



Business Development in the Blue Economy

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CCRES

Capturing Coral Reef and Related Ecosystem Services



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA



UCDAVIS

Currie



et al de foundation



Multidisciplinary Approach

Marine Sciences



Systems Dynamics



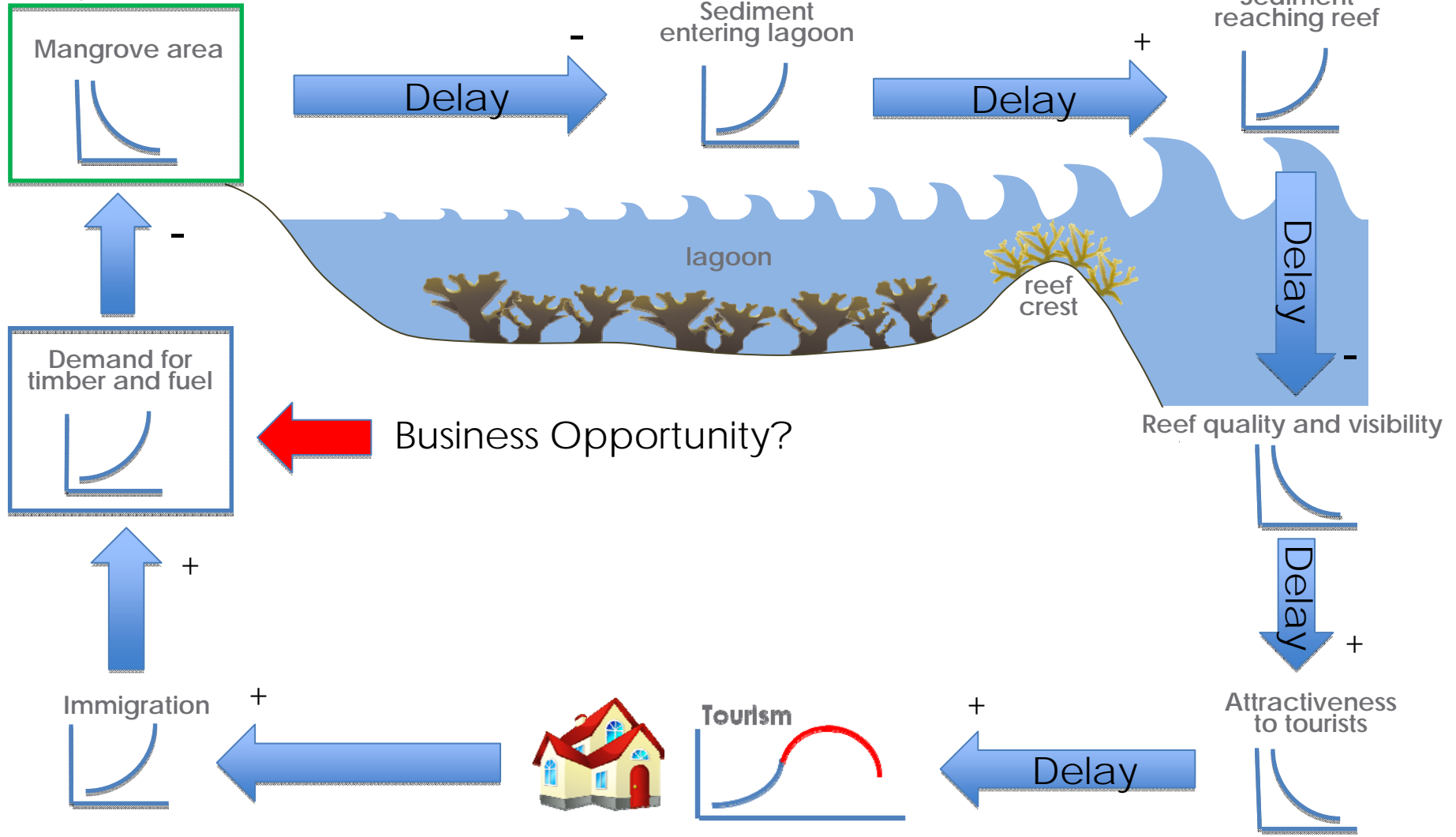
Management Science



Behavioral Change

Identifying & Evaluating Business Opportunities

Ecosystem Service



Case Study

Mangrove-based Fuel



Valuations Do Not Prevent Destruction



Need for Crucial Distinction

Social/Environmental Mission

Reduce
social/environmental
impact

Business Objective

Build a profitable and
scalable business model
for specific
product/service in a
specific market

