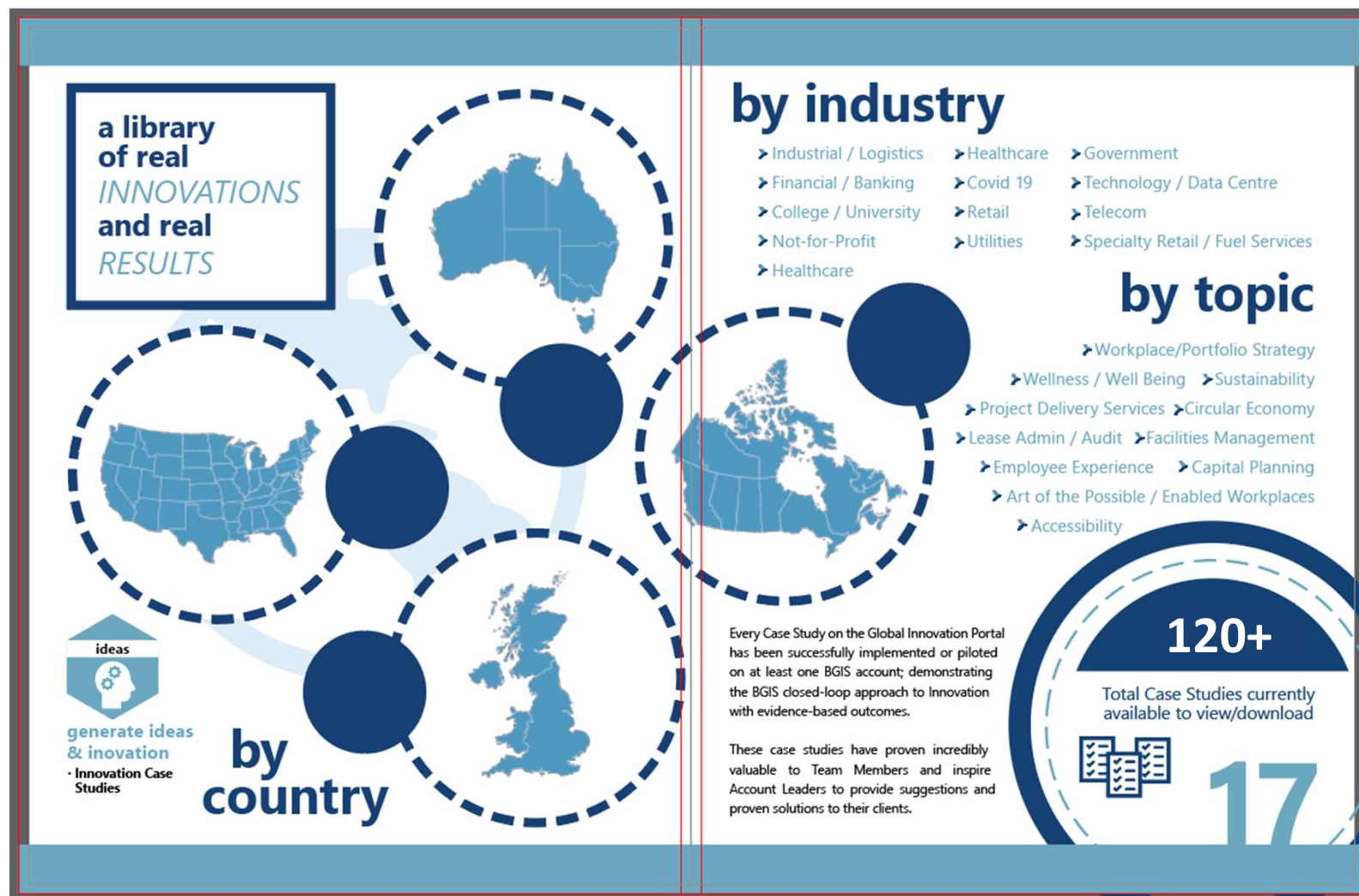
BGIS has a closed loop approach to Innovation with evidence-based outcomes



BGIS Innovation Program

In 2021 BGIS added over 120 case studies to the Innovation Library.

100% of these case studies are implemented at client locations.





FEATURED INNOVATION

the
*CIRCULAR
ECONOMY:*
powered by
COFFEE

Biomass products made from recycled coffee are a heat-efficient choice for businesses looking to reduce their carbon footprint and benefit from the innovation of sustainable energy.



CONSUMPTION

The world drinks ~2.5 billion cups of coffee every day. This creates 18 million tonnes of spent coffee grounds every year, typically sent to a landfill as waste.



COLLECTION

Spent coffee grounds are collected in collaboration with participating vendors and waste management and logistic infrastructures.



