

DATA INNOVATION LAB CHARTER

< Pterodactyl-Virtual Teardown Industrial Internet >

TOP 3 PROBLEMS

1. Are industrial internets a threat?
We need to understand strengths and weaknesses from a customer prospective and their use in being a brand agnostic global solution for our customer base.
2. Current solutions are designed to solve specific problems across a customer's value chain only, not an open ecosystem (industrial internet).
3. Currently no comparable common solutions exist.

References

<http://www.predix.com/predix>
<https://www.predix.io/>
<https://www.ge.com/digital/events/minds-machines-2015>

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SOLUTIONS

1. It is easy/difficult for customers to...
 - Use platform
 - Obtain developers license
 - Commercialize, receive payment
 - Load data
 - Create solutions
 - Etc.

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KEY RESOURCES & PARTNERS

1. No external partners needed.
2. Need to pay/subscribe to service.
3. Nigel Smith (Stakeholder).
4. No university resources.

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UNIQUE VALUE PROPOSITIONS

1. Assess the strengths and weaknesses of industrial internets as a customer solution. Compare to current Caterpillar services / offerings.
2. Understanding the range of this service capability is necessary in order to keep market share.

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KEY ACTIVITIES

1. Sign in to industrial internet.
2. Document / Evaluate every step.
3. Explore capabilities.
4. Load data.
5. Create solution.
6. Establish standard evaluation criteria

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CHANNELS & CUSTOMERS

1. Internal presentation of findings; story of customer experience
2. Service should be evaluated on mobility and scalability.
3. No value delivered to customer, exploration only.

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CUSTOMER SEGMENTS

1. By exploring industrial internets, we are creating value through insights gained for customer facing departments of Caterpillar.
2. Can we leverage industrial internets to serve our customers? Should Caterpillar create an industrial internet solution? Can it be commercialized?
3. Potential solution could be applied to various industries, businesses, and customer segments.

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COST STRUCTURE

1. Costs are registration fees for industrial internet.
2. Data Innovation Lab personnel
3. Fixed / variable costs limited to registration and licensing fees.
4. N/A

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VALUE STREAMS

1. Evaluation of industrial internet for benchmarking.
2. Value will be gaining knowledge of product offering.
3. No monetization.
4. No revenue models.
5. Metrics are the assessment of various stages of industrial internet user experience.

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Third Party Ecosystem – Digital Teardown Evaluation Process

1. Customer User Experience	2. Developer Experience	3. Technology Components
<ul style="list-style-type: none"> • Ease and speed of sign up • Customer touch points • Access to solution • Data ingestion and security • Ease of service payment • Ease of customization • User interface • Growth in customer adoption 	<ul style="list-style-type: none"> • Data ingestion/digestion process • Ease/speed of development • Learning support and P2P collaboration • Business support & platform/service costs • Revenue model - Path and time to ROI 	<ul style="list-style-type: none"> • Asset and data security • Data storage capability • Ease of asset/device connectivity • Computing & application performance • Analytics and visualization Toolset • Range of Development Tools • Third Party data access

