

43RD ANNUAL ECC CONFERENCE

engineering and construction contracting association



JOURNEY INTO UNCHARTED TERRITORIES

How are owners, contractors and suppliers adapting to successfully execute projects and reposition their businesses in the ever evolving project environment?

September 7-10, 2011

JW Marriott Desert Ridge, Phoenix, AZ



REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES



Maximizing Project Value Beyond Cost Cutting

Bob Lewis

Petroleum Engineer

Project Management Professional

30 Years Experience

Operations and Projects

Upstream and Downstream



Project Services Manager
Noble Energy, Inc

JOURNEY INTO UNCHARTED TERRITORIES

Breakout Forum



REPOSITIONING THE PROJECTS BUSINESS IN A WORLD WITH CHANGING BOUNDARIES

Noble Energy, Inc

Noble Energy, Inc. is
a leading independent energy company,
with a diverse portfolio of high-quality assets,
committed to delivering value
to our investors, business partners and employees.



**JOURNEY INTO
UNCHARTED
TERRITORIES**

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Noble Energy

Current Areas of Operations

- **Offshore – Deepwater Assets**
 - US GoM
 - Eastern Mediterranean
 - Western Africa
- **Onshore – Shale Assets**
 - Niobrara – Rocky Mountains

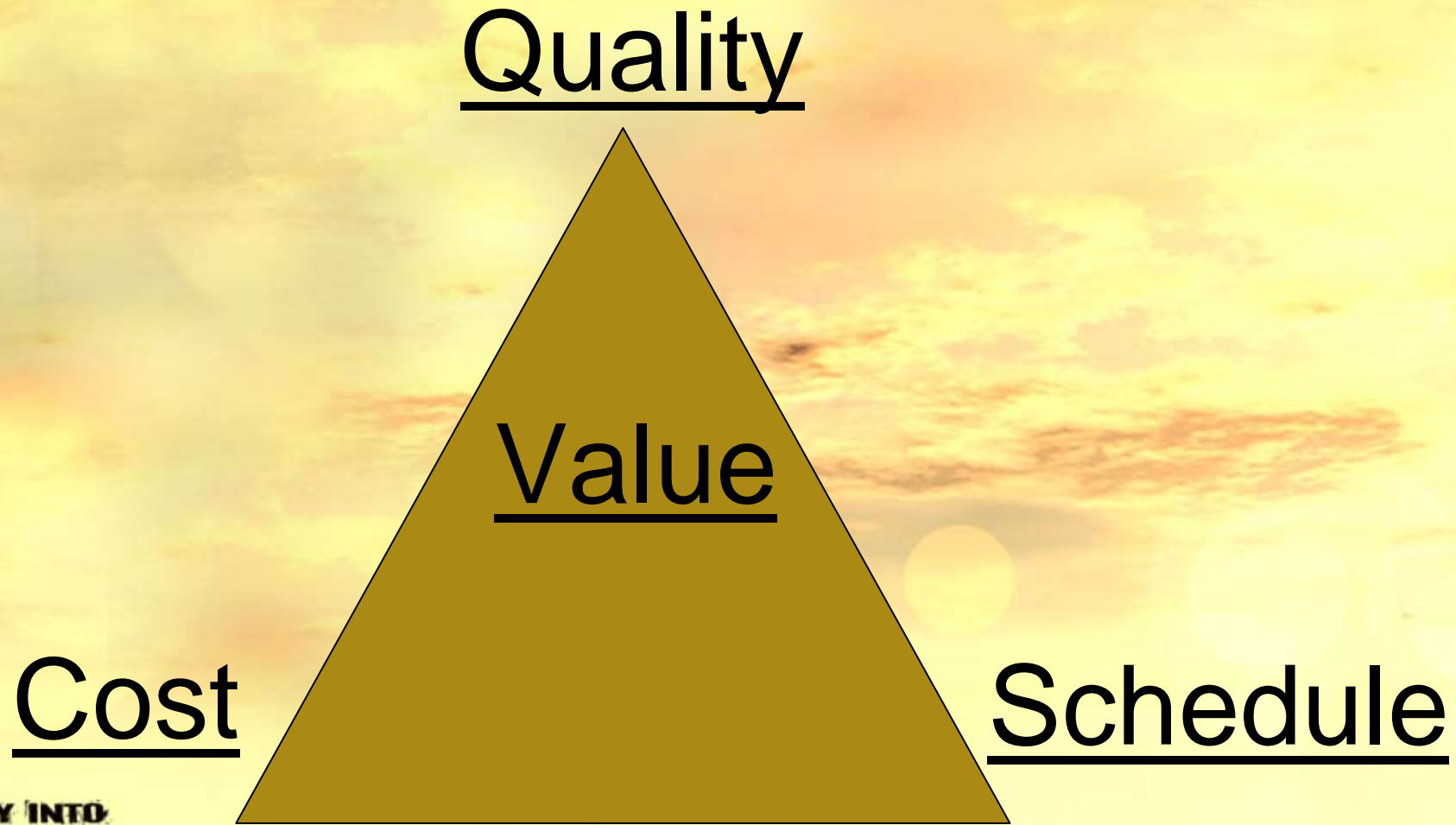
How does Noble Energy deliver Value?

