Knowledge Workers- Defined

1. **Workers with deep background in education (university/college degrees) and experience (Mckinsey & Co., Cooper, 2006).**
2. **Workers who think for a living or paid to think.**
3. **Workers who work with knowledge.**
4. **Workers who do not do production Manual Work. They do Intellectual Heavy Lifting.**
5 **According to Thomas Davenport "KWs have high degrees of expertise, education, experiences and the primary purpose of their jobs involves distribution, application of knowledge".**
6 **According to Peter Drucker a K-Worker is a "some one who knows more about his or her job than any one else in the organization".**
7 **Wikipedia 'KWs are workers whose main capital is knowledge.**
8. **All workers involved in a chain of producing and distributing knowledge products.**
9. **According to R. Florida " KWs are workers involved in the direct manipulation of symbols to create an original knowledge product or to add obvious value to an obvious one".**
10. **Sometimes referred to as "White Collar " or "Gold-Collar" Workers.**
11. **KWs are often defined by belonging to certain jobs. Examples, professors, Sr. Managers, Software Programs, MDs, Lawyers, Architects are thought of as KWs.**

NO PERFECT DEFINITION. Perhaps True Definitions may have to Include All of the Above.

Strategy First Consulting

Attributes of KWs

ATTTRIBUTES OF KWs

1 Mobile

2. They Take their Intellectual capital home every day.

3. Do a lot of interacting & Coordinating of activities with others.

4. Do a lot of info/data analyses & searching' reviewing, decision making, problem solving and problem finding.

5. They want autonomy, no micro management.

6. They want to recognized and want to work on meaningful projects.

7. They are able to work in different locations and in different time zones.

8. They are the fastest growing segment in the workforce.

Strategy First Consulting

Differences Between KWs and Production Workers (PWs)

1. **PWs tend to do specific routine task in a consistent manner . KWs tasks are not routine in nature.**
2. **Scope of PWs tasks is limited and does not require high degree of interactions or complex problem solving activities.**
3. **PWs work is efficiency driven. Scope of KWs work is often crosses over many departments and may require complex analyses and high degree of interactions with peers and others.**
4. **Productivity metrics for PWs work are easier to develop and implement than those for KWs work.**
5. **KWs Output is more difficult to measure that PWs work because most of the PWs output is intangible.**
6. **Managing KWs Processes is more difficult than managing PWs.**

Strategy First Consulting

Productivity Definitions and Related Issues

1. **Company Wide Productivity (P)= Output /Input.**
2. **Productivity of KWs is the summation of how efficient and how effective they are. P of KWs = tangible + Intangible outputs or outcomes.**

3. Productivity (P) is the Relationship between resources coming into the organization's systems over a period of time and outputs generated from these resources over the same period.

4. For production work, P can be defined as number of output units per unit time (tangibles).

5. P of KWs is very difficult to define or measure because KWs output is often invisible and productivity indicators are difficult to establish, define and measure.

6. P of KWs must be measured using both quantitative and qualitative metrics to be meaningful. The % of the quantitative vs qualitative indicators depends on how Knowledge Intensive the work is. Pure knowledge work is best measured qualitativly.

Strategy First Consulting

STRATEGIES TO ENHANCE PRODUCTIVITY OF KNOWLEDGE WORKERS.

Agenda Items.

1. *Introduction*
2. *Definition of Knowledge Knowledge Workers (KWs).*
3. *Attributes of Knowledge Workers.*
4. *Differences between KWs & Other workers.*
5. *Definition of Productivity of Production Workers (PWs) and Productivity of KWs.*
6. *Why Enhance the Productivity of KWs.*
7. *Strategic Challenges Facing Knowledge-Based Organizations*
8. *Strategies To Enhance Productivity of KWs AT MaRs & Ryerson University.*
9. *Concluding Remarks.*

Strategy First Consulting

WHY ENHANCE PRODUCTIVITY OF KWs

1. To cut costs. Do More with Less.

2. Increase profit margins

3.Improve utilization of capital and non-capital resources.