CONVERSION

The collected grounds are delivered to a factory where the coffee is conditioned and renewed for reuse in coffee pellets, logs, or biodiesel.



COMBUSTION

The new coffee pellets and logs are provided to businesses as a sustainable alternative to kindling, imported wood logs, or coal briquettes.



When a Client opts to utilize coffee biofuel, BGIS manages the specialized processes and logistics related to efficiently burn the converted waste coffee that is collected from buildings and coffee chains.



DESCRIPTION

At Ropemaker Place, BGIS Design and Engineering Teams reviewed design heat characteristics and applied the necessary technologies to deploy a solution that utilizes coffee pellets.

The site was previously using (EN regulated) compressed wood pellets to produce the raw heat material for the 1.2 meg of heat over the winter months (primary heating loop outputs demand). Segregation of coffee waste has been ongoing since 2013 with local suppliers partnering and getting involved in the first-of-its-kind conversion project.

BGIS reviewed the design heat characteristics of Ropemaker Place and calculated that under full heat load the building would consume 7 tonnes of spent coffee ground per week, rendering the secondary dual-fuel boilers as a slave to maintain supply temperatures overnight. Bio-mass technical teams demonstrated that the heat produced was adequate - however combustion testing showed that a filtration system would be required to remove noxious gases within the exhaust flue. BGIS's final design allowed both filtration and the coffee-fueled system to function in unison.



ENABLING
INNOVATION

BGIS

Biomass products made from recycled coffee are a heat-efficient choice for businesses looking to reduce their carbon footprint and benefit from the innovation of sustainable energy.

COFFEE PELLETS



Ideal for use in large commercial and industrial biomass boilers, coffee pellets displace the need to use virgin timber and reduce reliance on imported pellets.



HIGH CALORIFIC VALUE

Coffee pellets boast a high calorific value; a value $\geq 15\%$ higher than standard timber pellets.

SUSTAINABLE ALTERNATIVE

Coffee pellets provide an alternative to traditional carbon-heavy fuels, virgin timber and imported pellets.

LOW MOISTURE CONTENT

Coffee pellets feature a low moisture content (below 10%).

SFR ACCREDITED

BGIS will only supply coffee products that are accredited by the Sustainable Fuel Register.

25 CUPS OF COFFEE

Each log contains the spent grounds from approximately 25 cups of coffee.

BURNS HOTTER & LONGER

Coffee Logs burn 20% hotter and longer than kiln-dried wood.

FOR CLOSED APPLIANCES

Perfect for burning in domestic wood burners and multi-fuel stoves.

SAVES ON EMISSIONS

Generate 80% less emissions than if the grounds were sent to landfill.



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COFFEE LOGS



Perfect for wood burners and multi-fuel stoves, coffee logs displace the need to use virgin timber and logs, reducing reliance on local natural resources.



ENABLING
INNOVATION

BGIS



Ropemaker Place is one of the City of London's most attractive yet sustainable buildings.

The 21-storey Grade A office tower with three basements was developed by British Land. It was completed in May 2009 to best-in-class standards and comprises a rentable area of about 602,000 sq ft.

Ropemaker Place has a BREEAM Excellent sustainability rating and was the first building in the City of London to achieve a LEED Platinum pre-certification for sustainability.



BGIS's BIOMASS SUCCESS AT ROPEMAKER PLACE

Segregation of coffee waste has been ongoing since 2013 with local suppliers partnering and getting involved in the first-of-its-kind conversion project.

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FUELED BY COFFEE POWERED BY BGIS



DESIGN

BGIS Design & Engineering teams have the abilities to review design heat characteristics and apply the necessary technologies required to deploy the conversion.

INTEGRATE

BGIS, Biomass and filtration experts, and key Client and facility stakeholders will be engaged at roundtable workshops to review the proposed options.

MANAGE

BGIS will manage the specialized processes and logistics related to efficiently burn waste coffee collected from buildings and local coffee chains.

Measuring Utilization – an essential tool for the Hybrid office

- Monitor Actual vs. Plan occupancy (capacity)
- Monitor ‘how’ occupants are using the space
- Portfolio Strategy / Rightsizing
- Return to Office – Capacity Management
- Maintenance procedures (janitorial, legionella monitoring, heating / cooling)
- Rightsizing space types based on actual preference.

