

No Money Down Revitalization: Build Your Own Business Opportunities*

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Abstract

Innovative and forward-thinking services companies are offering their new products and processes to operators with underperforming wells with the understanding that they will be paid for their products and services out of increased production. “No Money Down Revitalization” can be very positive. First, the operator who is suffering in a low price environment does not have to put up any initial capital. Second, the service provider is able to charge a slightly higher price to account for the financing and the additional guidance. Finally, geologists and engineers are able to be paid for locating candidates, developing workflows, and overseeing the match-making out of the increase production. This session presents case studies from companies that have offered creative financing to operators to implement their new techniques and technologies, with positive results.

No Money Down Revitalization: Build Your Own Business Opportunities

Susan Nash, Ph.D.



A Few Preliminary Considerations



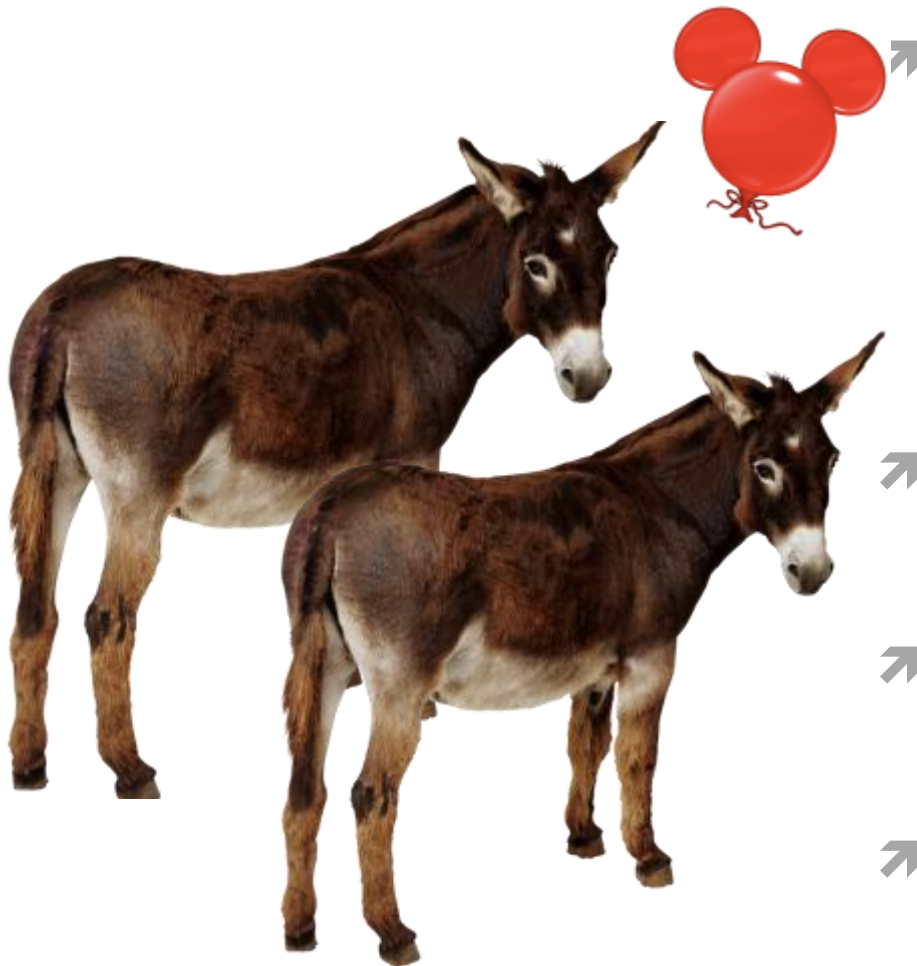
- Know Yourself & Reflect Upon Your Successes
- Creativity Is Critical
- Reconfigure Your Role / Your Approach
- Understand What People Need – Now and in the Future

Know Yourself



- Interests / Motivations
- Strengths
- Experience
- Wish-List / Perfect Job
- Plans
 - One Month
 - One Year
 - Five Years

Creativity Is Critical



- Maintain cognitive flexibility
 - Look for patterns & alternative explanations
 - Juxtapose unrelated items or concept – find points
- Communicate freely – keep uncensored journal
- Maintain intellectual Curiosity
- Go for the “flow”