4. Potential savings exceeds 300b$$ In the USA (36 million KWs)

5. Largest Growing Employee Group. 28%- 46% are KWs in Many Countries. Estimates Exceed 230 million KWs.

6. Productive Employees often feel better about themselves and about their Companies which will improve company's performance.

Productive Companies Tend to Have Higher Share Prices?.

Strategy First Consulting

Strategic Challenges Facing Knowledge-Based Organizations Related to Productivity of KWs

1. Talent Management-Achieving KWs Maximum Potential.
2. Managing Organizational and Cultural Issues Including Diversity.
3. Complexities in Managing Intangible Outputs & Outcomes.

Strategies to Enhance Productivity of KWs.

Successful Strategies should consider that KWs spend a great deal time on the threes Cs- coordination, collaboration & communication activities.

1. **Develop & Implement Dual LADDERS (Technical Ladder & Managerial Ladder).**
2. **Implement ways to allow KWs to attend and or present some of their outputs at tech conferences attended by peers.**
3. **Establish Fair Processes that lead to fair outcomes (this is big issue).**
4. **Implement meaningful & timely feedback mechanisms that encourage learning-teaching dialogue. (no annual performance appraisals please)**
5. **Establish processes that cares about results, expectations and people rather than short-term gains and artificially designed milestones.**
6. **Reward supervisors and managers who not autocratic and shy away from micro-managing.**
7. **Introduce Work Flex hours**
8. **Allow KWs to spent certain % of their .time on projects of interest to the company.**
9. **Introduce a policy dictating that certain % of products and services must be from new ideas.**

Strategy First Consulting

Guiding Principles.

1. **All KWs are not the same. Their Jobs Vary in Criticality.**
2. **To Achieve Maximum Productivity Enhancement it helps if you SEGMENT/TARGET your KWs.**
3. **Removal of BARRIERS that are Blocking the Enhancement will improve productivity. (Creating an Environment for Succeed).**
4. **Productivity of KWs is a f (Tasks, organizational Environment & KWs involvement).**
5. **Knowledge should be viewed as an Asset not Cost.**
6. **Productivity of KWs must include both Quantitative and Qualitative Metrics.**
7. **KWs are Responsible for Managing themselves (Autonomous).**
8. **KWs job involves Continuous Learning & Teaching**

Strategy First Consulting

Complexities of Intangible Assets (IAs)

1. No Clear Definition of IAs. Lots of Examples.
2. Investors are Willing to Pay High Prices for Knowledge Based IAs. Market Cap for Facebook, Twitter too High. Higher than Banks.
3. No Set Criteria or Post s are Available to Evaluate IAs.
4. Future Potential Benefits of IAs are the basis for High Valuation.
5. Some Brand Names are worth Billions . Coca Cola, Mercedes-Benz?.

Strategy First Consulting

Conclusions

1. Productivity of KWs Can be Measured and must include both Quantitative (Efficiency) and Qualitative (Effectiveness) Measures.
2. Best Productivity Enhancement Strategies are Based on Segmenting KWs Work
3. KWs Differ from Production Workers in Areas such as Tasks, and Coordination Activities.
4. KWs should Viewed as Assets not Cost Elements.
5. Work on Productivity of KWs Continues to Evolve. More Work Needed.