- We create Value by discovering and monetizing hydrocarbons quickly in a safe and responsible manner.
- We optimize Value through Lower Costs and Faster Schedules
- We prevent Value destruction with an emphasis on Quality Management

How do YOU deliver Value?

- Do YOU create Value by discovering and monetizing **opportunities** quickly in a safe and responsible manner?
- Do YOU optimize Value through Lower Costs and Faster Schedules?
- Do YOU prevent Value destruction with an emphasis on Quality Management?

Our Components of Value



Managing Quality for Value

- Quality preserves Value
- Cost Cutting on Quality is accepting a short term gain for a long term loss
- Quality should not be compromised

Quality Components of Value - Examples

- Contractor Availability
- Efficient Work Processes & Systems
- Health & Environmental Awareness
- Integrity & Reputation
- Risk Management
- Safety Record, Practices, and Programs
- Workmanship

Managing Cost and Schedule for Value

- Net Present Value can be used to evaluate incremental changes to Cost and Schedule

$$NPV = CF_1/(1+r) + CF_n/(1+r)^n \dots$$

CF_1 = Cash Flow in Year 1

CF_n = Cash Flow in Year n

r = discount rate

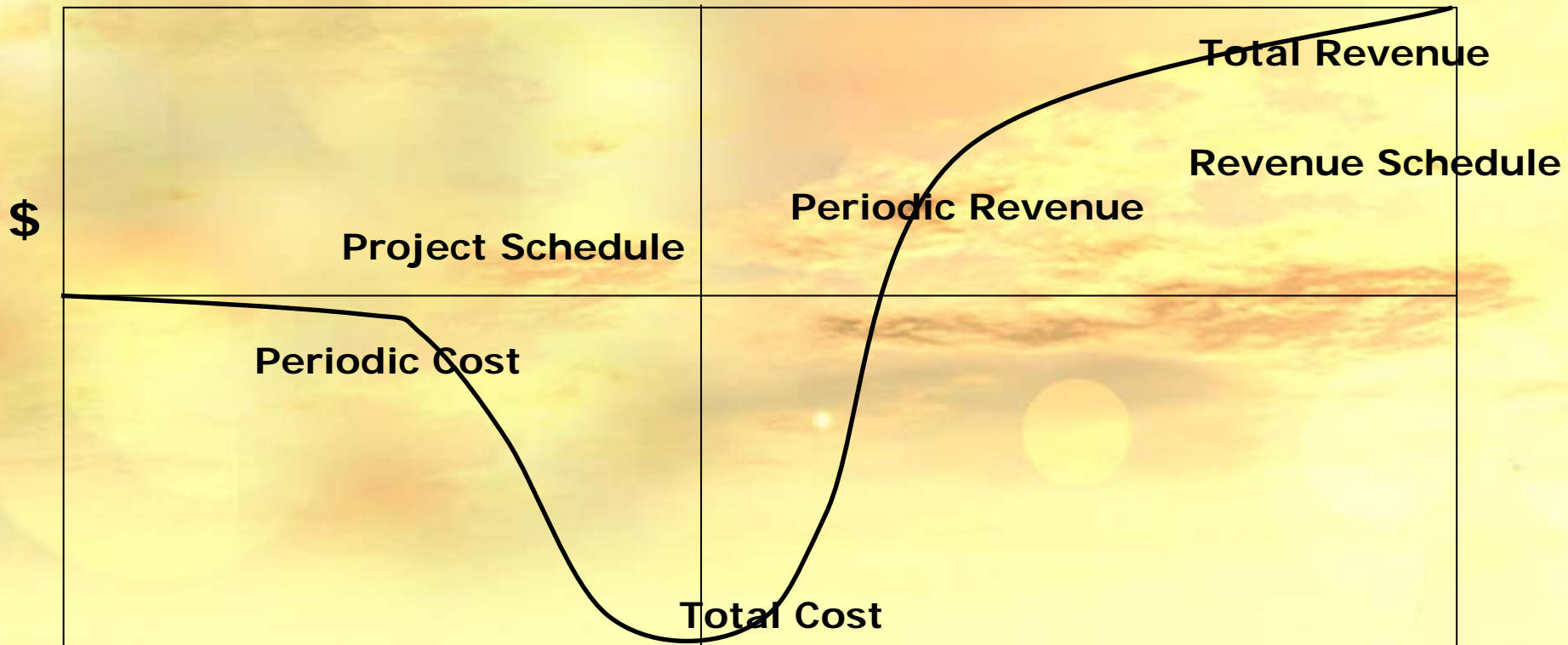
Optimizing Cash Flow is the key to
Managing Cost and Schedule for Value

