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!
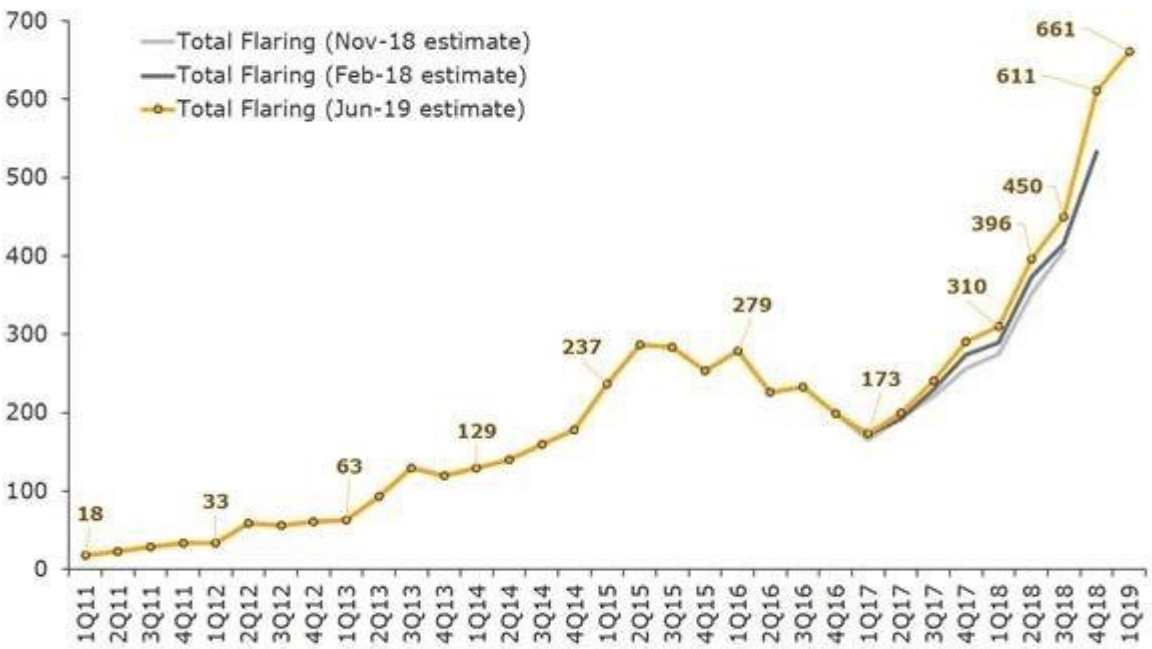
Over forecasted oil

Under forecasted gas

By Staff report
Jan 3, 2019, 12:56pm EST

DALLAS BUSINESS JOURNAL

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.

Natural gas flaring and venting in the Permian Basin by quarter
Million cubic feet per day

Total Flaring (Nov-18 estimate)
Total Flaring (Feb-18 estimate)
Total Flaring (Jun-19 estimate)

661
611
450
396
310
279
237
173
129
63
33
18

1Q11 2Q11 3Q11 4Q11 1Q12 2Q12 3Q12 4Q12 1Q13 2Q13 3Q13 4Q13 1Q14 2Q14 3Q14 4Q14 1Q15 2Q15 3Q15 4Q15 1Q16 2Q16 3Q16 4Q16 1Q17 2Q17 3Q17 4Q17 1Q18 2Q18 3Q18 4Q18 1Q19