Excess space contributes to excessive cost and Carbon

- \$30-\$50 s.f.
- 20 pounds of CO2 per s.f. or 1/3 of a mature tree / year
 - 25,000 s.f.
 - 30% vacancy
 - 2,250 trees / year

$$30\% \text{ VACANCY} = \begin{array}{c} \text{2,250} \\ \uparrow \\ \text{tree} \end{array}$$

ACTION

- Vacancy Reporting to CFO – cost and carbon
- Industry trends - reducing 20-50% of space
- Redesign Purpose - Changing space to focus on collab
- Co-working conversions

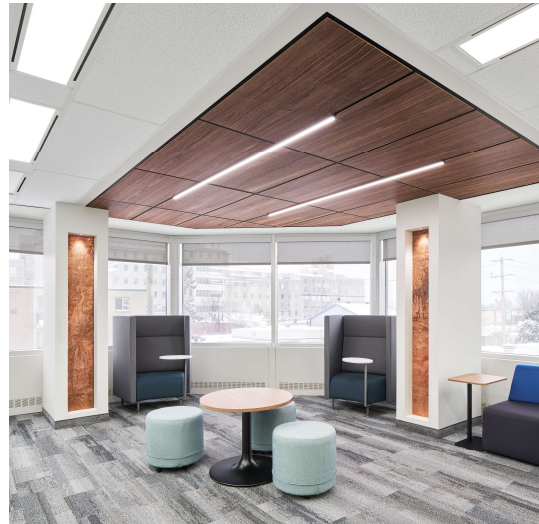


SUSTAINABLE OFFICE DECOMMISSIONING



WITH THE ENTIRE WORLD RETHINKING THEIR WORKPLACE... WHAT DO WE DO WITH ALL OF THE OLD FURNITURE AND WORK TOOLS OF THE PAST

BGIS Team Members on the Government of Canada Account developed a comprehensive and sustainable approach to decommissioning old office furniture and materials.



The Issue

- Many organizations are working to modernize their work environments flooding an already saturated used furniture market.
- The Covid-19 Pandemic is accelerating these efforts as companies work to adapt to new workforce expectations.
- Traditionally furniture items end up in the landfill as they can not be recycled as whole units

The Solution

- Through a systematic approach to decommissioning that includes redeployment, resale, donation and deconstruction to enable recycling of components and materials.
- Our process includes detailed tracking and the use of certified recyclers to provide detailed line of sight and accurate reporting.

As we move towards workplace modernization, how do we ensure that old office furniture, equipment and materials do not end up in the landfill?

INNOVATION CASE STUDY – THE SOLUTION

SUSTAINABLE OFFICE DECOMMISSIONING



BY ADDRESSING ALL MATERIALS AND BREAKING THEM DOWN INTO THEIR COMPONENTS WE ACHIEVE THE HIGHEST POSSIBLE LANDFILL DIVERSION RATES

We ensure accurate and detailed sorting of metals: Clean & “Dirty”

- Lateral files, storage cabinets and overhead storage bins are clean metal

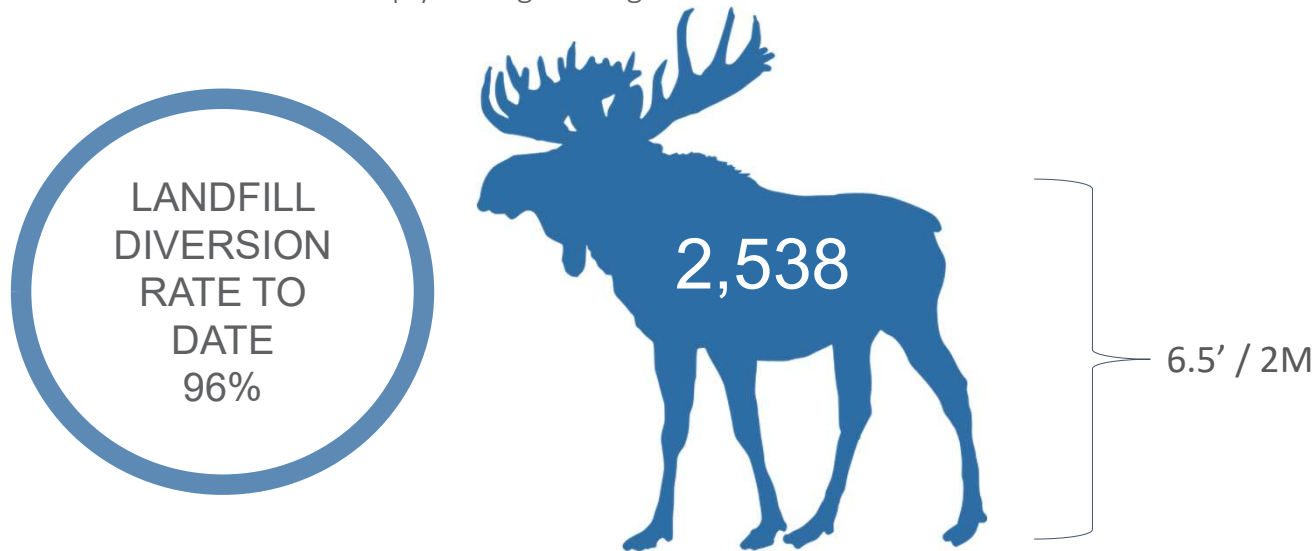
Furniture and Equipment are separated into components:

- **Work Surfaces:** Plastic edge banding is removed from work surfaces and sent for recycling, wood surfaces sent for shredding and incineration
- **Task lights :** Plastic for recycle, Bulbs hazardous waste, 9 ft. Cord and the main frame
- **Hanging Folders & Binders:** Metal is separated from cardboard and plastic components

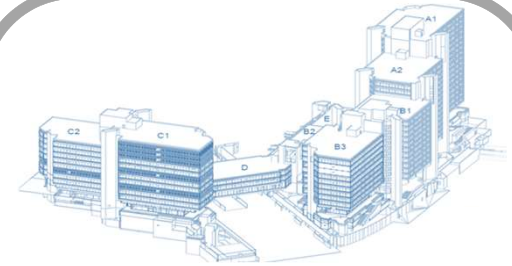


SUSTAINABLE OFFICE DECOMMISSIONING BGIS

- The initial pilot project identified a **20% savings** compared to the traditional approach
- Significant increase in diversion rates
- Benefits to charities, schools and other local organizations
- We also think ... it is simply the right thing to do!



Total furniture waste diverted to date across active and completed projects is 1014.98 tons, equivalent to 2,538 average Canadian male moose



Sample Project:

- 84 floors, spread across 5 towers
- Approximately 79,600 sq/m of usable space
- 4,500 Government Employees

Content to be Decommissioned:

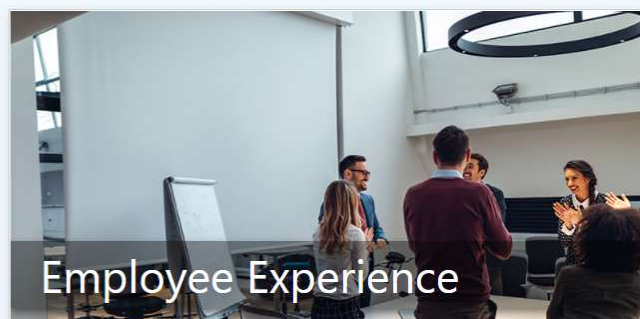
- 4,569 workstations
- 378 office suites
- 174 meeting rooms
- 7,820 chairs
- 5,268 filing cabinets



Lease Admin/Audit



Facilities Management



Employee Experience



Circular Economy



Do you have an offering that qualifies as a Circular Economy Solution?
We want to hear from you! innovation@bgis.com

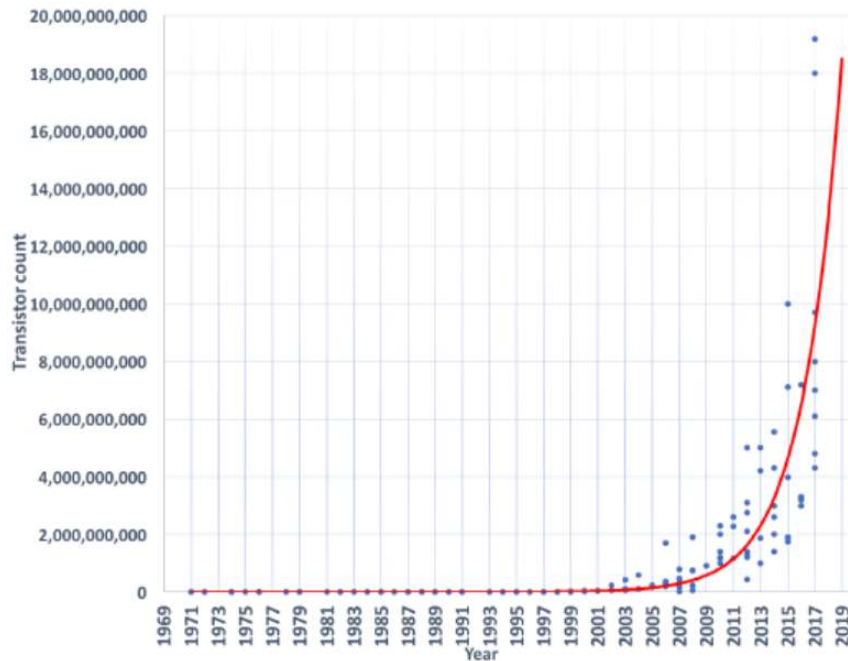
PART 2:
IS PROCUREMENT EVOLVING
FAST ENOUGH TO SUPPORT
INNOVATION AGENDAS?



