



# DISCOVERY THINKING

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## American Association of Petroleum Geologists

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# Toffler's "Future Shock"

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## ■ Toffler described Task Forces or Teams

- ◆ Created for a specific project
- ◆ Disbanded when project done



Alvin and Heidi Toffler

- ## ■ We add a twist – Spread special expertise through multiple teams



# Exploration Hexagon

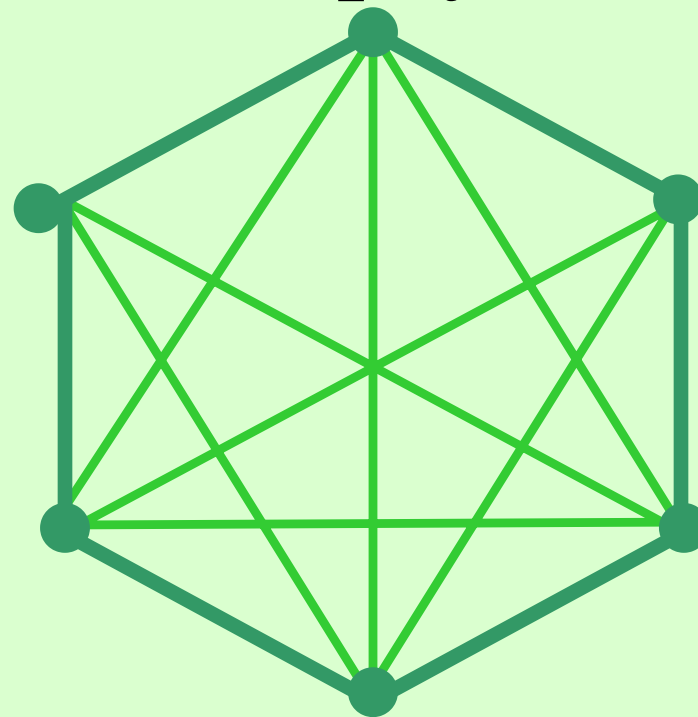
**Exploration  
Petrophysics**

**Exploration  
Geology**

**Exploration  
Geophysics**

**Exploration  
Geochemistry**

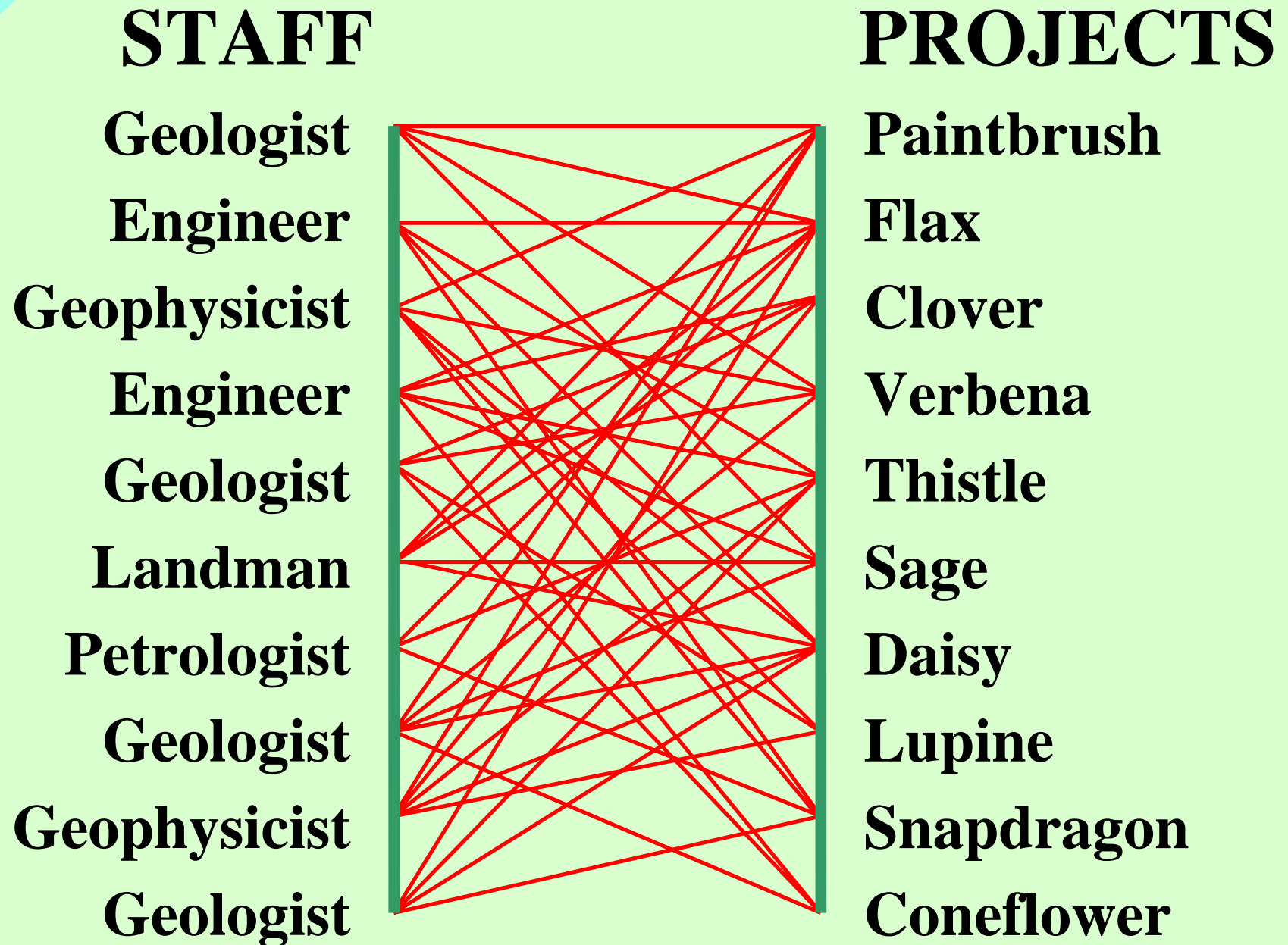
**Exploration  
Reservoir  
Engineering**