Owner's Cash Flow

Cumulative Cash Flow

Project Implementation

Production Operations

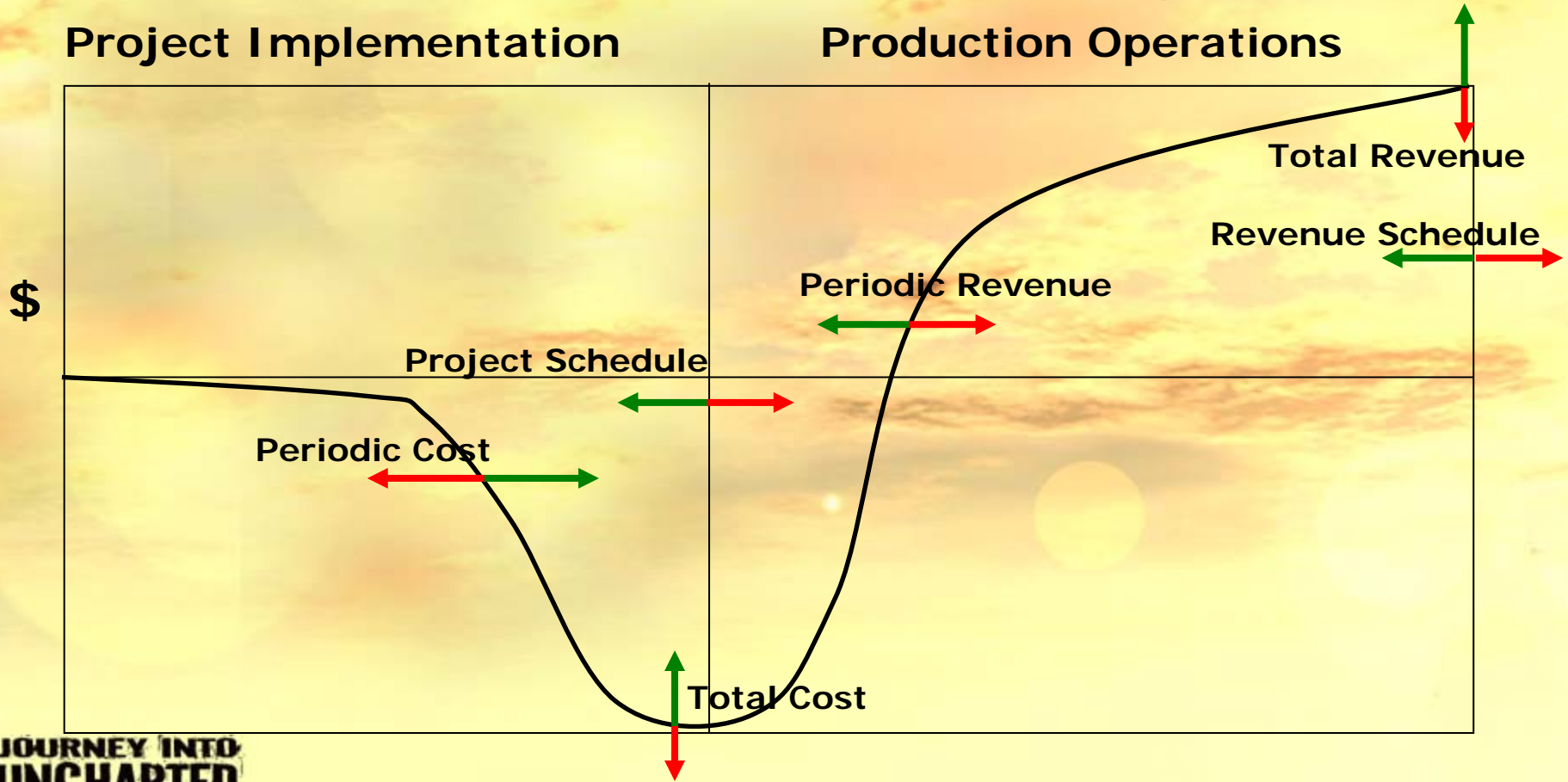


Owner's Value of Time and Money