Disruption is radical change to an existing industry or market due to technological innovation. No industry is immune to digital disruption.

We are going to experience more change in this decade than the last 50 years

Note magnitude of IMPACT, as well as TIME



All About America

Most of 2030's Jobs Haven't Been Invented Yet

By Dora Mekouar
February 08, 2019 08:48 AM



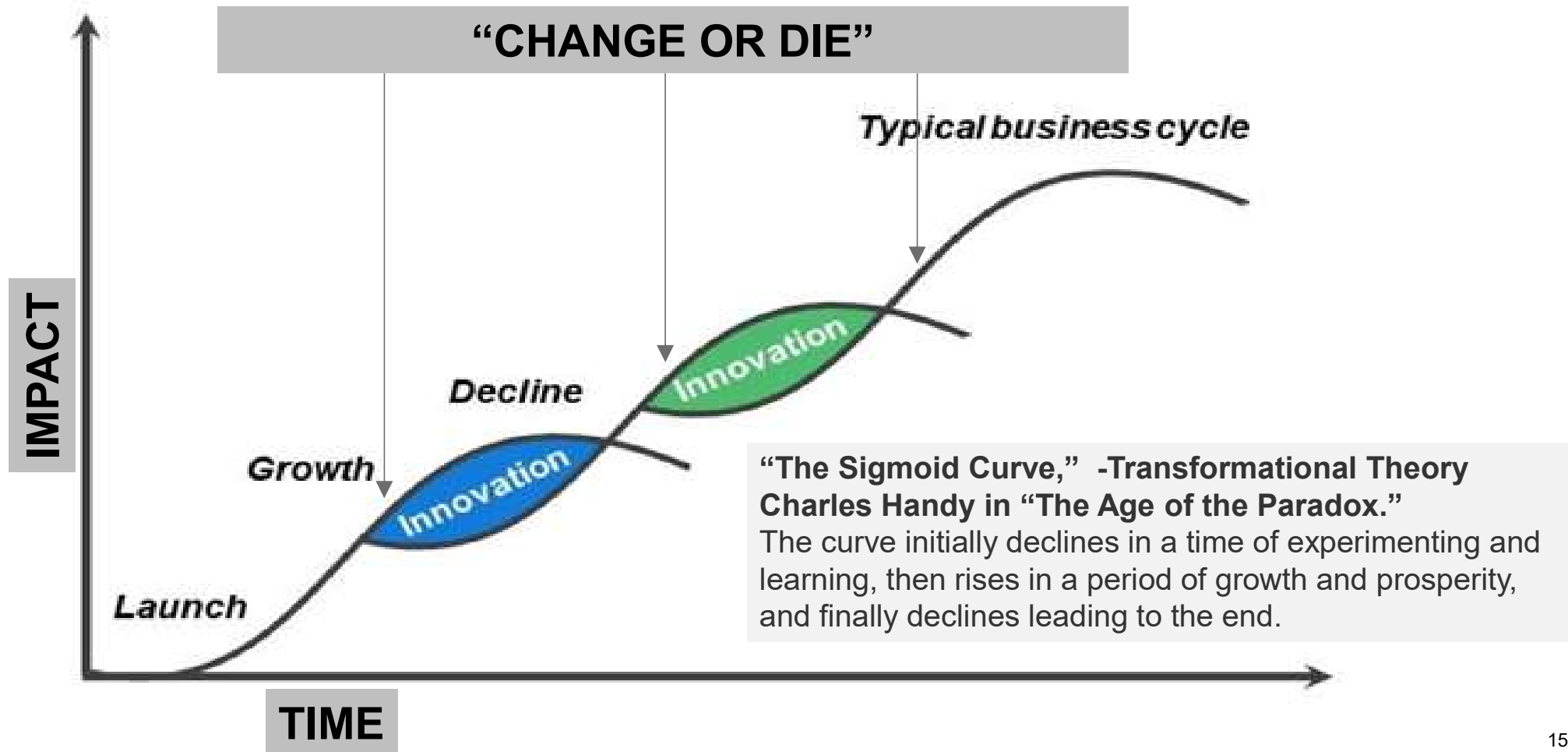
Los Angeles-based DAQRI uses augmented reality devices to display work instructions over a worker's

Gordon Moore, one of the pioneers of integrated circuits, predicted that the **number of transistors** that could be fit on one chip would double every two years. This prediction is known as **Moore's Law**.

https://bjc.edc.org/bjc-r/cur/programming/6-computers/2-history-impact/2-moore.html?topic=nyc_bjc%2F6-how-computers-work.topic&course=bjc4nyc.html&novideo&noassignment

<https://www.voanews.com/usa/all-about-america/most-2030s-jobs-havent-been-invented-yet>

S Curve – Launch, Growth, Decline..... Change or Die



"Although 84% of executives agree that innovation is important to growth strategy, only 6% are satisfied with innovation performance."