Source: Rystad Energy research and analysis, Rystad Energy ShaleWellCube

RYSTAD ENERGY

USI
- Physics-Based : CMG 40+ yrs. Co. & 10+ yrs. uncon dev
- Forward-looking solutions:
  - Pre-run full field reservoir simulation: fully understanding well behaviors
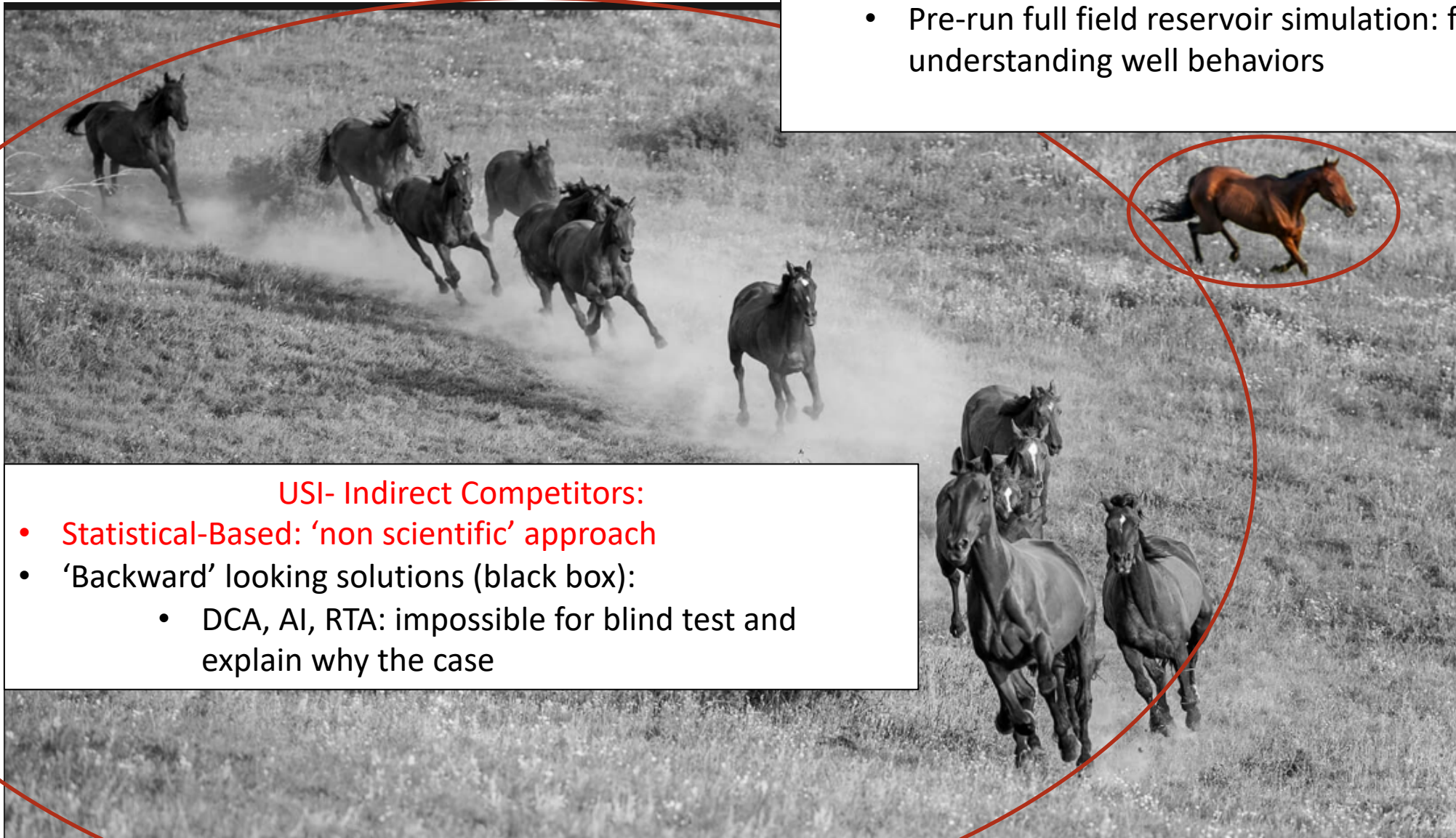
USI- Indirect Competitors:
- Statistical-Based: 'non scientific' approach
- 'Backward' looking solutions (black box):
  - DCA, AI, RTA: impossible for blind test and explain why the case

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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

<u>Raised</u>

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

<u>Goals</u>

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

<u>Use of Funds to expand the team:</u>

- 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

WHAT'S UNIQUE: PATENT PENDING METHODS

- 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

TAM-SAM-SOM

	All figures in $ Million	
Source: TMR (Transparency Market Research)	Year 2019	Year 2025
Global exploration & production (E&P) software Market	$ 6,017	$ 14,150
Total Reservoir Solution	33%	33%
Total Available Market (TAM)	$ 2,006	$ 4,717
Bottom-up Approach (TAM) Crossed-check	$ 1,905	
Serviceable Available Market SAM	$ 1,805	$ 4,245
Unconventional onshore 70%	$ 1,264	$ 2,971
Conventional offshore 30%	$ 542	$ 1,273
Serviceable Obtainable Market SOM, assuming 10% penetration	$ 180.5	$ 424.5
Unconventional onshore 70%	$ 126.4	$ 297.1
Conventional offshore 30%	$ 54.2	$ 127.3

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

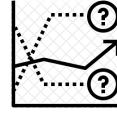- To become the best reserves estimation software company in the world

UNCONVENTIONAL SUBSURFACE INTEGRATION

THANK YOU!

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WHY USI?