**Exploration Well  
Stimulation and  
Completion**



# Project Matrices





# MULTIPLE TEAM APPROACH

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- **Each individual is involved in more than one project**
- **Critical mass – you need some minimum number of technical people selected for their expertise to make this whole system work**



# Play Concept

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- **A play is a Petroleum System within a (usually) large Geographic Area with identifiable source rocks, maturation, migration history, seals and traps**
  
- **Knowledge Base and Technology**



# Creating a New Play

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- **Understand Regional Geology**
  - ◆ **Stratigraphy and Structure**
  - ◆ **Source Rock Richness, Maturation and Timing**
  - ◆ **Integration with Structure**



# Creating a New Play

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- **Understand Analog Field Characteristics**
  - ◆ **Analog Field Studies**
  - ◆ **Scale is Important**
  
- **Peer Review**
  - ◆ **Must defend against 1200 Man Years of Experience**
  - ◆ **Must defeat Dogma and Prejudice**

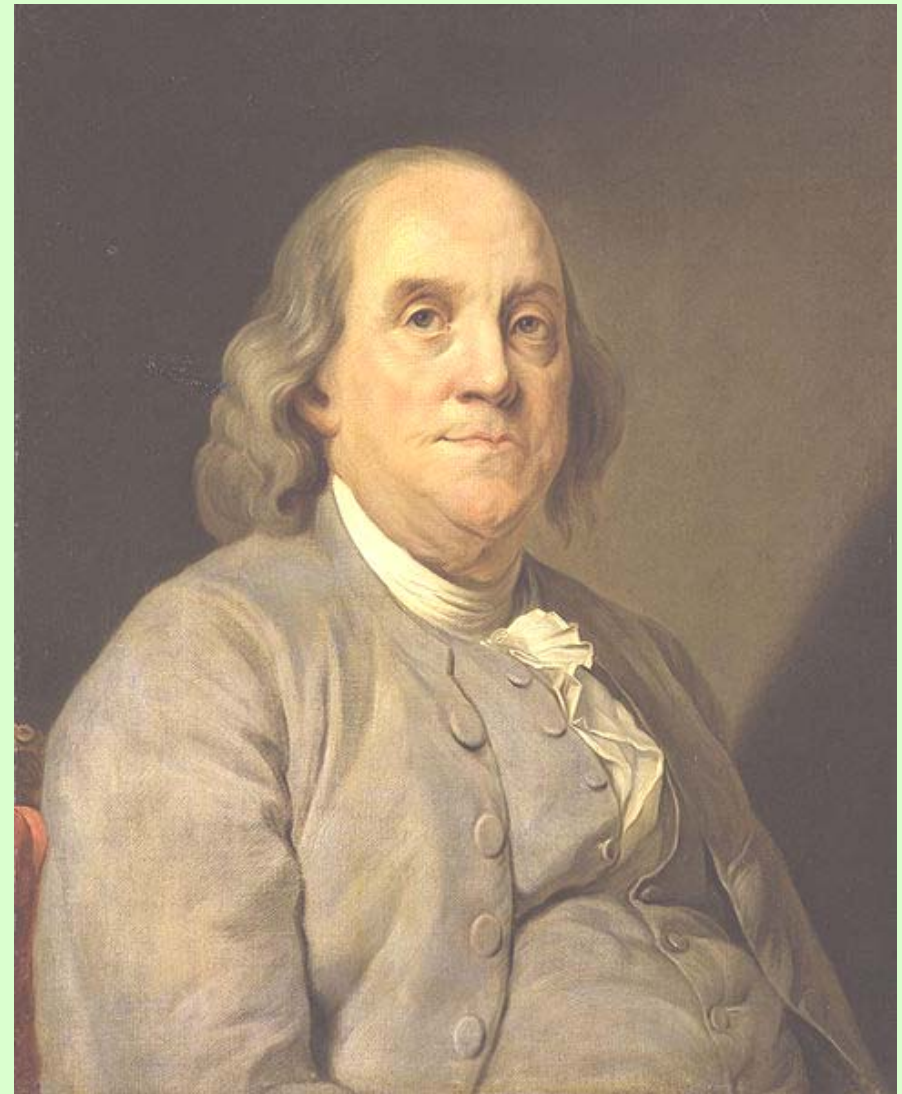




# Thomasson Partner Associates Mission Statement

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- **Survival**
- **Fun**
- **Technology**
- **Golden Rule**
- **Wealth**

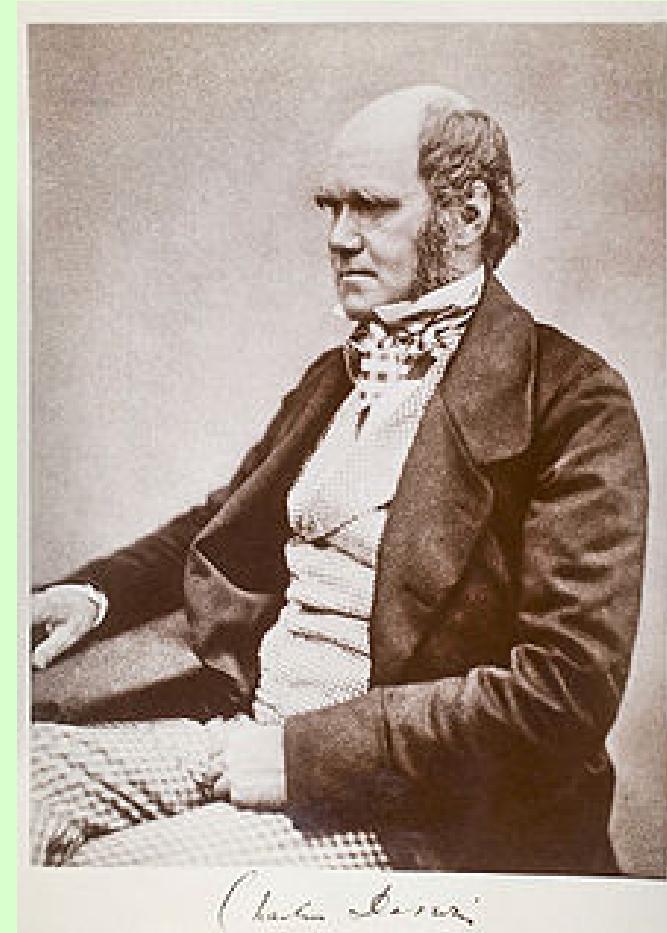


**Benjamin Franklin**



# Attributes of Great Explorers

- **Honest**
- **Intelligent**
- **High Work Ethic**
- **High Level of Creativity**
- **Ability to work well with others**



**Charles Darwin**



# Qualities of Great Explorers

- **Curiosity**
- **Basic Data Collection**
- **Problem Solving**
- **Vision**
- **Contrary Thinking**
- **Think Big**
- **Persistence**



**Alfred Wegener**



# More Qualities of Great Explorers

- **Technology vs Art**
- **Passion & Enthusiasm**
- **Optimism**
- **Mitigate Risk**
- **Challenge Dogma**
- **Question the Answers**



**James Hutton**



# Two Principles

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- **Surround yourself with people smarter than you are.**
- **Make certain everyone shares justly in the rewards**