SNC Lavalin: Digital Transformation

University of Rochester Simon School of Business

> Haotian Gong Gengfei Li William Trigg Minjia Zhan

Why Digital Transformation?

The Influence

- Meeting new demands from clients by digitizing our existing products and services while improving internal efficiencies by incorporating new technologies
- Expand our product portfolios for potential new services for clients

- New competitors that are purely technology services will take a more important role in the industry
- Uncertain future in terms of demands for digital products and services

Why Digital Transformation?

Funding

- Equity fundraising
- Internal restructure
- Merge
- Partnership

Change in Business Model

We are pushing the construction industry towards a data-oriented business model

Investor's Perspective

Move towards a more consulting role that can supplements our products and services across all industries

Situation Analysis

Strength



- Diversified Sectors
- Strong P/E vs peers
- International leadership
- Strong dividend performance
- Strong clientele
- End-to-End services
- Profitable
- Nuclear advantage in Canada

Weakness



- High debt
- Debt ratio

Opportunities



- M&A leads to new business operations
- Nuclear monopoly in Canada

Threats



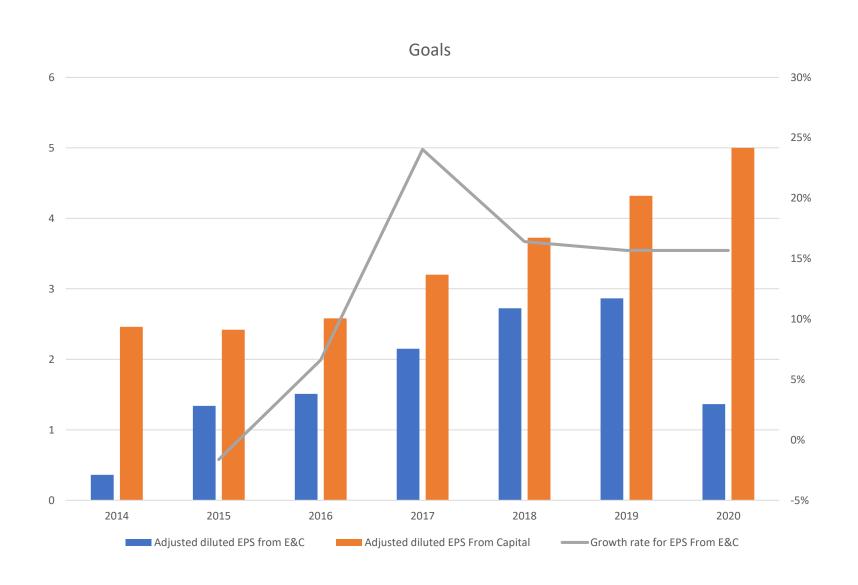
- Legal risks and regulations
- Change in accounting principal (IFRS vs Non-IFRS)
- Poor E&C performance
- M&A risks(Atkins)

Goals

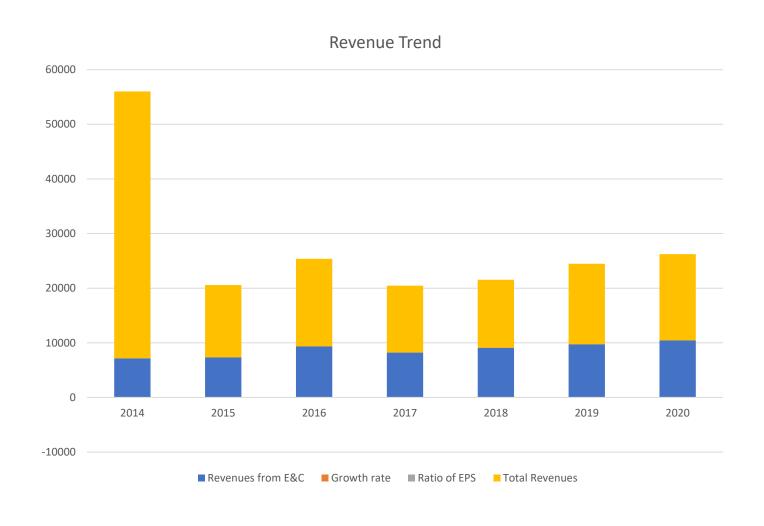
Digital transformation externally and internally

Increase profits by increasing revenue externally while reducing internal costs.