Strategy First Consulting

MaRS Discovery District

Best Practices – Knowledge Workers

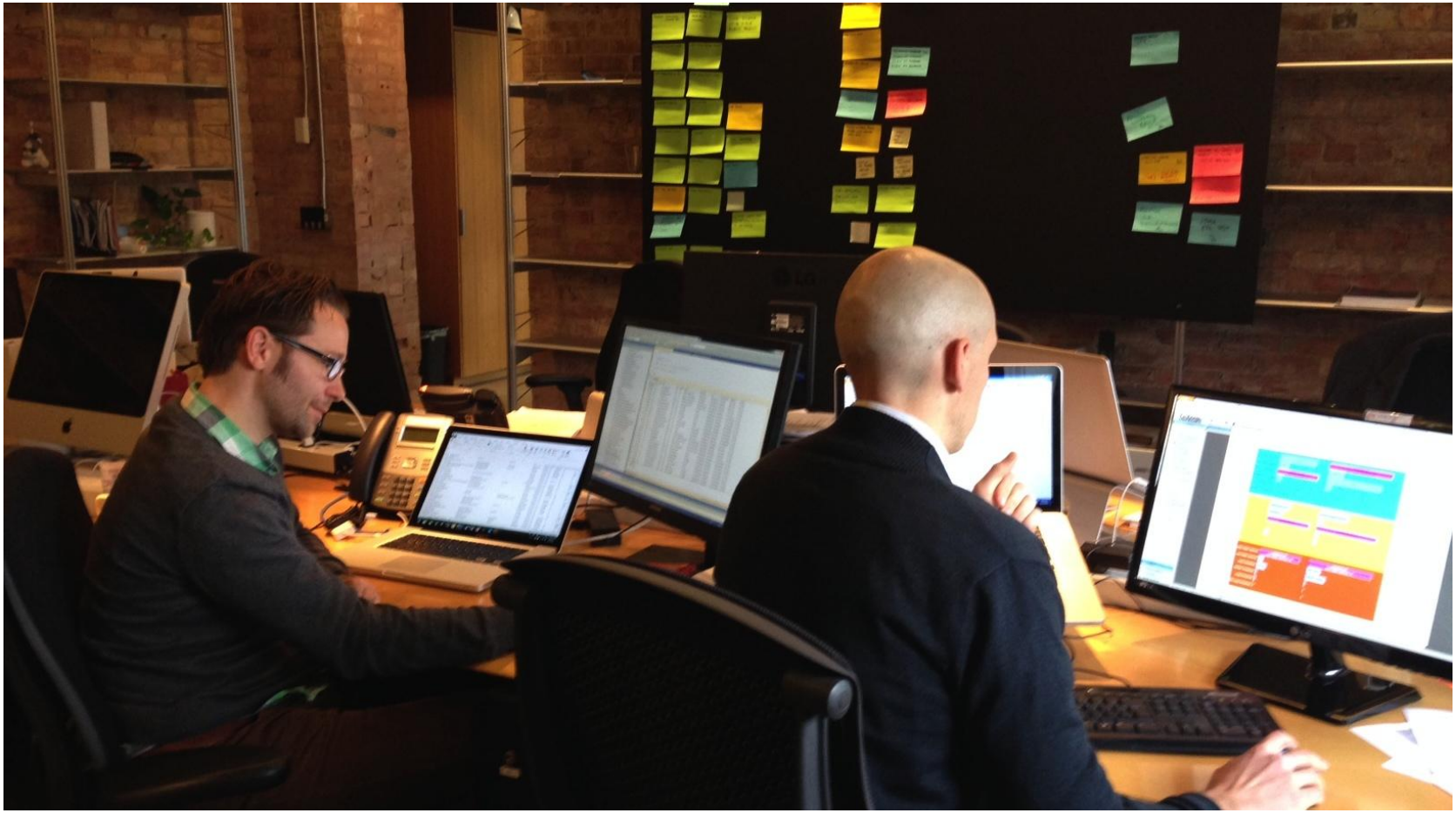
November 2013

Many key levers to enhancing productivity:

- Clear Strategy
- Strong People Leadership
- Aligned organization structure and role design
- Talent
- Reward and performance programs
- IT and Physical space enabled cross boundary communication
- Learning and development programs
- Effective communication and conversation

IT and Physical space enabled cross boundary communication

Knowledge Workers at Work



Planet MaRS enables:

- collaboration on technical documents
- team reviews of product concepts
- a knowledge management repository
- team source idea generation
- feedback loops
- reduction of email traffic
- and social connection as a team

People Leader Development

People Leader Development – Key Conversations

Management Paradigms for Knowledge-Intensive Organizations

20th Century	21st Century
Command & Control	Creative Empowerment
Maximize Profit	Profit ***and*** Purpose
Traditional Organizational Structure	Agile Organization
If → Then Rewards	Rewards Suited For…
Corporate 'One-to-Many' Learning	Employee 'Self-directed' Learning
Annual Performance Review	Ongoing / Just In Time Feedback
Siloed Organizational Communication	Cross Boundary Communication