Types of Thinking



➤ Convergent Thinking

- Facts
- Categories
- Rules / Laws

➤ Divergent Thinking

- Propose new thinking
- Ask questions
- Find new patterns
- Uncover the beliefs shaping your assumptions and challenge them



A Reconfigured Role for a Geologist



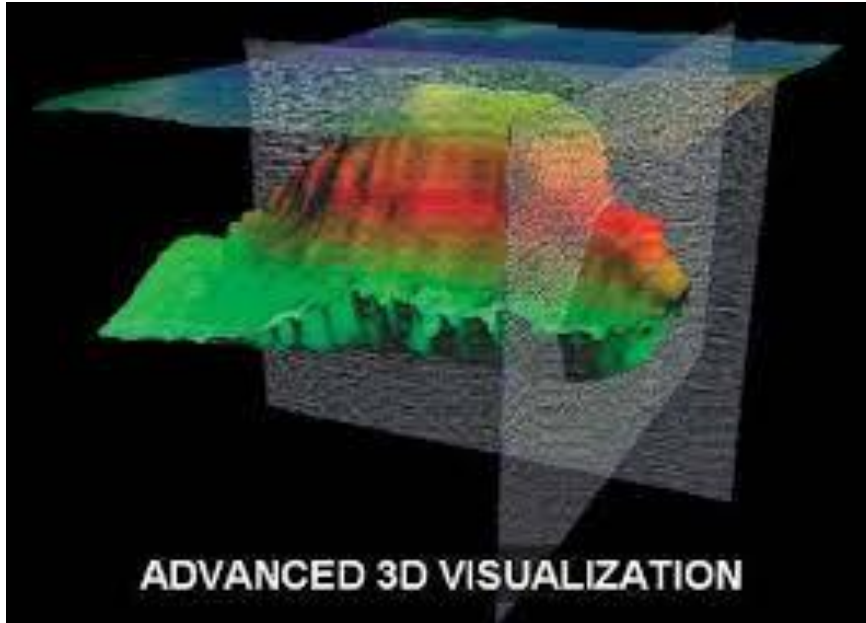
- Blended Role
 - Engineering
 - Geophysics
 - Geochemistry
 - Big Data / Analysis
- New Patterns / Knowledge
- Beyond Prospects
 - Identify Candidate Wells or Fields
 - Propose New Studies Using Big Data

Blend Yourself: Engineering



- Reservoir Engineering
 - Better reservoir characterization, better modeling
- Completions
 - Propose better procedures using geology
- Recompletions / Re-Entries
- Drilling Engineering

Blend Yourself: Geophysics



- 2D and 3D Seismic
- Sequence Stratigraphy Improvements
- Integrating seismic with new geological thinking
 - 4D / Time
 - Depositional models
 - Geological history
 - Basin Modeling

A Step Back: Why Blend?



- Sweet Spot Hunting
- Reservoir Optimization
- Reservoir Revitalization
- New Discoveries
- Developmental (old fields)
- Revitalization of Depleted Fields
- Delayed Completions (Optimize)
- Recomplete / Refracture

The ProActive Geologist: Step 1



- Self-Assessment: These are my strengths and interests
- Data: This is the data I can get for free
- Tools: Here are the tools I have
- Technologies: Here are new technologies I like
- Products: Implement in new ways

The ProActive Geologist: Step 2



- Identify a Goal
 - Bypassed pay?
 - New production
 - Revitalized reservoir?

- Identify Candidate Fields or Wells for Revitalization? Acquisition?

- Matchmake
 - Contact Operator
 - Contact Product / Service Provider

The ProActive Geologist: Step 3



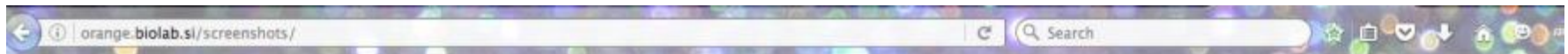
- Propose Solution
- Explain Outcome
- Explain How Your Services Contribute to the Success
- Create your own solution with the data / software you have (free / low-cost data & information sources)

ProActive Tool / Data Sourcing



- ArcGIS for Personal Use:
<http://www.esri.com/software/arcgis/arcgis-for-personal-use>
- Directory of Free Data Sources / Information (see presentation)
- Big Data Software & Application Case Studies (see presentation) – great product (free: Orange - <http://orange.biolab.si/>)
- Spotfire & equivalents
<http://spotfire.tibco.com/products/spotfire-desktop>

