SNC LAVALIN
HOW TO ACHIEVE DIGITAL GROWTH?

Presented to Senior Leadership Team of SNC LAVALIN

Smurfit Digital Consulting
Your challenge

How to achieve Digital Growth?

- How will digital transformation affect your business?
- How should your design engineering business change its business model?
- How do you fund digital investments?
- What should you tell investors?
RECOMMENDATION

$720 million 3-year “Digital Transformation” Program

- Systematic M&A
- Expenditure on R&D
AGENDA

Analysis
Geoff O’Brien

Recommendation
Monika Ghita

Implementation
David Madigan
EDPM Current Business

ESB International Finance Manager

Specialist engineering talent charged out at cost plus margin
Margin has to cover:
• Business Development
• Client Management
• Overhead support staff
• Physical business premises costs

Workflow

Consultant Business Model unchanged
McKinsey Growth Model

- Regular acquisitions less than 30% of MktCap
- Need 25% better productivity metrics
- Must spend 1.7x median competitor spend
- Limited in EDPM space

Choosing two increases odds of success
Impact of Digital Transformation

- Less people required, new digital capabilities needed

- Bespoke Design Drawings from High Level Design to Low Level Design

- AI Machine Learning takes previous projects and automates Low Level Design drawings

- Numerous detailed surveys of physical site

- Drones photograph site, AI produces 3D drawings, VR/AR allows designers to walk through infrastructure virtually

- Frequent contract management meetings to agree subjective delivery milestones

- Use of blockchain technology to allow “smart contracts” that both client and EDPM can review in real-time and agree remotely
Impact of Digital Transformation

- Certifying third party contractor work. Frequent site visits and laborious checking.
- Support Functions – Finance, Facilities
- SNC-Lavalin EDPM responsible for Professional Indemnity and their work standards
- Combination of blockchain smart contracts and AI Machine Learning increase productivity
- Use of data analytics to reduce human interactions – 30% decrease in headcount.
- Unchanged – SNC-Lavalin EDPM reputation for quality must be retained

Managing change for existing staff is critical
RECOMMENDATION
$720 million
3-year “Digital Transformation” Program
Business Model options (value-capture)

1. **Shift to Service model**
   - Value-based pricing;
   - Develop proprietary technology
   - Continues improvement required

2. **BUILD + OPERATE + OWN model**
   - Annual fee
   - Increased recurring revenue
   - Capital Intensive
   - Small market – limited projects

3. **Standardized solutions**
   - Used to build bespoke client solutions
   - Client resistance

4. **SaaS model**
   - Clients will pay for R&D
   - Client resistance

Capture value via “Shift to Service” model
McKinsey Growth Model

- Buy companies who share our values (safety, integrity, collaboration & innovation)
- Maximize collaboration and innovation

Picking two options increases your chance of success
1. Systematic M&A

Acquisition of Machine Learning technology for $120 million

- Leveraging previous projects
- Automated creation of drawings
- Fault finding
- Compliance
- Documentation
- Knowledge capture & management

Buy Blockchain company

- Open source – doesn’t give you competitive advantage
- Clients will also use it

Replicability of capabilities across all projects and geographies
2. Capital R&D Expenditure

$200 million R&D expenditure over 3 years

- M&A won’t provide all the answers
- Create autonomous Center of Excellence
  - Existing Atkins expertise
  - New M&A staff (approx. 300 people)
- 1% ($100 million) of revenues -> 2% ($200 million) per year

Create products through which we can charge value-based pricing
Recommendation – Shift to Service Model

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4. SaaS model
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Capture value via “Shift to Service” model
How to fund the digital investment program?

<table>
<thead>
<tr>
<th></th>
<th>Acceptability to Shareholders</th>
<th>Feasibility</th>
<th>Cost</th>
<th>Alignment with 2020 Vision</th>
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<tbody>
<tr>
<td>Retained Earnings</td>
<td></td>
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<td>Cut the Dividend</td>
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<td>Debt</td>
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<td>Equity raise</td>
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<td>Client Funding</td>
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<td>Productivity Improvement</td>
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Retained earnings after dividend is the best funding option.
Digital Transformation Communication Via investor day

Key Details

- Hosted in May 2019 - 4 hours
- Outline how industry is changing why we need adapt
- $600m digital investment
- Illustration of benefits
- 3 year programme
- 2x revenues
How to fund the digital investment program?

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues</th>
<th>E&amp;C</th>
<th>Capital</th>
<th>Total Profits</th>
<th>Dividend Payout @ 30%</th>
<th>Retained Earnings</th>
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</thead>
<tbody>
<tr>
<td>2016</td>
<td>10,000</td>
<td>46</td>
<td>209</td>
<td>256</td>
<td>(77)</td>
<td>179</td>
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<tr>
<td>2017</td>
<td>10,800</td>
<td>176</td>
<td>206</td>
<td>383</td>
<td>(115)</td>
<td>268</td>
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<tr>
<td>2018</td>
<td>11,664</td>
<td>190</td>
<td>223</td>
<td>413</td>
<td>(124)</td>
<td>289</td>
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<tr>
<td>2019</td>
<td>12,597</td>
<td>209</td>
<td>241</td>
<td>450</td>
<td>(135)</td>
<td>315</td>
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<tr>
<td>2020</td>
<td></td>
<td></td>
<td>260</td>
<td>511</td>
<td>(153)</td>
<td>358</td>
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<tr>
<td>2021</td>
<td></td>
<td></td>
<td>281</td>
<td>582</td>
<td>(175)</td>
<td>408</td>
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Revenue multiple required: 2%

Required Funding for Additional Digital Investment Programme: 180, 250, 170

Machine Learning Acquisition: 120

Residual Earnings after Digital investment: 15, 108, 238

Retained earnings after dividend is the best funding option.
Host Investor Day in May 2021 to communicate the digital transformation strategy

10000

(3,000)

200

7,200

Digital Transformation required for SNC to compete
SNC LAVALIN WILL SUCCEED IN DIGITAL GROWTH

Smurfit Digital Consulting