Impact of Cumulative Cash Flow Changes on NPV

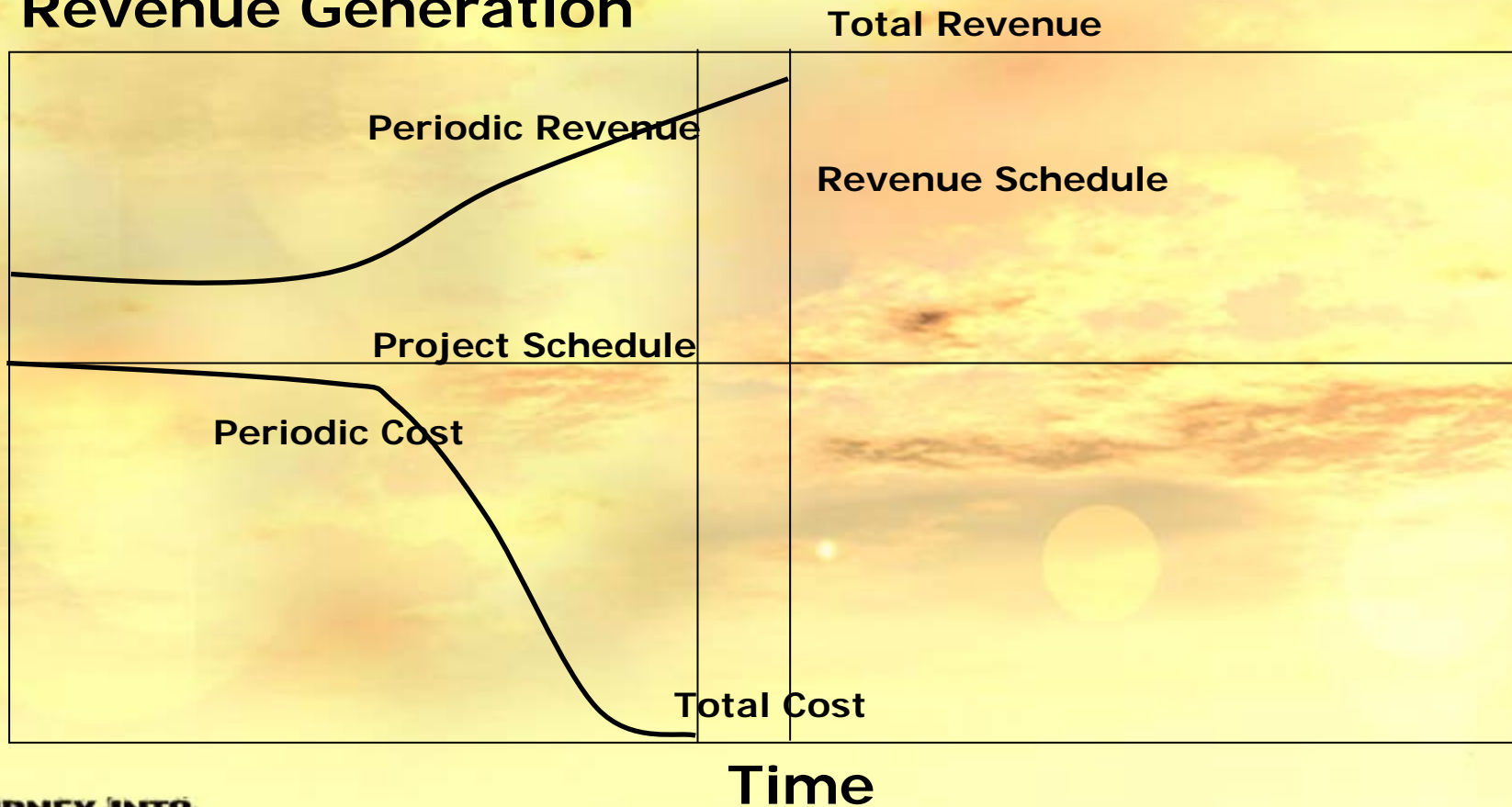
Project Implementation

Production Operations



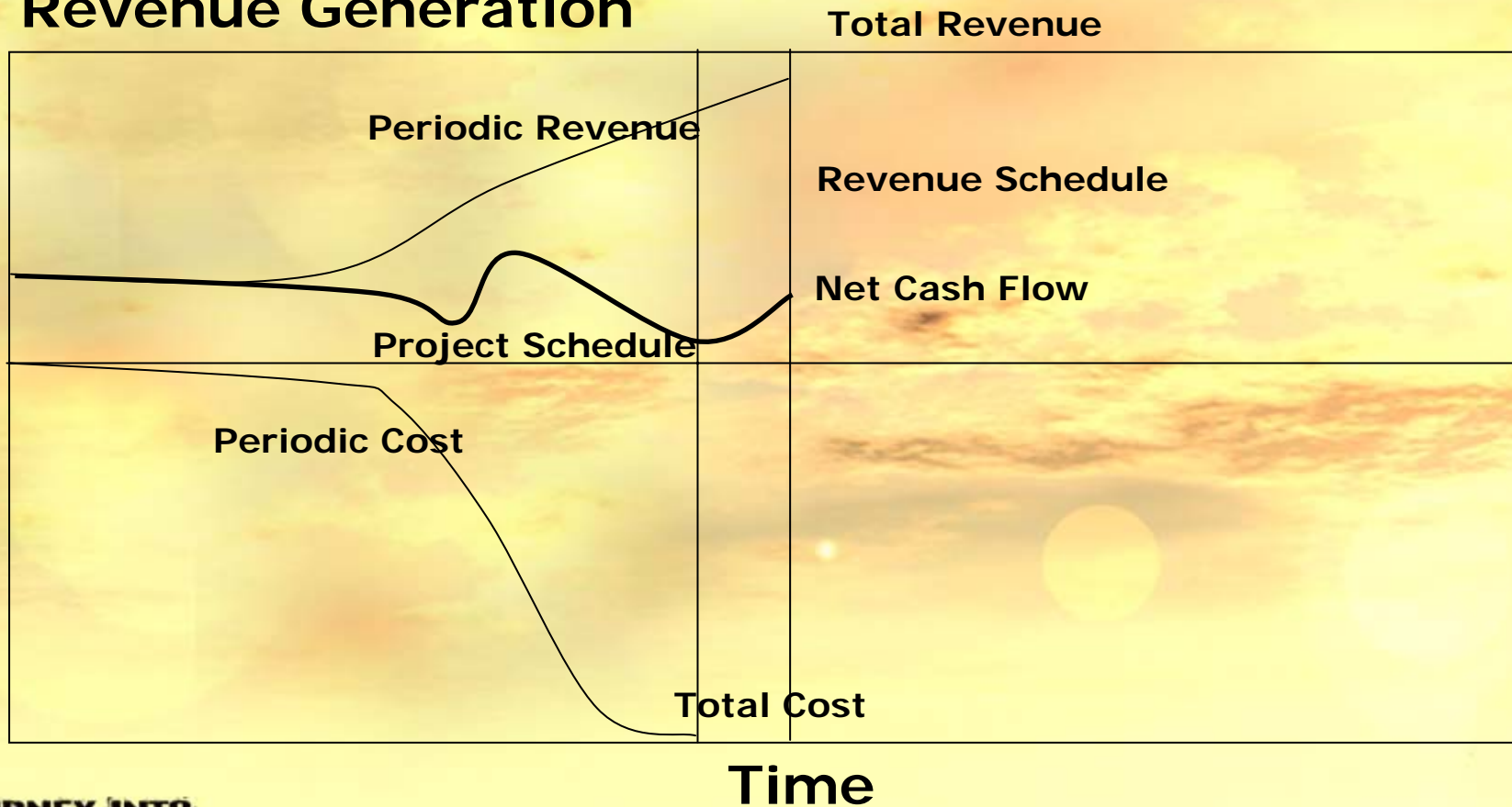
Contractor's Cash Flow