FORECASTING
FUNDAMENTALS
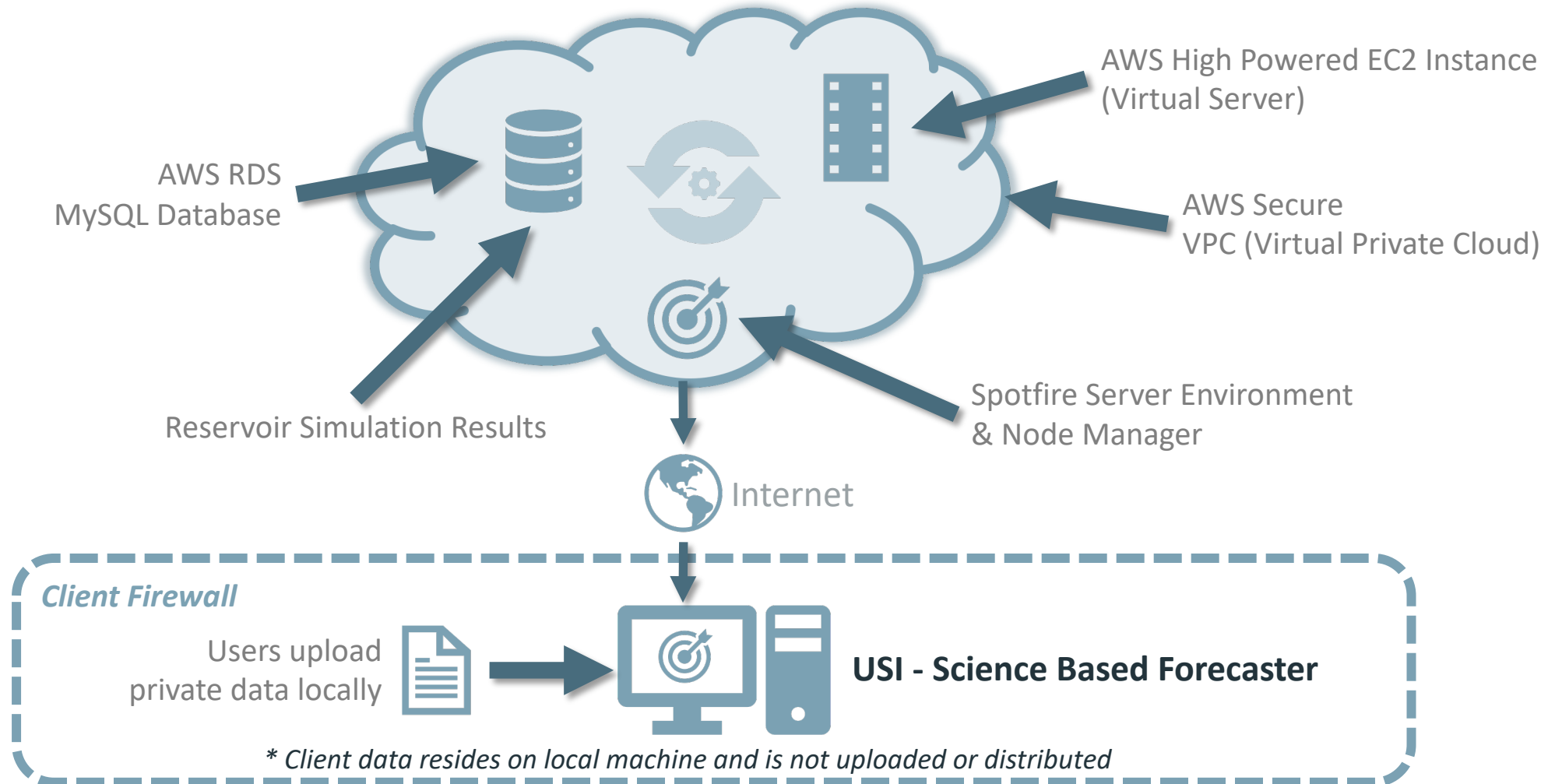
Commercialization
SBF: May 2018
APF: Late 2020

USI
TECHNOLOGY

OPERATIONAL
EXCELLENCE
(Development)

WELL PLANNING
SUCCESS
(Exploration, Resource play)

AWS High Powered EC2 Instance
(Virtual Server)

AWS RDS
MySQL Database

AWS Secure
VPC (Virtual Private Cloud)

Reservoir Simulation Results

Spotfire Server Environment
& Node Manager

Internet

Client Firewall

Users upload
private data locally

USI - Science Based Forecaster

* Client data resides on local machine and is not uploaded or distributed

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Founder Background

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.

Duc Lam, P.E.

COMPANY INFO

- Formed December 2017

- Focusing on self-development

- Young team pursuing healthy culture