Strategies to Enhance the Productivity of Knowledge Workers: Focus on people

Wendy Cukier, MA, MBA, PhD, DU (hon) LLD(hon) M.S.C.
Vice President of Research and Innovation
wcukier@ryerson.ca

MaRS

- ☐ Thinking about performance: Productivity and Innovation
- ☐ People, Processes and Technology
- ☐ The Innovation Gap: the Missing Pieces

- ☐ Ryerson University

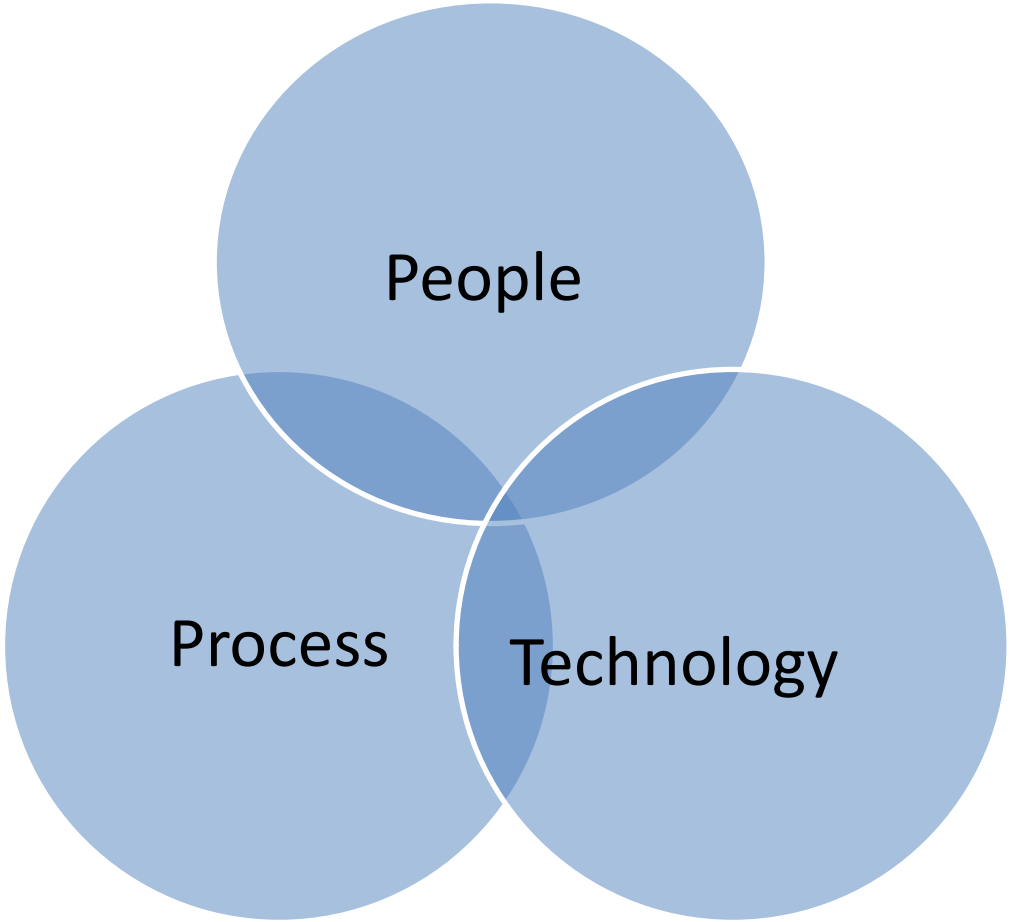
Thinking about “Performance”