Project Implementation Revenue Generation



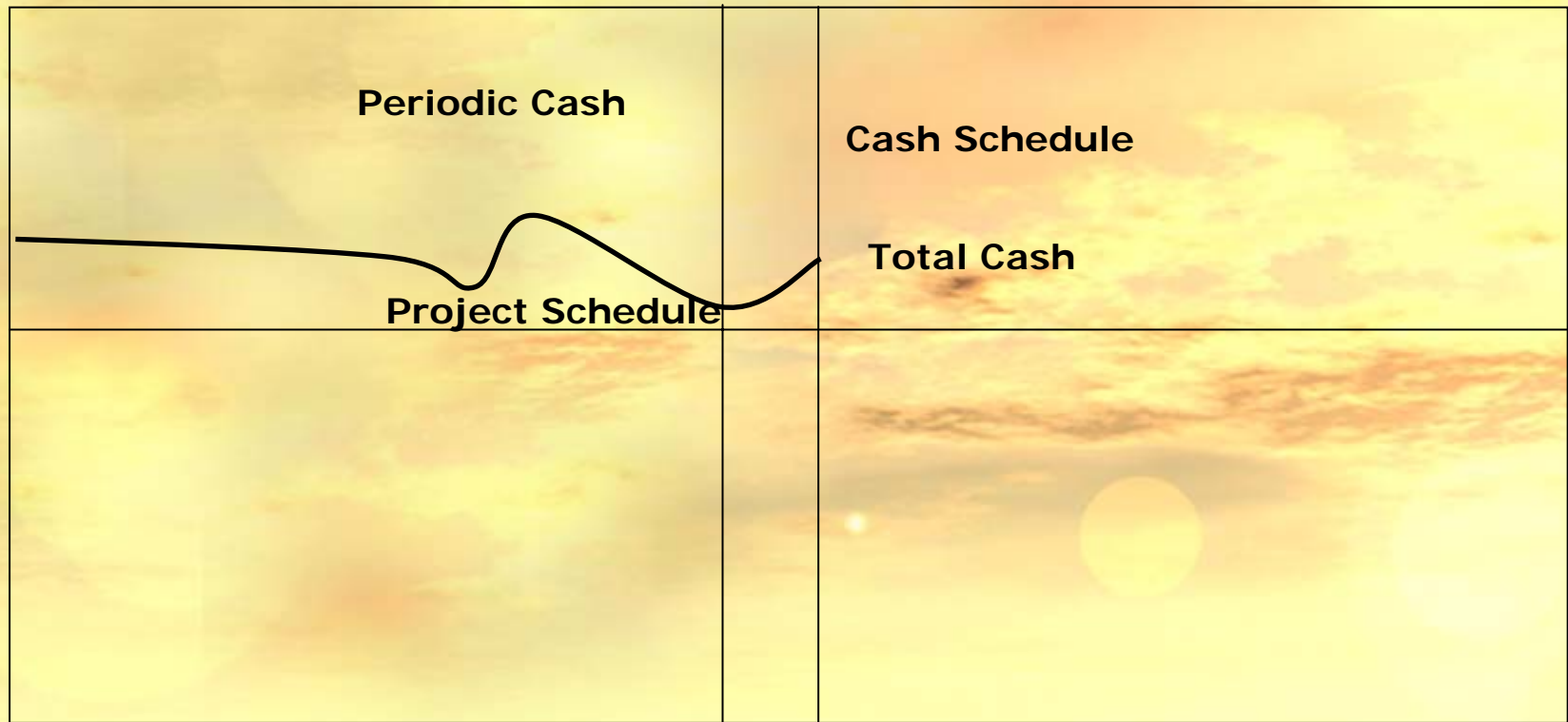
Contractor's Cash Flow

Project Implementation Revenue Generation



Contractor's Cash Flow

