

Telco's Perspective - AI/ML for NFV

This survey is to help Anuket-Thoth to Stay 'relevant' to Telco's Needs

Are you familiar with the AI/ML works (solution and systems) present in your organization?

[Click for anchor link](#) Familiarity with your Organization's AI/ML works

Choices Your Vote Current Result: (2 Total Votes) Comments

YES.	2 Votes , 100%
NO.	0 Votes , 0%

MOTORS: MODEls - TOols - ResearchStudies

What is more valuable to Telcos?

[Click for anchor link](#) We (Thoth) build better (explainable, least-error, accurate) ML-models to important problems

Choices Your Vote Current Result: (1 Total Votes) Comments

5. Very Important	1 Vote , 100%
4. Important	0 Votes , 0%
3. Good to have	0 Votes , 0%
2. Not important	0 Votes , 0%
1. No value addition.	0 Votes , 0%

[Click for anchor link](#) We (Thoth) optimize the existing model for important problems

Choices Your Vote Current Result: (1 Total Votes) Comments

5. Very Important	1 Vote , 100%
4. Important	0 Votes , 0%
3. Good to have	0 Votes , 0%
2. Not important	0 Votes , 0%
1. No value addition.	0 Votes , 0%

[Click for anchor link](#) We (Thoth) build a flexible* ML-Framework with implementation of important models that can be trained and used.

Choices Your Vote Current Result: (1 Total Votes) Comments

5. Very Important	1 Vote , 100%
4. Important	0 Votes , 0%
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2. Not important	0 Votes , 0%
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[Click for anchor link](#) We (Thoth) build tools that can help telcos to build ML-Models

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[Click for anchor link](#) We (Thoth) conduct research studies with thorough and systematic analysis of Open-Problems

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Dataset

If we generate dataset in testbeds (Openstack/Kubernetes + Chaos Tools such as litmus + OSS TrafficGens) and use it to train the ML-Models (ex: failure prediction, anomaly detection, etc), how relevant these models will be useful for production networks of Telcos?

[Click for anchor link](#) Relevance of Dataset + Model from Testbed (labs) to the Production

Choices

Yes. Relevant

No. It will not be.

Why do it with testbed dataset when we (Telco) have access to production dataset?

Your Vote Current Result: (1 Total Votes) Comments

0 Votes , 0%

0 Votes , 0%

1 Vote , 100%

Frameworks

Telcos have (for past 15-20 yrs - maybe even more) AI/ML systems solving business problems (customer churns) and/or legacy Network management (failures prediction, anomaly detection, etc.). Is it Important that the ML-models we develop (related to Telco Clouds) should work in these frameworks (of legacy systems) ?

[Click for anchor link](#) Integration with legacy AI/ML Systems?

Choices

YES (we don't want to maintain multiple systems)

NO (Managed by different silos)

Your Vote Current Result: (1 Total Votes) Comments

1 Vote , 100%

0 Votes , 0%

Models: Importance of AI/ML Problems related to NFV

Please add any other problems you consider that is important here:

[Click for anchor link](#) Importance of Failure Prediction (VM)

Choices	Your Vote	Current Result: (0 Total Votes)	Comments
5. Very Important		0 Votes , 0%	
4. Important		0 Votes , 0%	
3. Good to have		0 Votes , 0%	
2. Not important		0 Votes , 0%	
1. No value addition.		0 Votes , 0%	

[Click for anchor link](#) Importance of Failure Prediction (Containers)

Choices	Your Vote	Current Result: (0 Total Votes)	Comments
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4. Important		0 Votes , 0%	
3. Good to have		0 Votes , 0%	
2. Not important		0 Votes , 0%	
1. No value addition.		0 Votes , 0%	

[Click for anchor link](#) Importance of Failure Prediction (Links)

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3. Good to have		0 Votes , 0%	
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<div><div>Click for anchor link</div><div>Importance of Failure Prediction (Apps)</div></div> <table><thead><tr><th>Choices</th><th>Your Vote</th><th>Current Result: (0 Total Votes)</th><th>Comments</th></tr></thead><tbody><tr><td>5. Very Important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>4. Important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>3. Good to have</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>2. Not important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>1. No value addition.</td><td></td><td>0 Votes , 0%</td><td></td></tr></tbody></table>	Choices	Your Vote	Current Result: (0 Total Votes)	Comments	5. Very Important		0 Votes , 0%		4. Important		0 Votes , 0%		3. Good to have		0 Votes , 0%		2. Not important		0 Votes , 0%		1. No value addition.		0 Votes , 0%		<div><div>Click for anchor link</div><div>Importance of Failure Prediction (Services - control/middleware/)</div></div> <table><thead><tr><th>Choices</th><th>Your Vote</th><th>Current Result: (0 Total Votes)</th><th>Comments</th></tr></thead><tbody><tr><td>5. Very Important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>4. Important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>3. Good to have</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>2. Not important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>1. No value addition.</td><td></td><td>0 Votes , 0%</td><td></td></tr></tbody></table>	Choices	Your Vote	Current Result: (0 Total Votes)	Comments	5. Very Important		0 Votes , 0%		4. Important		0 Votes , 0%		3. Good to have		0 Votes , 0%		2. Not important		0 Votes , 0%		1. No value addition.		0 Votes , 0%		<div><div>Click for anchor link</div><div>Importance of Traffic Engineering (Ex: Reinforcement Learning)</div></div> <table><thead><tr><th>Choices</th><th>Your Vote</th><th>Current Result: (0 Total Votes)</th><th>Comments</th></tr></thead><tbody><tr><td>5. Very Important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>4. Important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>3. Good to have</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>2. Not important</td><td></td><td>0 Votes , 0%</td><td></td></tr><tr><td>1. No value addition.</td><td></td><td>0 Votes , 0%</td><td></td></tr></tbody></table>	Choices	Your Vote	Current Result: (0 Total Votes)	Comments	5. Very Important		0 Votes , 0%		4. Important		0 Votes , 0%		3. Good to have		0 Votes , 0%		2. Not important		0 Votes , 0%		1. No value addition.		0 Votes , 0%	
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Please add any other comments you would like to share

Comments and Suggestions