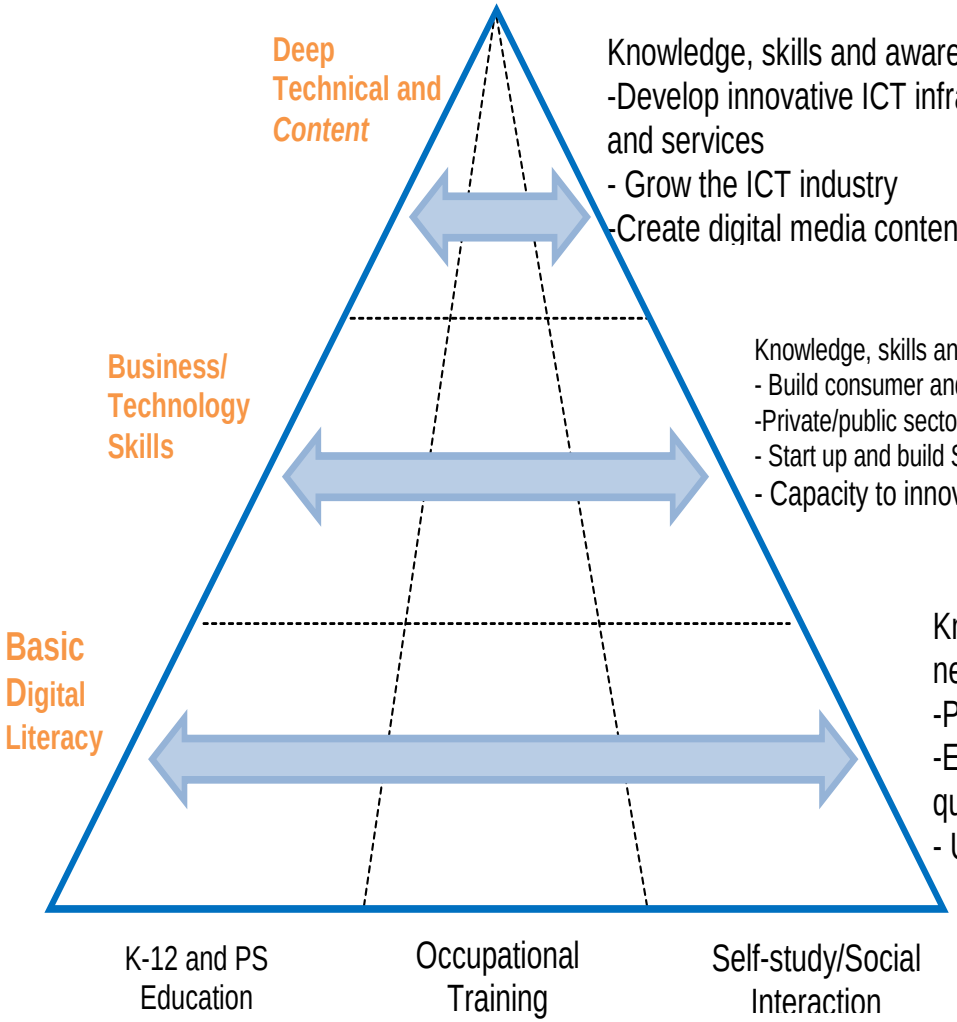
- Productivity is output/input
- Current models are based on manufacturing, linear systems
- Innovation is non linear and complex
- Productivity paradox: averages mask the variances
- Technology and competitive advantage (20th c)
- Talent and competitive advantage (21st c)

- Ryerson University

Key Factors

Ryerson University





Knowledge, skills and awareness needed to:
-Develop innovative ICT infrastructure, products and services
- Grow the ICT industry
-Create digital media content advantage

Knowledge, skills and awareness needed to use ICTs to:
- Build consumer and commercial markets for ICTs
-Private/public sector productivity and competitiveness
- Start up and build SMEs
- Capacity to innovate using digital technology

Knowledge, skills and awareness needed by all Canadian to:
-Participate in the digital economy
-Enhance personal opportunities and quality of life
- Use digital technologies to access

MaRS

Key Processes

- ☐ Leadership
- ☐ Structure for Innovation
- ☐ Collaboration and Teams
- ☐ Provide “Time to Wonder”
- ☐ Talent Processes
  - Development
  - Rewards
  - Work/Life/Play
- ☐ Openness
- ☐ Encourage Risk Taking

