Science Based Forecaster (SBF)
Auto Physics Forecaster (APF)

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Can being right and being practical coexist? The last 10 years: No

How much have ‘practical’ AI and Machine Learning helped us over the last decade regarding production forecasting: Not Much

Practicing petroleum engineering the right way can also be practical.
PRODUCTION FORECASTING: IT’S NOT WORKING!

Over forecasted oil

Under forecasted gas

The WSJ wrote that two-thirds of projections made by energy companies producing in the country’s four biggest drilling regions between 2014 and 2017 were overly optimistic. The WSJ looked at roughly 16,000 wells operated by 29 producers in basins in Texas and North Dakota.
USI

• Physics-Based: CMG 40+ yrs. Co. & 10+ yrs. uncon dev
• Forward-looking solutions:
  • Pre-run full field reservoir simulation: fully understanding well behaviors

USI- Indirect Competitors:
• Statistical-Based: ‘non scientific’ approach
• ‘Backward’ looking solutions (black box):
  • DCA, AI, RTA: impossible for blind test and explain why the case
Working closely with:

- CMG: joined marketing effort at REU 2019 and sales pitches to clients
- Gaffney Cline & Associates
- Ryder Scott
- Haas Engineering

Active projects with mostly Permian operators:

- Super major: 2
- Publicly traded: 3
- Privately held: 7
WHY WE ARE HERE: PARTNERSHIP AND FUNDING

Raised
• Total Raise: $750K (Founder + 4 Angel Investors)

Goals
• Seed Funding during first half 2020
• Looking for partners to expand market shares

Use of Funds to expand the team:
• 2 Reservoir Simulation & Reserves Engineers (New Customers Support)
• 4 Developers (APF development): project manager, front end, back end, tester
• 1 Marketing/Sales rep
• Additional servers and simulation licenses to meet demand
Provisional submitted Feb 2018
Non-provisional submitted Feb 2019

**Patent covers:**
Method’s on how current and future wells are forecasted using 35+ physics based parameters, auto-forecasting methods, conventional and unconventional reservoirs.

- Multiple years of R&D work which will take others long time to replicate
- Software are designed for all engineering levels, takes few hours to fully train
- Proven successful results using real data: Midland, Delaware and Eagle Ford
- Working to expand to Powder River and Vaca Muerta
<table>
<thead>
<tr>
<th>Source: TMR (Transparency Market Research)</th>
<th>Year 2019</th>
<th>Year 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global exploration &amp; production (E&amp;P) software Market</td>
<td>$6,017</td>
<td>$14,150</td>
</tr>
<tr>
<td>Total Reservoir Solution</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Total Available Market (TAM)</td>
<td>$2,006</td>
<td>$4,717</td>
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<tr>
<td>Bottom-up Approach (TAM) Crossed-check</td>
<td>$1,905</td>
<td></td>
</tr>
<tr>
<td>Serviceable Available Market SAM</td>
<td>$1,805</td>
<td>$4,245</td>
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<tr>
<td>Unconventional onshore 70%</td>
<td>$1,264</td>
<td>$2,971</td>
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<tr>
<td>Conventional offshore 30%</td>
<td>$542</td>
<td>$1,273</td>
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<tr>
<td>Serviceable Obtainable Market SOM, assuming 10% penetration</td>
<td>$180.5</td>
<td>$424.5</td>
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<tr>
<td>Unconventional onshore 70%</td>
<td>$126.4</td>
<td>$297.1</td>
</tr>
<tr>
<td>Conventional offshore 30%</td>
<td>$54.2</td>
<td>$127.3</td>
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</tbody>
</table>

All figures in $ Million
**COMPANY GOALS**

**SHORT TERM GOALS (2020-2022)**
- Using SBF and powerful in-house workflow to help operators maximize profitability with optimal plans

**LONG TERM GOALS (2022-2030)**
- Successfully model all unconventional plays in the US and International using advanced reservoir simulation techniques and fully utilize new features of APF to help operators, reserves auditors, and bankers achieve their bottom-line goals in time-efficient manner
VISION STATEMENT

• Realizing the full potential of oil and gas assets: to drive a new era of profitability and precisions. By 2030, oil and gas industry will achieve highly accurate production forecasts and intelligent investment decisions.

MISSION STATEMENT

• To give customers the fastest and most accurate production forecasting software and services possible

COMPANY OBJECTIVES

• To become the best reserves estimation software company in the world
THANK YOU!

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WHY USI?

FORECASTING FUNDAMENTALS
Commercialization
SBF: May 2018
APF: Late 2020

OPERATIONAL EXCELLENCE
(Development)

WELL PLANNING SUCCESS
(Exploration, Resource play)
SCIENCE-BASED FORECASTER: HOW

AWS RDS MySQL Database

AWS High Powered EC2 Instance (Virtual Server)

AWS Secure VPC (Virtual Private Cloud)

Spotfire Server Environment & Node Manager

Reservoir Simulation Results

Internet

USI - Science Based Forecaster

Users upload private data locally

*Client data resides on local machine and is not uploaded or distributed
Founded USI Tech after gaining more than ten years of industry experience as a Reservoir Engineer working for Apache Corp and Hess Corp.

Began early career with Apache’s engineering development program, and later joined Apache’s Corporate Reservoir Engineering group where he worked Corporate Reserves and Business Development focusing on Anadarko Basin, Permian Basin and Canada.

Also held various positions of increasing responsibilities in Hess’s New Venture and Business Development across China, Williston Basin, Canada and Permian Basin.

Holds a BSc with Honors in Petroleum Engineering from Texas A&M University and is a licensed professional engineer in the State of Texas.
COMPANY INFO

• Formed December 2017
• Focusing on self-development
• Young team pursuing healthy culture