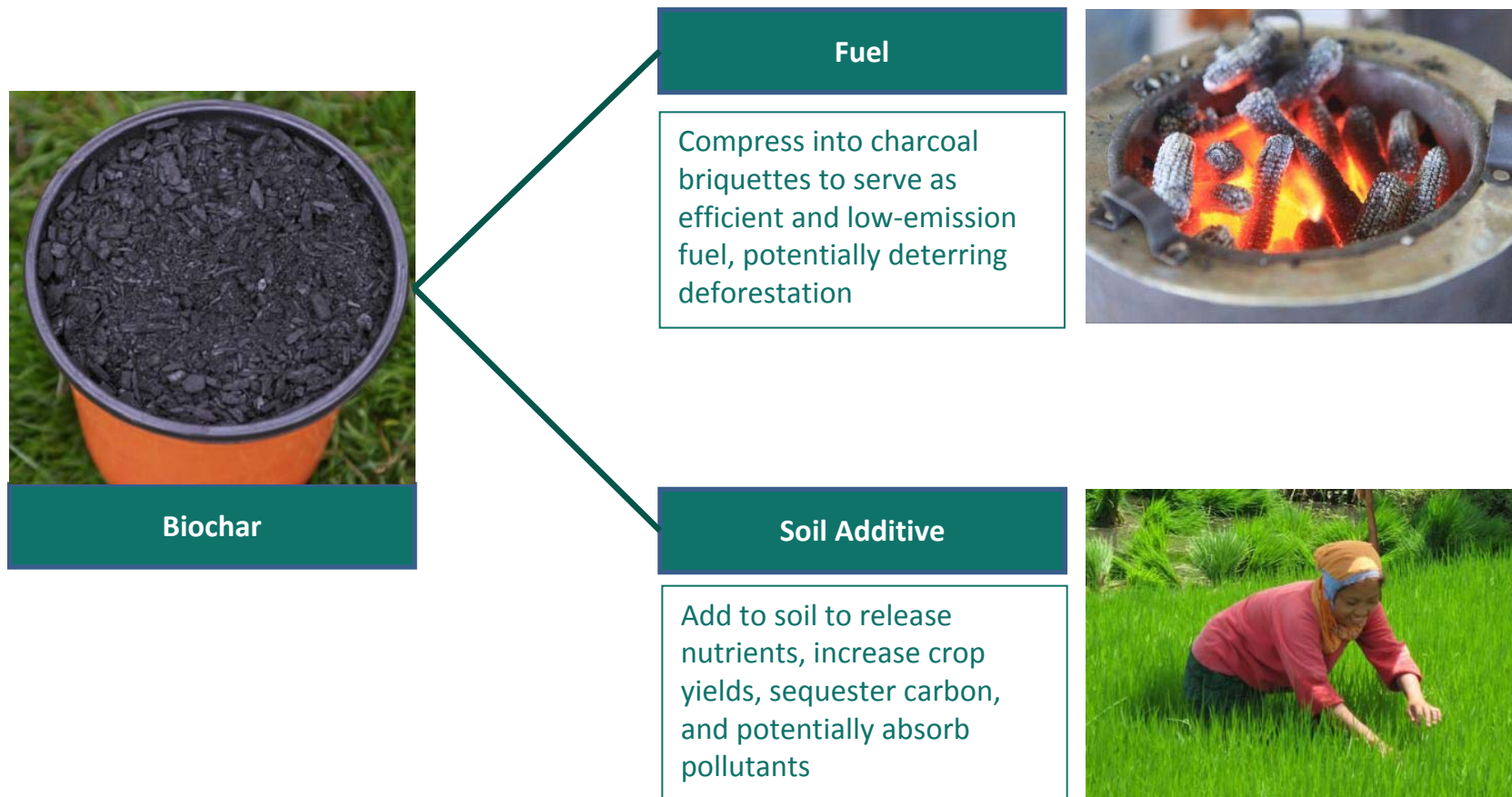
A Healthy Charcoal Market



Demand is Strong



Technological Options



Global Benchmarks

Eco-Fuel Africa



Uganda

ANSAB



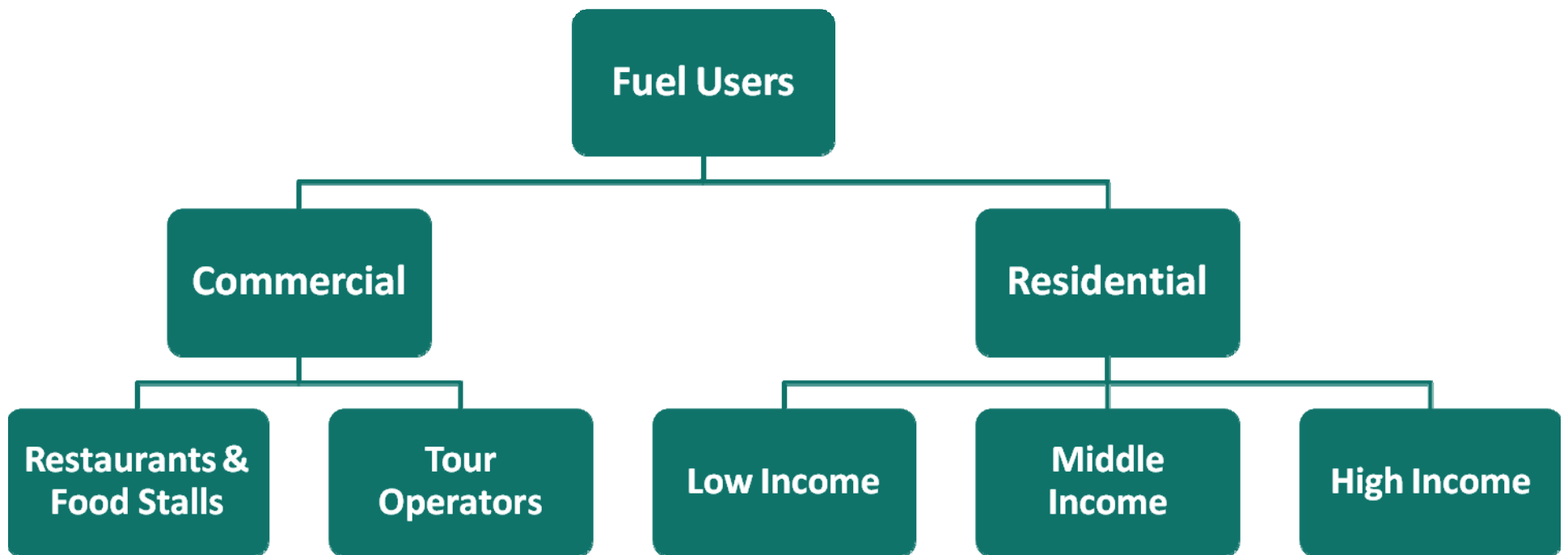
Nepal

Ngata Toro



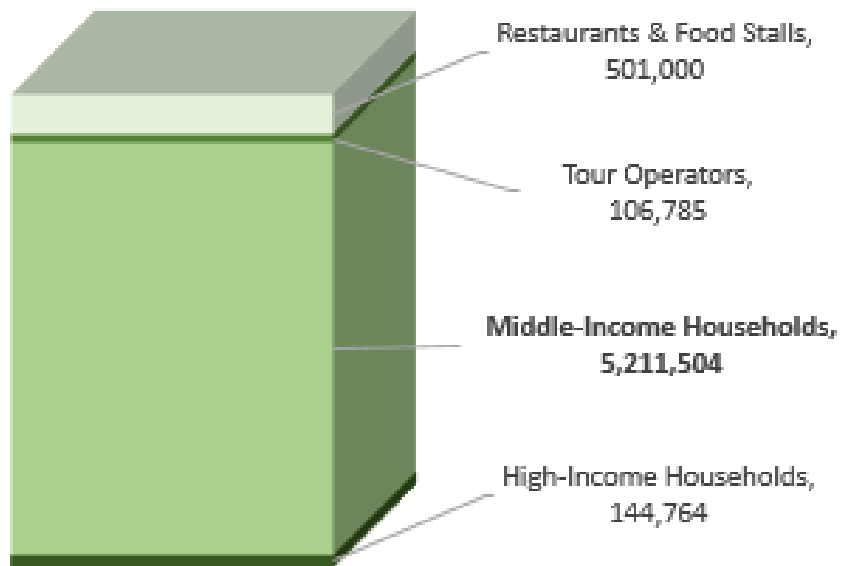
Indonesia

Market Segmentation



Market sizing