Data Mining with Orange



Home Screenshots Download Docs Blog



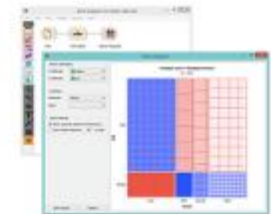
Paint a two-dimensional data set



Data selection in scatter plot is visualised in a box plot



Heatmap visualisation



Sieve diagram on a titanic data set



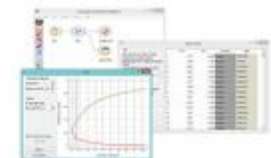
Box plot and class-based grouping



Explorative analysis and classification trees



Data can contain references to images



Principal component analysis

<http://orange.biolab.si/screenshots/>

More Data Mining Sources



WEKA 3

<http://www.cs.waikato.ac.nz/ml/weka/>

RapidMiner

<https://rapidminer.com/>

KNIME Analytics Platform

<https://www.knime.org/knime-analytics-platform>

Data Visualization



DataWrapper

<https://www.datawrapper.de/>

Weave2

<http://iweave.com/>

Presentation Software

Visme (animated presentations + infographics):

<http://www.visme.co/>

Canva (infographics): <https://www.canva.com/>

PowToon (animated): <https://www.powtoon.com/home/>

Google Slides: <https://www.google.ca/slides/about/>

Apache Open Office Impress

<https://www.openoffice.org/product/impress.html>

Free Image Editing Software



PicMonkey:

<http://www.picmonkey.com>

GIMP: <http://www.gimp.org/>

Paint.Net:

<http://www.getpaint.net/index.html>

Example 1: “No Money Down”



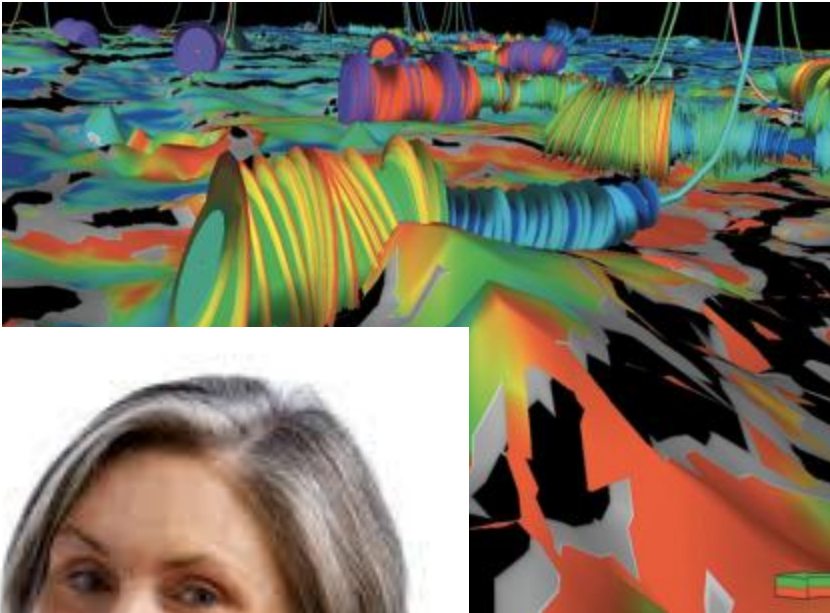
- Understand what the new product can deliver (involves contacting the company)
- Identify candidate wells
- Contact the operator
- Explain your study and the potential / seek meeting

Example 2: “Mergers & Acquisitions”



- Understand what might make an asset be, in reality, undervalued
- Develop list of attributes of undervalued assets, or ones with potential
- Thoroughly profile, and include risk

Example 3: “The Next Big Thing”



- Goal-oriented / Problem-solving focus
- Use new tools (big data / algorithms / visualization)
- Test the assumptions – pilot / start small
- Proof of concept
- Scalable
- Disseminate

Final Thoughts



- Develop a goal
- Launch more than one personal initiative
- Include self-study to keep yourself fresh and to challenge your old ways of thinking
- Be Bold: find the stakeholders who can benefit from your ideas and let them know
- Welcome challenges