



Matías
Birrell



Matías Birrell's TOC Expertise: The Core of PHAXSIS Consortium's Business Model

Matías Birrell's mastery of the Theory of Constraints (TOC) is the backbone of the PHAXSIS Consortium's business model, providing a systemic framework that optimizes complex operations and drives sustainable, high-ROI outcomes. As a global TOC expert and Technical Director for Goldratt Group in Latin America, Birrell applies his deep understanding of constraint management to streamline PHAXSIS's multidisciplinary initiatives, particularly in mining and space resources. His ability to identify and resolve bottlenecks ensures that resources, capital, and processes are aligned to maximize throughput, making TOC the cornerstone of PHAXSIS's ability to deliver innovative circular economy models that balance profitability with environmental stewardship.

At the heart of PHAXSIS's business model lies Birrell's application of TOC to create sustainable circular economies, which integrate resource flows across industries to minimize waste and enhance value. By modeling closed-loop systems—where outputs from one process (e.g., mining byproducts) serve as inputs for another (e.g., space resources)—Birrell ensures that PHAXSIS achieves operational efficiency and cost savings. His work through Goldfish, his TOC-based startup, provides practical tools that PHAXSIS adapts to optimize decision-making in small and medium mining operations, reinforcing the consortium's commitment to scalable, sustainable practices that deliver superior financial returns.

Birrell's TOC-driven approach is integral to PHAXSIS's strategic planning, enabling the consortium to navigate the complexities of cross-sector partnerships and volatile markets. His experience as a consultant and project manager with Goldratt Group equips him to design flexible, resilient operational frameworks that align diverse stakeholders, from investors to community partners. By applying TOC's focus on system-wide optimization, Birrell ensures

that PHAXSIS's business model remains agile, allowing rapid adaptation to changing economic or environmental conditions while maintaining high ROI through streamlined processes and reduced inefficiencies.

The educational and thought leadership dimensions of Birrell's work further embed TOC into PHAXSIS's core operations. As a professor at CIGE and author of three TOC books, he brings cutting-edge management insights to the consortium, fostering a culture of continuous improvement. His global engagements with TOCICO and weekly YouTube discussions keep PHAXSIS at the forefront of operational innovation, ensuring that its business model leverages the latest TOC advancements. This intellectual capital enhances PHAXSIS's ability to attract partners and investors who value data-driven, systemic approaches to sustainable investment.

Ultimately, Birrell's TOC expertise is the linchpin of PHAXSIS's success, transforming its ambitious vision into actionable, high-impact reality. By embedding TOC principles into every facet of the consortium's operations—from resource allocation to partnership structuring—Birrell ensures that PHAXSIS delivers measurable financial and environmental benefits. His ability to simplify complex systems while maximizing stakeholder value positions PHAXSIS as a global leader in sustainable circular economies, with Birrell's systemic thinking serving as the driving force behind its innovative, high-ROI business model.