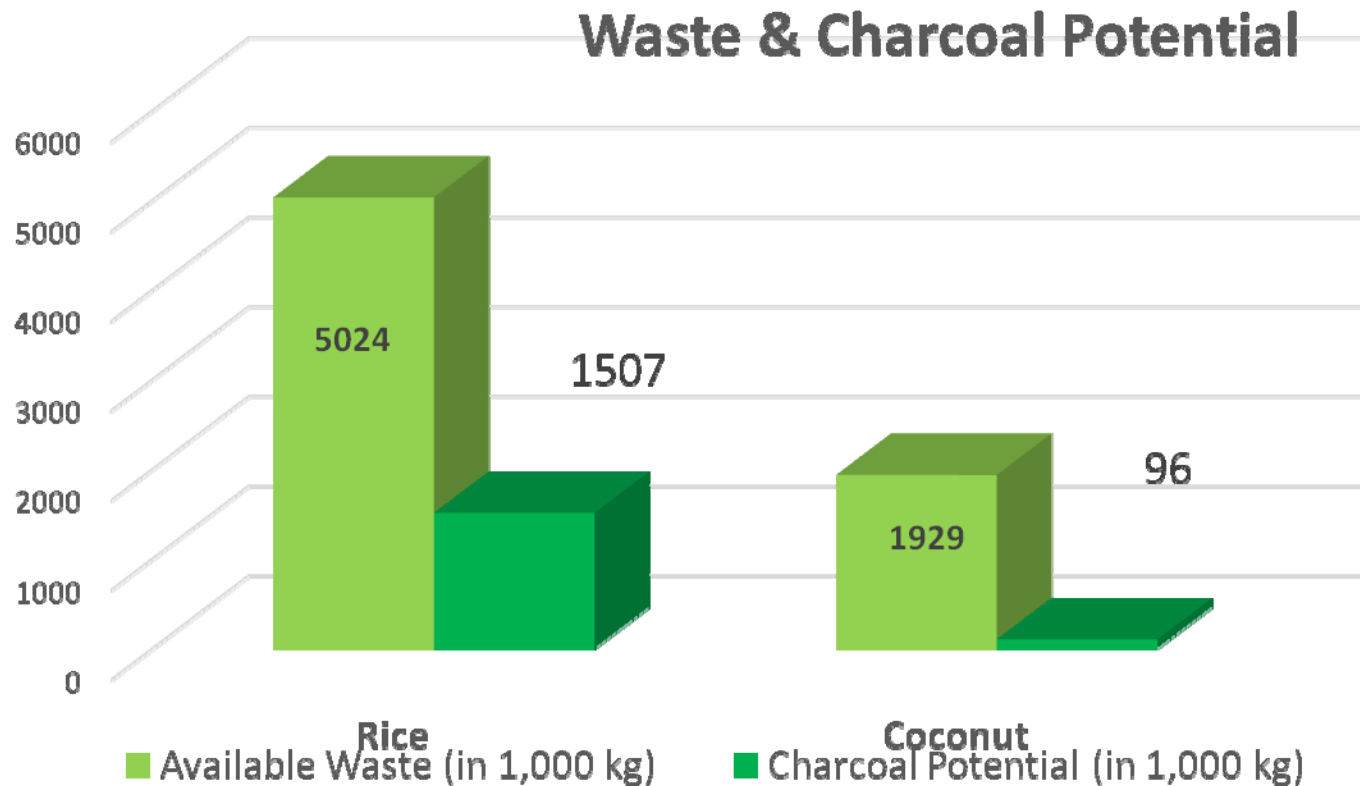
Segment Consumption (kg/year)



Total demand for charcoal is about 5.96 M kg/year

→ 5.2 M kg/year of this comes from Middle-Income Households

Alternative Feedstock: Waste



Poor Management



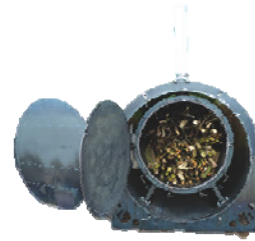
Technological Infrastructure



**Top-Lit Up-Draft Stove
(TLUD)**



Traditional Biochar Oven



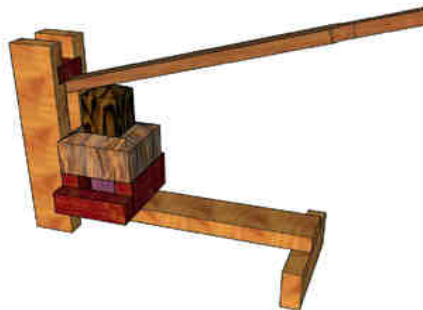
Retort Kiln



New Combustion Machine



Hand Press



Lee Hite DIY Press



Machined Briquette



Hydraulic Presses

Potential for Agroforestry



Potential Product Innovation



Business in the Blue Economy Requires Applied Problem- Solving Guided by Rigorous Management Science

