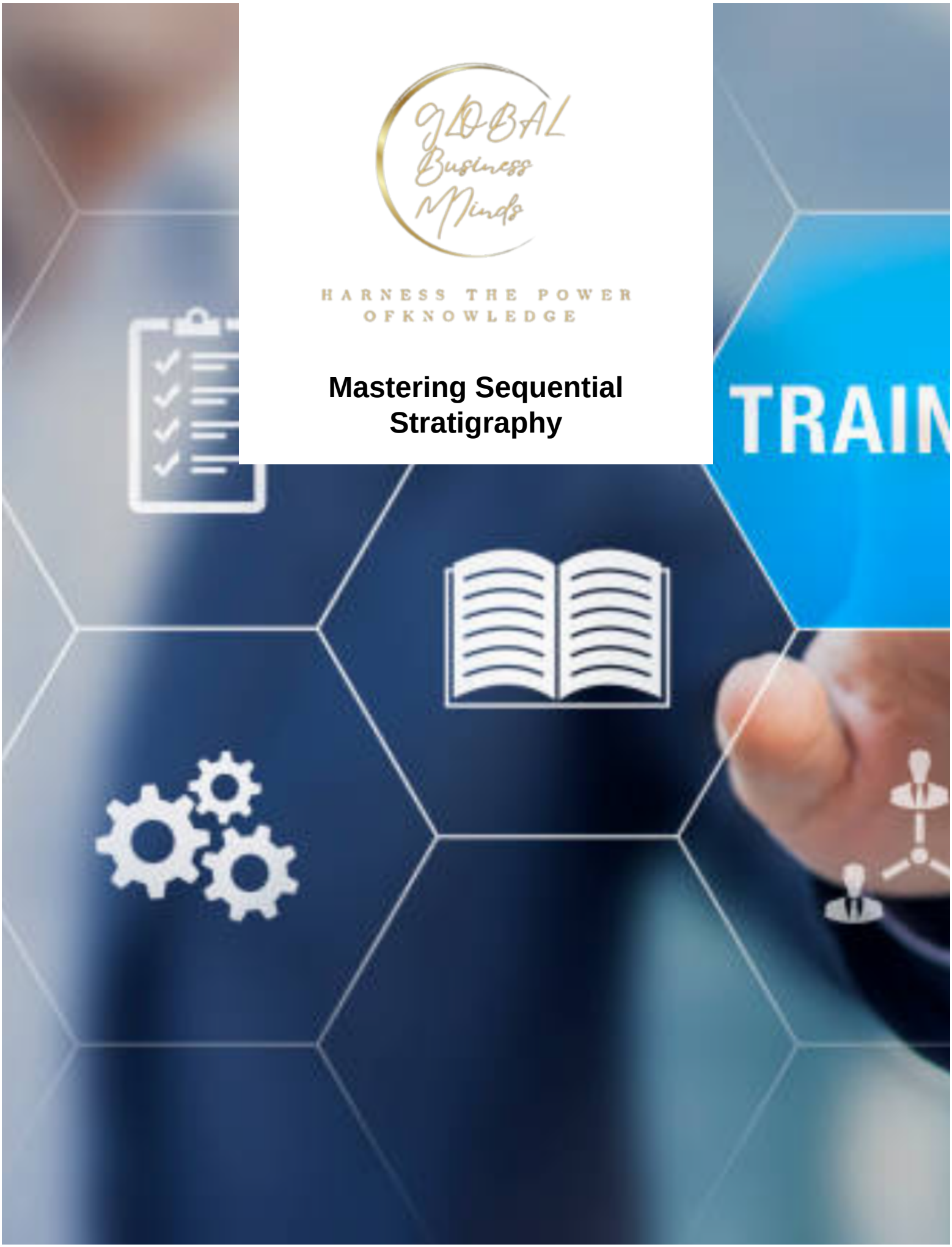
GLOBAL
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HARNESS THE POWER
OF KNOWLEDGE
Mastering Sequential
Stratigraphy
TRAIN