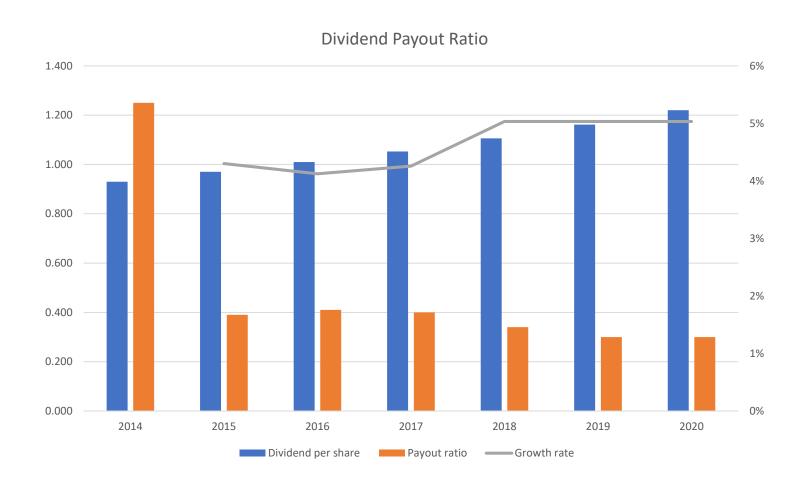
Internal Analysis



Internal Analysis



Internal Analysis



Potential Options

- 1. Introduce more 3D printing, modularization and robotics technologies to reduce project risks and improve projects' efficiency
- 2. Advance the AI technology to optimize the inventory and procurement process
- 3. Develop software that can provide performance analytics and tools that can be applied to projects

Potential Option 1:

1. Introduce more 3D printing, modularization and robotics technologies to reduce project risks and improve projects' efficiency

Benefits:

- Reduces on-site risks
- Streamline production process

Challenges:

- Requirement for new hardware and equipment
- Internally training process

Potential Option 2:

2. Advance the AI technology to optimize the inventory and procurement process

Benefits:

- Avoid delays caused by Just-In-Time inventory method
- Reduces labor cost and risks associated with Just-In-Time

Challenges:

 Inventory and procurement are estimated according to historic data, leading to higher storage cost

Potential Option 3:

3. Develop software that can provide performance analytics and client-facing tools to be used post-project

Benefits:

- Address consumer interest in digital products and services
- Expand products' portfolio
- Diversify revenue stream through subscription pricing model

Challenges:

- Expensive development process:
 - Expand IT team

Solution

Short-term

Advance the Al technology to optimize the inventory and procurement process

Long-term

Develop software that can provide performance analytics and client-facing tools to be used post-project

Implementation Plan

Short-term (12 – 18 months)

Long-term (3 – 5 years)

Utilize historic data to more accurately predict inventory needed for similar upcoming projects

Expand Digital & Al Teams to apply analytics to each sector

Facilitated through internal restructuring and post-dividend profits

Utilize our experiences and teams to develop tracking and analytics software

Offer as add-on service to future products

Funded by savings from the shortterm plan and post-dividend profits

Risk & Mitigation

<u>Risks</u>

Large investment

Cost associated with restructuring

Mitigation

High savings and builds strong foundation for future technology

Restructured format will be more efficient and have more accessible data

Conclusion

Introducing digital transformation internally will prepare our team for the growing demand for digital services in the construction while saving money

Providing these services in the long run will expand our product portfolio, keep it relevant, and improve profitability

Thank you!