

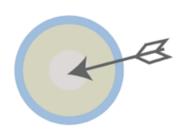
Having experienced both the academic and industry worlds, I realized that Frontier Exploration is facing fundamental unknowns in the Geology of rifted margins and mountain belts. Usual tools and workflows cannot be extrapolated between conventional and frontier exploration domains as simple for a simple reason: their geological evolutions are differing. Ideally the industrial geological challenges should be translated into Research projects and successfully fuel the development of new predictive tools: The R&D chain. Academic and Industrial interests are, however, rarely matching. The main aim of M&U is to provide value for both by decreasing the distance between academia and industry worlds and develop innovative Research "on purpose".

Emmanuel MASINI / "Manu"

CEO & Founder M&U sasu Specialist of Rifted margins and their deformed equivalents in Mountain belts.







# noitidmA nuO Mho are we.

#### Researchers & Consultants in Geosciences

We propose Solutions &

**Answers** 

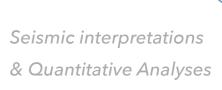
where questions and borders arise



Specialists in Tectonics & Sedimentary processes from Rifting to Orogenesis

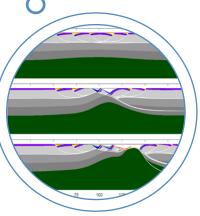


Field investigations & Analogies









Modeling & Kinematic restauration



Hyper-extension Partioning **Timing**  Partioning Analogues Hyper-extension Fossil margins

Field Trips

Kinematics

Ongoing Necking
Ongoing Breakoff

Hyper-extension Exhumed mantle

Salt

Inheritances

Transform

ranspression

Magma-rich rifting

Jurassic Sag

Rift preservation Hyper-extension Salt Giant Thermicity & Break-up Asymmetry Asymmetry

Asymmetry Magma-rich

Partitioning Extreme sedimentation

Salt Margins Vs Subduction
Sutures
Proto
HP exhumation
caribbean
Magmatic plateau Subduction initiation
Magmatic plateau Subduction initiation
Magmatic Plateau Subduction Subduction Initiation
Magmatic Plateau Subduction
Magmatic Subduction
Magma

Kinematics

Thermicity &

Necking \*
Magma Salt \*

Field analogues

Inversion Out of sequence
Aborted rift Transform margin

Transpression Marginal plateau Hyper-extension

Extreme Sedimentation SagThermicity Magma & CO2 Carbonates Sag Giant Salt Province Subsidence anomaly

Magma-rich rifting Subsidence

> Hyper-extension Transform Segmentation

Breakoff Subduction to Collision Margin inversion

Old inheritances Hyper-extension

Thermal anomaly Magma-rich rifting

& Micro-continent

Propagator

Transform margin Out of sequence deformation Subduction initiation

Hyper-extension Lakes Magma & CO<sub>2</sub>

# Geo- Challenges

Seismic interpretation Structural modeling Quantitative analysis Field analogues

Field investigations Field analogues

Structural modeling Seismic interpretation

Field investigations
Field investigation
& analogue
Seismic interpretation

Seismic interpretation Structural modeling

Kinematic modeling

Field investigations Quantitative analysis

Integrated reprocessing Seismic interpretation

Seismic interpretation
Structural modeling

Structural modeling

Seismic interpretation Structural modeling

Quantitative analysis Int. seismic interpretation

Quantitative analysis

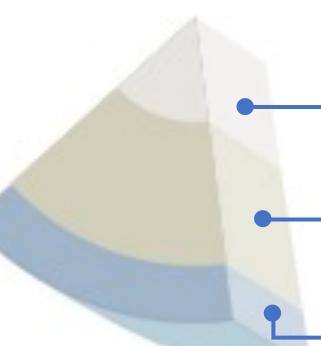
Structural modeling

Seismic interpretation

Seismic interpretation







#### Research & Development

We create knowledge

### Geological Consultancy

We apply knowledge

#### Field trip & Teaching

We transfer knowledge

#### Research & Development

Facing an unexpected facies, geometry, diagenesis or thermal record in frontier exploration acreages?

Maybe not simply an imaging challenge, it is likely that the interpretation toolbox is not adapted to be predictive. At M&U, we think that this is where the threshold between Engineering and Research challenges should be and that the R&D value comes from their linkage.

By being at a mid-way between Academic & Industry interests, we provide **a crucial support** to Exploration companies to set and manage adapted Research programs to **fulfil their exploration toolbox**.

M&U was thought to **be at every step of the R&D chain from the initial definition of the scientific issues**, through the design and management of an academic-industry research venture until the final development of industrial solutions.



#### Geological Consultancy

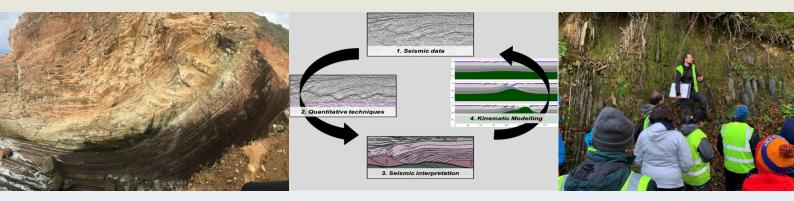
Are you working on structural scenarios from prospect to lithospheric scale?

Are you facing a complex geometry, subsidence or thermal issues on a new venture asset?

As geology-geophysics interpreters and specialists of rifted margins as well as orogenic settings we provide integrated and innovative solutions.

At M&U, seismic interpretation is completed by a set of quantitative techniques to test your or our delivered structural scenarios.

Our multi-method and integrated approach comprise from kinematic restoration to forward kinematic modelling allowing us to deliver key insights to fuel successful explorations.



#### Fieldtrips and Teaching

Distal parts of rifted margins are inaccessible except by seismic imaging... An alternative way to study them is to **use fossil analogues preserved usually in mountain belts.** 

**M&U uses fossil analogues as natural laboratories**. Based on that we organize Field Excursions and courses focused on rifting processes, rifted margins architecture and their integration within an orogenic system.

Proposed field areas are: Alps, Pyrenees and Oman belts





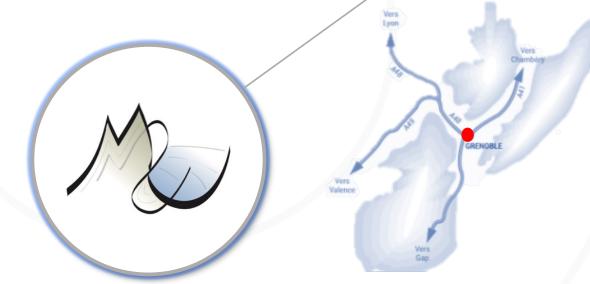
# For more informations

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