McKinsley Global Innovation Survey



We need to invest in Innovation as much as we do Risk and Governance

IMPACT / CHALLENGE

- Innovation will drive new levels of value, and is essential to survival. It is pervasive, no business will remain untouched.

OBSERVATIONS

- Procurement disproportionately invests in Risk and Governance
- (Lack of Innovation is a risk too)

MANIFESTO

- Sourcing can become catalysts of a competitive advantage for the business if we
- We need to get 'great' at facilitating innovation
- Our need to manage business risk will go way up, but so will our need to manage innovation



IMPACT / CHALLENGE

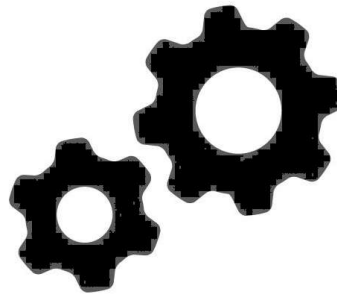
- Low hanging fruit extinction
- Value is achieved by more sophisticated ecosystems

OBSERVATIONS

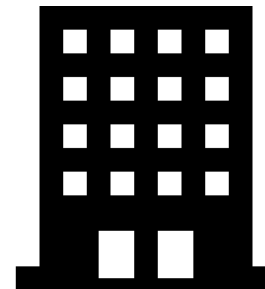
- Perverse Incentives; Obsession with savings vs. value
- Domino effect is not visible or accountable for outcomes; Disruption to the business

MANIFESTO

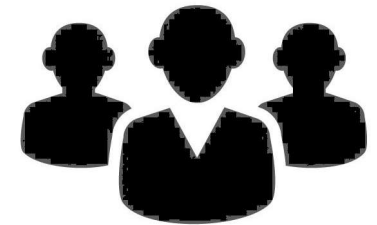
- We must acknowledge the bigger ecosystem of value potential and our impacts (TCO)
- We must change the way we are accountable for value (not just cost reduction)


MAINTENANCE
 \$3-5 S.F.

- Janitorial
- Maintenance


WORKSPACE
 \$30-\$50 S.F.

- Quantity of s.f.
- Cost / s.f.


PEOPLE
 \$300-\$500 S.F.

- Amount of FTE
- Type of FTE
- Location of FTE

IMPACT / CHALLENGE

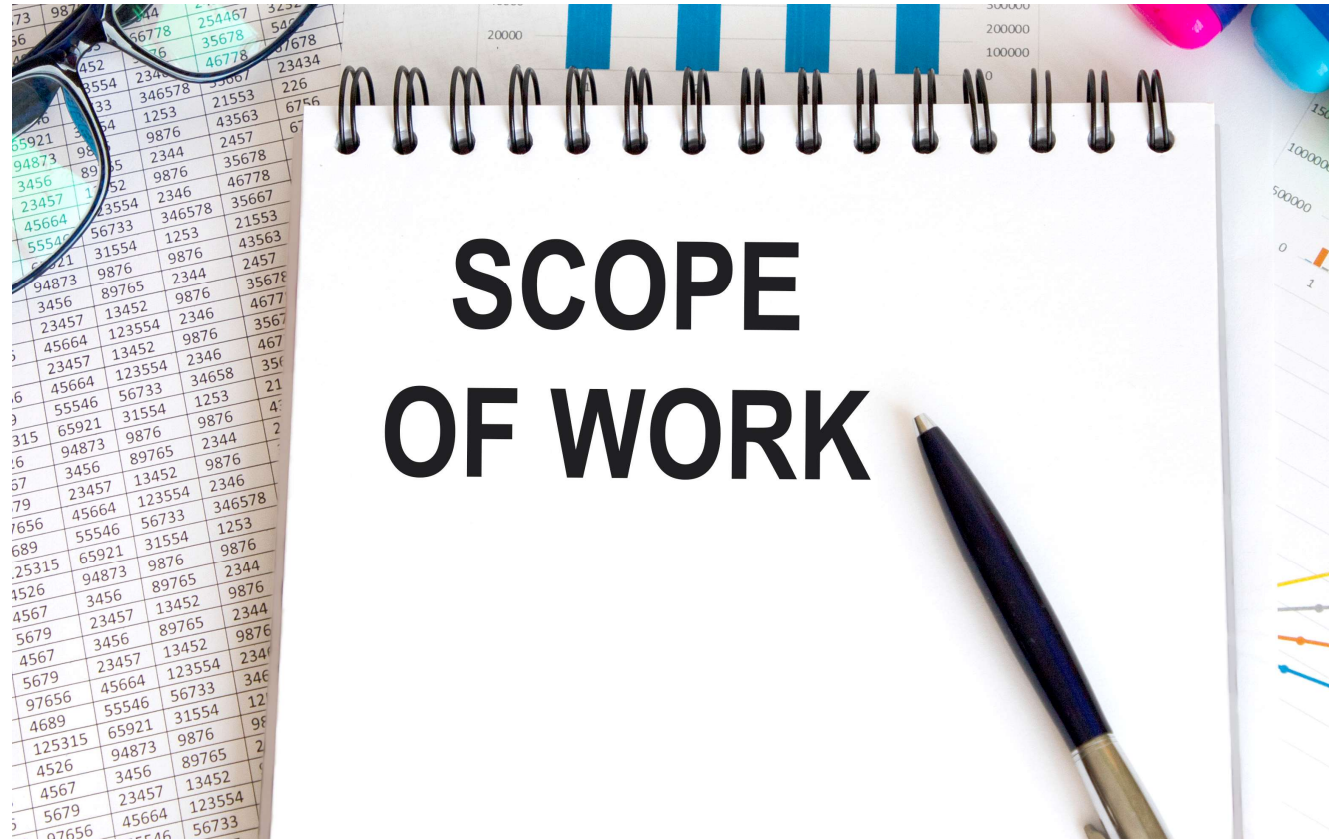
- Innovation is changing business at an unprecedented pace.
- Survival of business depends on innovative transformation
“Change or Die”