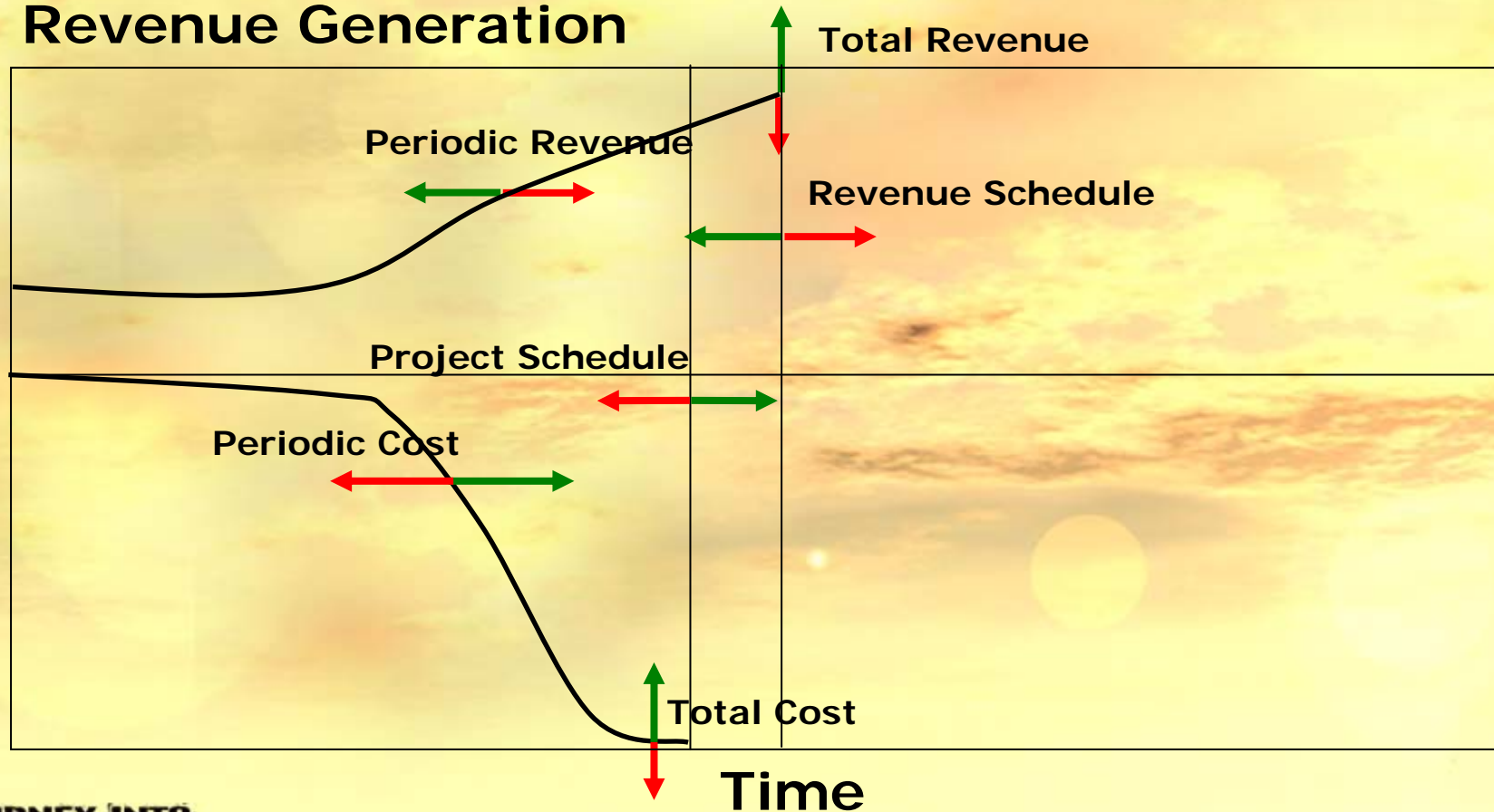
Cumulative Net Cash Flow



Time

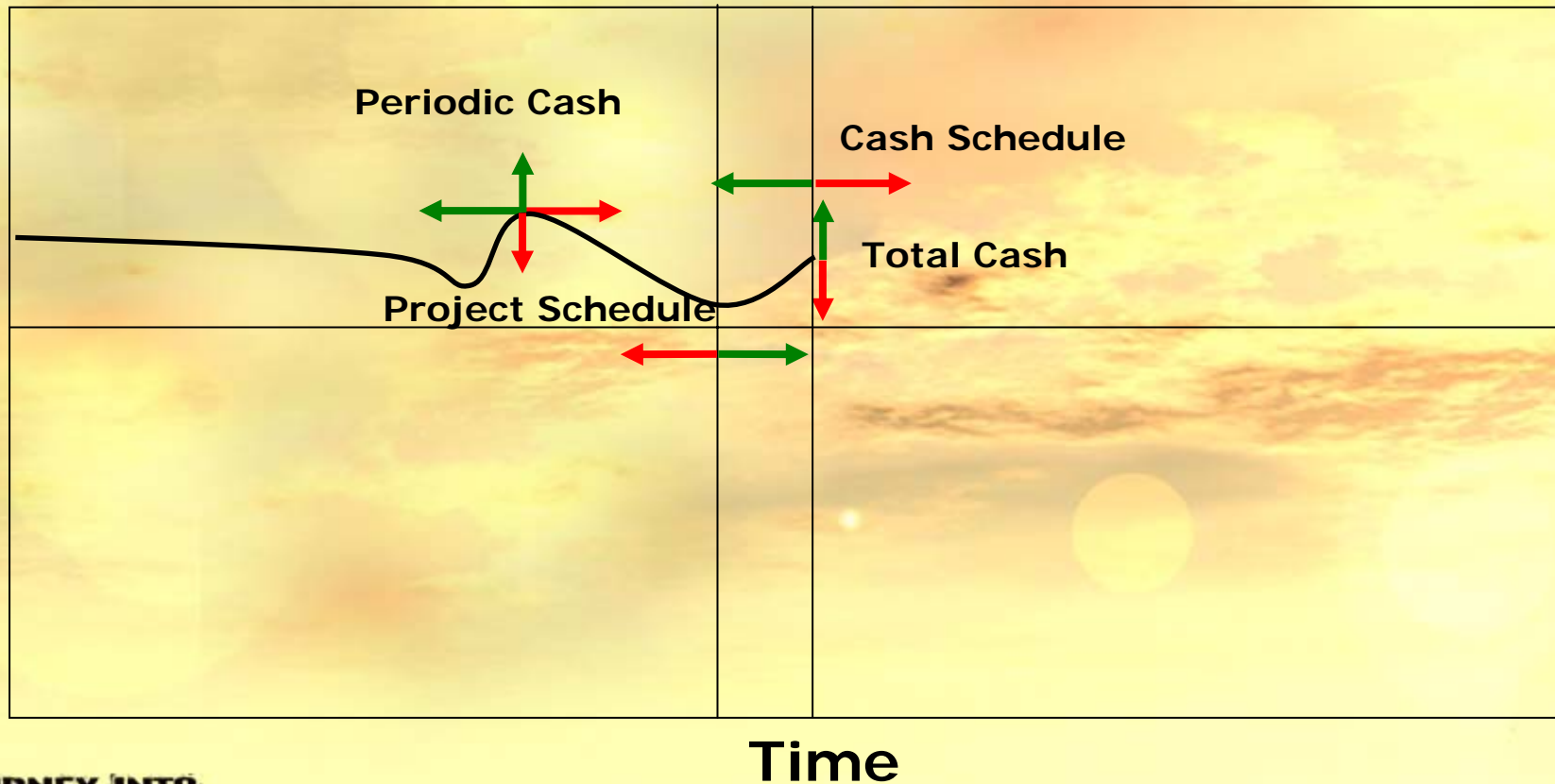
Contractor's Value of Time and Money

Project Implementation Revenue Generation