Introduction

Sequential stratigraphy, a branch of stratigraphy that deals with the order and timing of depositional systems in response to sea-level fluctuations, is a critical tool for understanding the evolution of sedimentary basins and predicting the distribution of potential hydrocarbon reservoirs

This comprehensive 5-day professional training course will equip you with the essential knowledge and skills to effectively apply sequential stratigraphy principles to various geological settings

Course Objectives

By the end of this course, you will be able to:

• Understand the fundamental principles of sequential stratigraphy and its significance in subsurface interpretation
• Identify and interpret key surfaces associated with sea-level changes, including sequence boundaries, maximum flooding surfaces, and lowstand surfaces
• Apply sequential stratigraphy concepts to decipher the depositional history of sedimentary basins and predict the distribution of facies and reservoir potential
• Utilize sequence stratigraphy in conjunction with other geological and geophysical data for comprehensive subsurface characterization
• Apply sequential stratigraphy knowledge to address real-world challenges in hydrocarbon exploration, reservoir development, and environmental assessment

Course Agenda

Day 1: Introduction to Sequential Stratigraphy

• Explore the history, principles, and applications of sequential stratigraphy in subsurface interpretation
• Understand the relationship between sea-level changes, sediment supply, and the development of depositional systems
• Review the different types of depositional systems and their association with sea-level fluctuations

Day 2: Sequence Boundaries and Systems Tracts

• Delve into the identification and interpretation of sequence boundaries, the key surfaces that mark the boundaries of depositional sequences
• Explore the different systems tracts within a depositional sequence, including lowstand systems tracts, transgressive systems tracts, highstand systems tracts, and falling stage systems tracts
• Utilize systems tracts to infer the timing and relative position of deposition

Day 3: Sequence Stratigraphic Analysis of Well Logs and Seismic Data

• Apply sequence stratigraphy principles to interpret well logs, including identifying key surfaces and determining depositional environments
• Utilize seismic data to map sequence boundaries, systems tracts, and depositional facies
• Integrate well log and seismic data to construct sequence stratigraphic frameworks

Day 4: Application of Sequential Stratigraphy in Exploration and Development

• Discuss the application of sequential stratigraphy in hydrocarbon exploration, including identifying potential reservoir intervals and predicting their distribution
• Utilize sequential stratigraphy to optimize well placement and guide reservoir development strategies
• Apply sequential stratigraphy to assess environmental risks and identify potential subsurface hazards

Day 5: Advanced Sequential Stratigraphic Concepts and Case Studies

• Explore advanced sequential stratigraphic concepts, such as sequence hierarchy, allostratigraphy, and sequence stratigraphy in non-marine settings
• Analyze real-world case studies to apply sequential stratigraphy principles to various geological scenarios
• Discuss the latest advancements and techniques in sequential stratigraphy research and applications

Who Should Attend

This course is designed for:

• Aspiring and experienced geoscientists seeking to enhance their understanding of sequential stratigraphy and its applications in subsurface interpretation
• Reservoir engineers involved in reservoir modeling, well placement, and production optimization
• Petroleum geologists working on geological modeling, facies analysis, and reservoir characterization
• Geophysicists utilizing seismic data and well log interpretation for subsurface mapping and reservoir evaluation

Course Benefits

• Develop a comprehensive understanding of sequential stratigraphy principles, techniques, and applications in subsurface interpretation
• Gain hands-on experience in applying sequential stratigraphy to real-world geological scenarios using industry-standard software
• Enhance your ability to integrate sequential stratigraphy with other subsurface data for improved reservoir characterization and exploration success
• Apply sequential stratigraphy knowledge to optimize well placement, reservoir development strategies, and environmental assessment
• Stay updated on the latest advancements and techniques in sequential stratigraphy methodologies and subsurface interpretation