Ryerson University

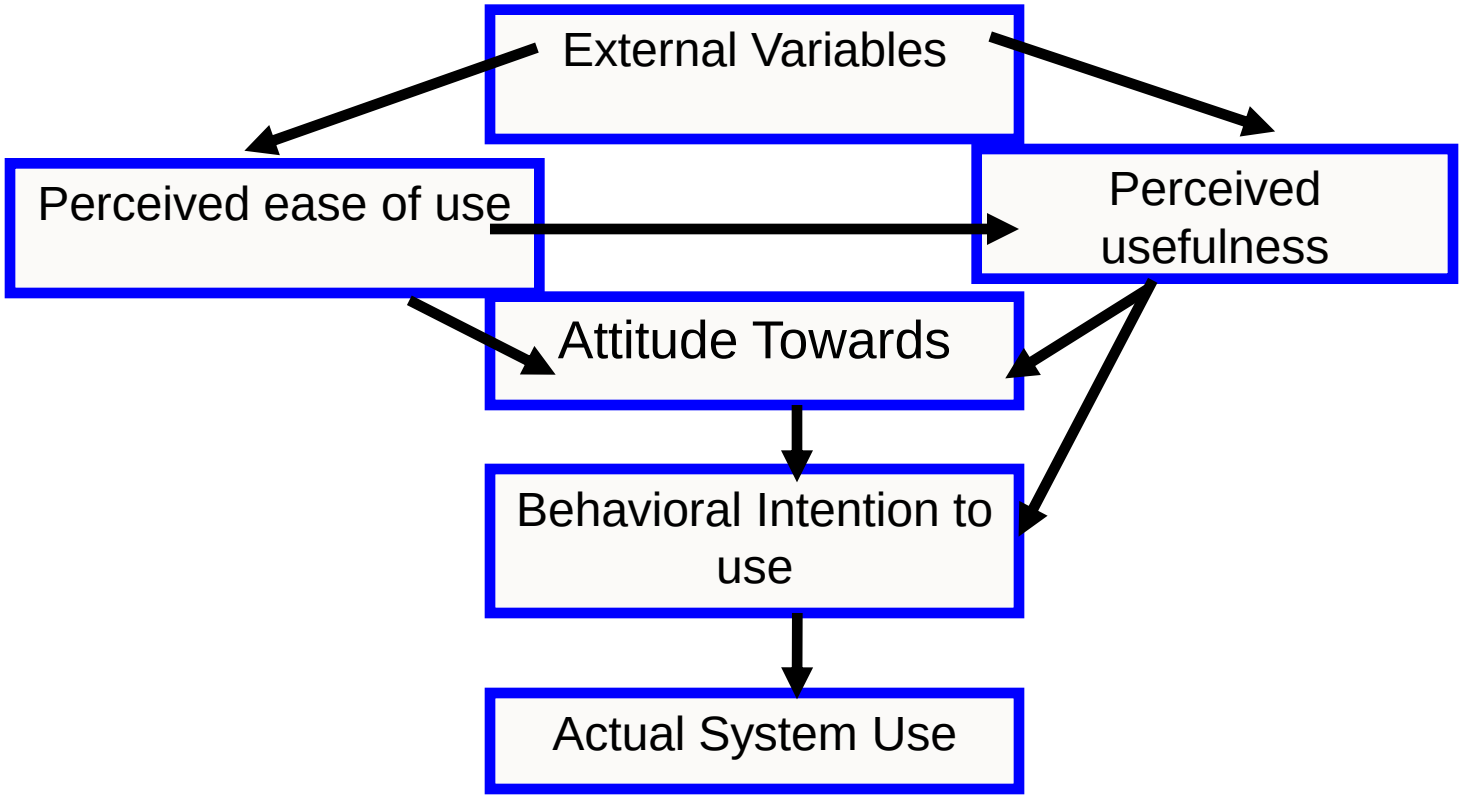
Technology

- Canadian companies under-invest in technology
- SMEs in particular are not using advanced approaches
- Immense potential to transform work and systems (big data, 3 D printing etc.)
- Amazing technologies available but there is innovation if its not actually used
- “If we build it they will come” technology driven approaches do not work

- Ryerson University

Technology Adoption

Ryerson University



INNOVATION PARADOX

- ☐ Rethinking the models and assumptions
- ☐ Better research on successes and failures
- ☐ Understand “the upside of irrationality”
- ☐ To have a great idea have a lot of ideas
- ☐ Focus on people: talent, organizational processes and technology adoption
- ☐ STEM is necessary but insufficient

- ☐ Ryerson University