Contractor's Value of Time and Money

Cumulative Net Cash Flow

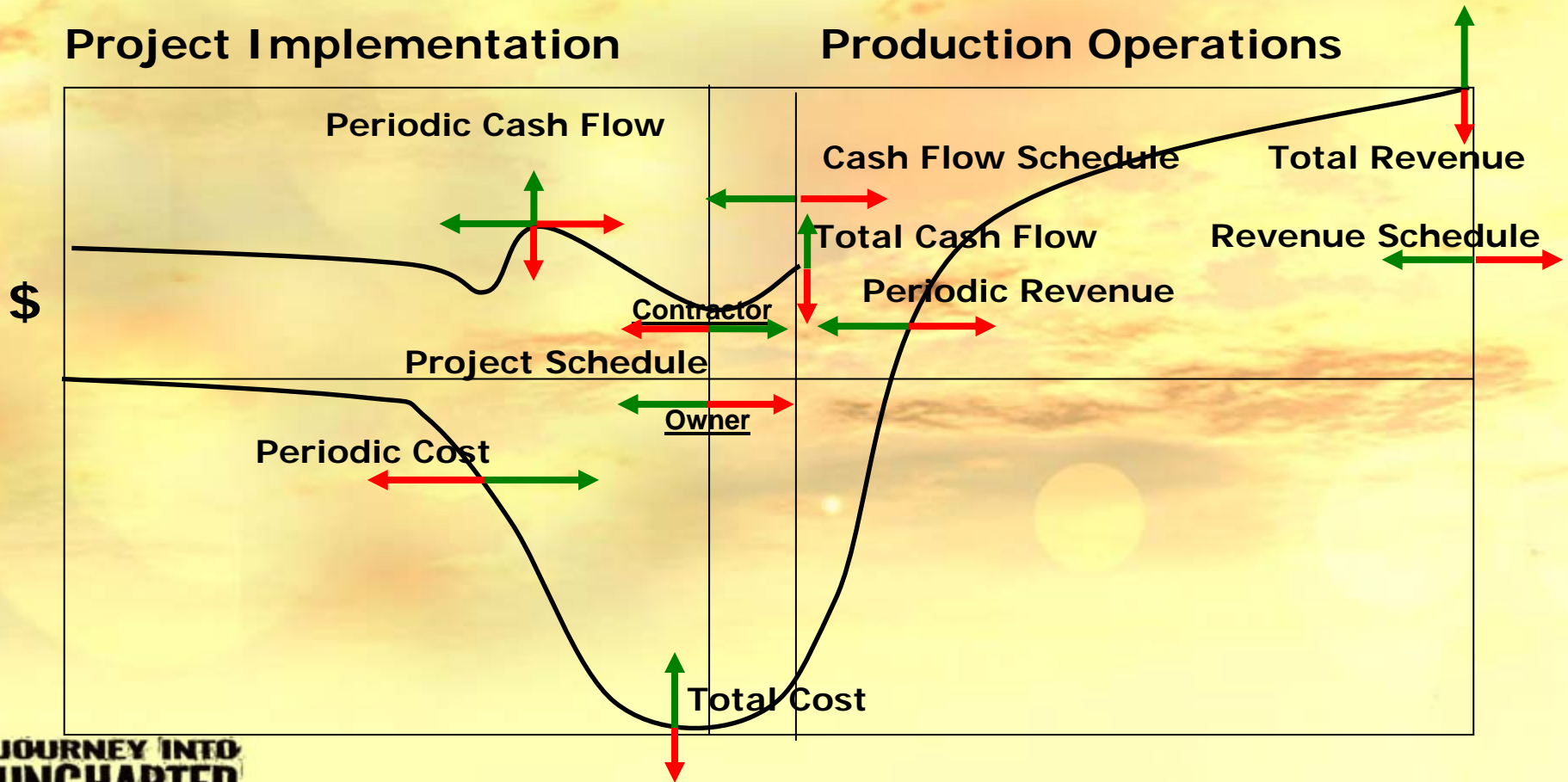


Misaligned Values of Time and Money?

Cumulative Cash Flow

Project Implementation

Production Operations



Conclusions

Our common goal: **Maximize Project Value**

How?

- Understand the Drivers of NPV
- Optimize Quality
- Accelerate Schedules
- Reduce Costs