Business opportunity

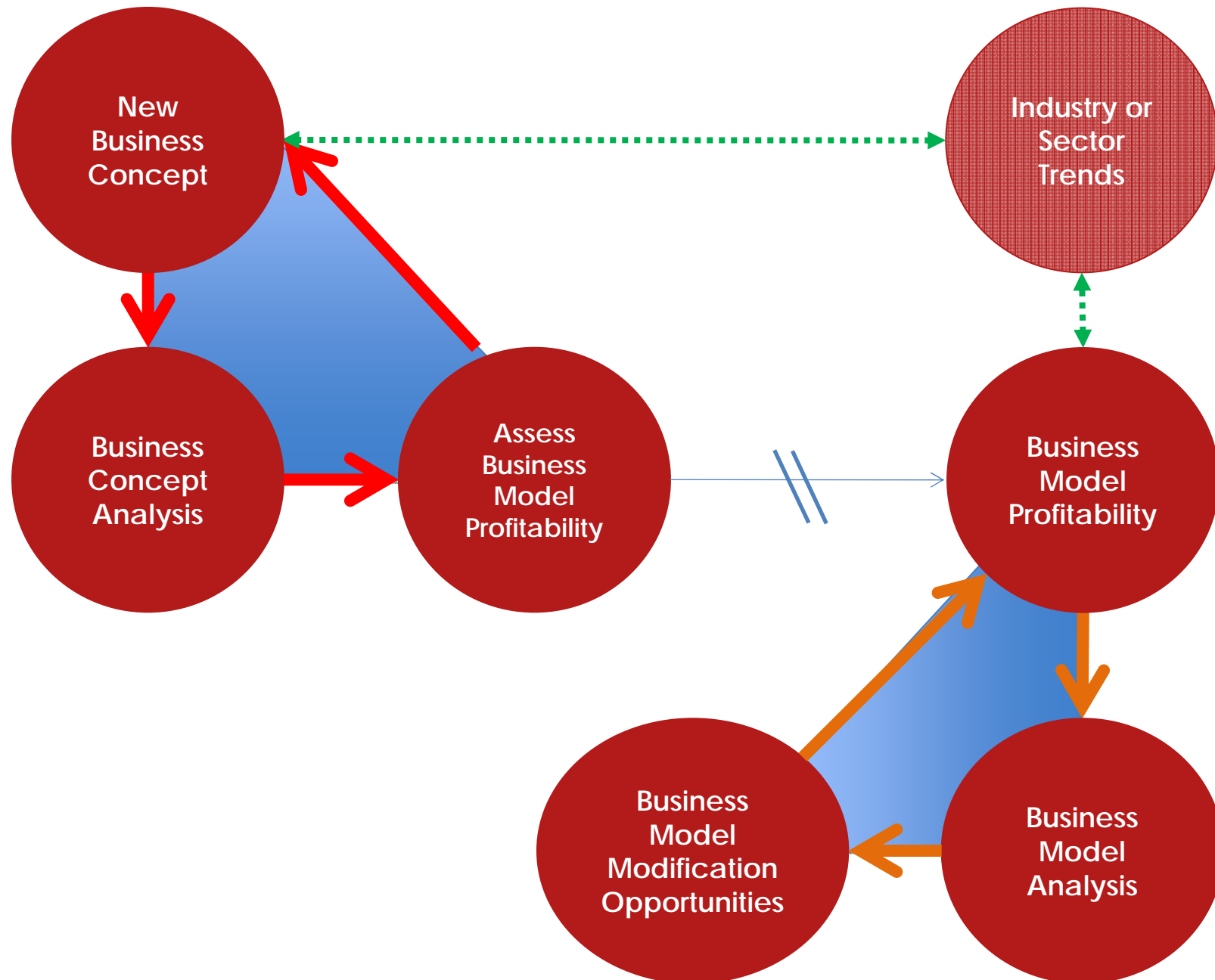


Business case



Business model

Realization of the Blue
Economy is Going to Require
More Widespread Knowledge
& Understanding of Dynamic
Business Processes



Critical Business Fundamentals

- Cost, pricing, and profitability structure
- Production structure
- Distribution structure
- Demand structure
- Supply structure
- Competitive structure
- Customer segmentation
- Marketing/branding norms
- Product (or service) segmentation
- Regulatory structure
- Impact on and/or impacted from marine ecosystem services





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