OBSERVATIONS

- Stale SOW's
- Lack of thinking outside the contract box
- 10% Savings is not sustainable

MANIFESTO

- Early renewal strategy
- Plan to challenge 'how' to achieve outcomes, early in renewal
- Evolve Category Management
- Focus on CRM relationships



IMPACT / CHALLENGE

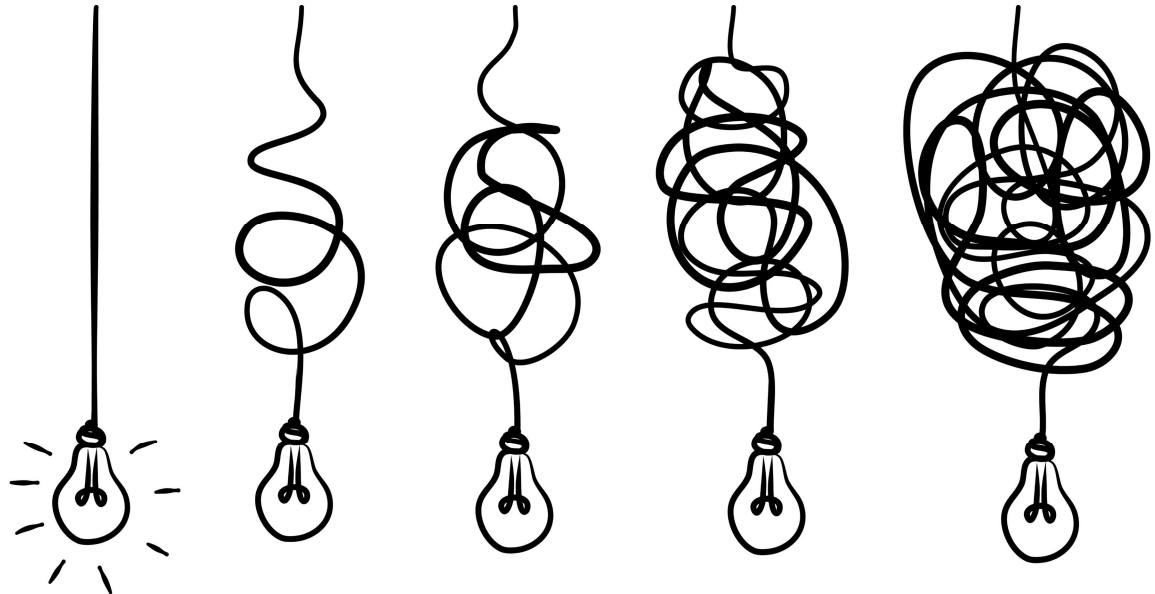
- Solutions are becoming more complex and sophisticated 'ecosystems'
- Bigger value potential (1+1=3)

OBSERVATIONS

- We are generally more comfortable with transactions and products.
- We are less equipped to buy solutions because they are harder to compare
- How vs. What

MANIFESTO

- Stronger development of expertise to buy services and solutions
- Buy outcomes vs. individual parts



We managed tasks vs. outcomes – the industry is moving to utility and as a service. We need to say what we want and not what to achieve.

IMPACT / CHALLENGE

- As solutions become more sophisticated, it will require a complex list of stakeholders in order to achieve efficient buy in and approvals.
- PRIVACY, Information Security, HR, IT, Real Estate, Facilities, Physical Security often converge

OBSERVATIONS

- We will need to deal with a much wider spectrum of multiple CRM Stakeholders
- Most business units still tend to 'stay in their lane'.
- Bureaucracy is also a risk

MANIFESTO

- Proactively anticipate more multi stakeholder solutions.
- Build relationships and evaluation teams that anticipate approvals and necessary change



Category Management must understand industry innovations and disruptive influences, and proactively engage with the business to ideate transformation

IMPACT / CHALLENGE

- Innovation is of growing importance.
- Traditional approaches risk slowing us down.'

OBSERVATIONS

- Innovation is often a contractual expectation ie: 1/Q
- Often lacking in collaboration
- Goals lead vs sales lead
- Short term / opportunistic

MANIFESTO

- A collaborative approach towards innovation is proven more effective
- Planning accelerates progress
- "2 in a box" , "I win you lose" (Kate Vitasek)
- Deep innovation comes from longer term contract relationships
- Buy outcomes (what vs. how)



IMPACT / CHALLENGE

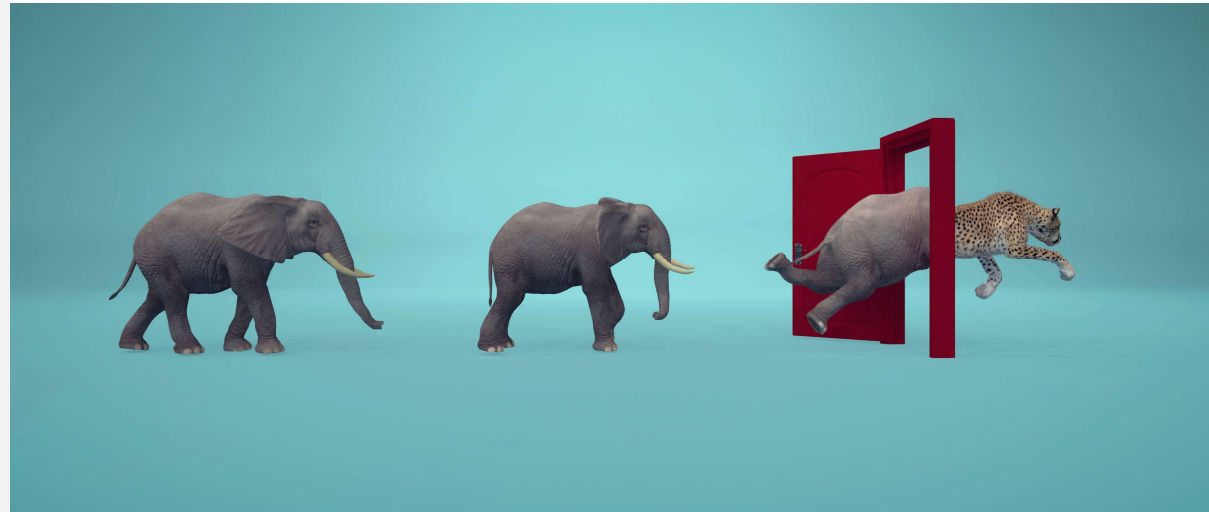
- Change is increasing exponentially
- Technology changes faster than humans
- “70% of organizations that undertake a change do not achieve the results intended”

OBSERVATIONS

- Expectations are not enough – we need to acknowledge the people
- We play a leadership role – the vendors can only do so much
- Communicate, Communicate, Communicate
- A good idea poorly implemented is a bad idea (Change Mgt = Risk Management)

MANIFESTO

- We need to become Ambassadors of Change.
- Change Management is a key success ingredient for our future. A disciplined approach will significantly increase the likelihood of success.



ADKAR Awareness, Desire, Knowledge, Ability and Reinforcement—the elements an individual needs to move through to achieve successful change: The ADKAR Model describes successful change at the individual level.

IMPACT / CHALLENGE

- Sustainability objectives are not moving fast enough

MANIFESTO

- Change the SOW and standards to include permanent positions on sustainability.
- Seek buy in for the business for these changes ie: Dandelions vs. pesticides
- Circular Economy
- “Sourcing is the biggest contributor to our carbon neutrality, driving results”



