Interrelated Attributes of Project Feasibility: Visualizing the TELOS Framework

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Based on a forthcoming literature review.

Project Feasibility consists of Interrelated Answers.

Feasibility consists of interrelated questions. Often, organizations place a narrow focus on the technical feasibility of a preferred option (Lucae et al. 2014; Samset 2009). Hence, many frameworks, including TELOS, have been developed to encourage more holistic feasibility appraisal (Bause et al. 2014; Burch 1992).

Poorly considered feasibility studies are a significant contributor to project failure, loss of reputation, lost opportunity, excess sunk costs, loss of morale, and litigation (see Dussud et al., 2019; Sahu 2014).

Identifying Questions and Answers to Assess Feasibility is Inherently Iterative.

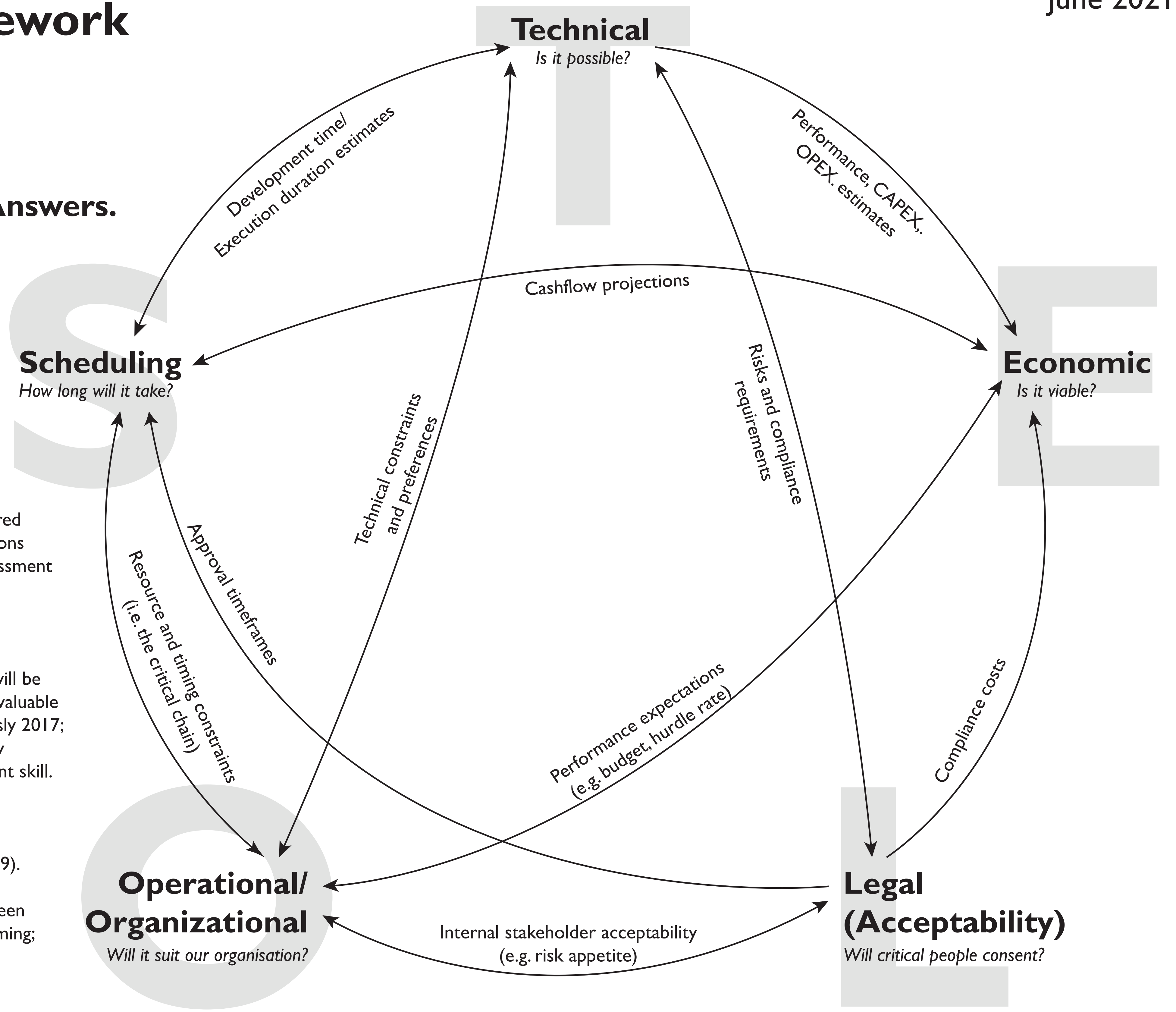
Feasibility studies are applied research projects. Defining what needs to be discovered is a critical starting point for any high-quality feasibility study. Some research questions can only be known through earlier work - which is why three-phase feasibility assessment processeses are industry standard (Mackenzie and Cusworth, 2007; Merrow 2012).

Interdisciplinary Input is Critical.

A wide range of professionals and stakeholders - encompassing both people who will be involved and impacted in the delivery and operational phases of the project - hold valuable supporting information and capabilities to support informed feasibility analysis (Mesly 2017; Syan and Menon 1994). Managing the many interfaces between disciplines and study elements - as represented in the figure to the right - is a critical project management skill.

The feasibility study is also an important milestone in considering how risks and opportunities can be identified and managed throughout the project life cycle, including through careful contracting and profit and pain sharing (Dussud et al., 2019).

Feasibility appraisal frameworks, like TELOS, can facilitate integration of work between professions, disciplines, and stakeholder groups (Bause et al. 2014; McLeod forthcoming; Mesly 2017; Graaskamp 1972).



References

Bause, K. et al. 2014. "Feasibility Studies in the Product Development Process." *Procedia CIRP*. 10.1016/j.procir.2014.03.128

Burch, J. 1992. *Systems analysis, design, and implementation*. San Francisco: Boyd & Fraser.

Dussud, M., et al. 2019. *Optimizing mining feasibility studies: The $100 billion opportunity*. Toronto: McKinsey & Company.

Graaskamp, J.A. 1972. *A Guide to Feasibility Analysis*. Chicago: Society of Real Estate Appraisers.

Lucae, S., et al. 2014. "Understanding the Front-end of Large-scale Engineering Programs." *Procedia Computer Science*, 10.1016/j.procs.2014.03.079

Mackenzie, W. and Cusworth, N. 2007. "The Use and Abuse of Feasibility Studies." *Project Evaluation Conference*.

McLeod, S. Forthcoming, in review. "Feasibility Studies for Novel and Complex Projects."

Merrow, E.W. 2011. *Industrial Megaprojects*. Hoboken, N.J: Wiley.

Mesly, O. 2017. *Project Feasibility*. Boca Raton: CRC Press.

Sahu, R 2014. "An Insight into Bankable Feasibility Studies." *Business Law Review* 35 (2): 38–46.

Samset, K. (2009). "Projects, Their Quality at Entry and Challenges in the Front-end Phase." In Williams, Samset, & Sunnevåg (Eds.), *Making Essential Choices with Scant Information: Front-End Decision Making in Major Projects*. London: Palgrave.

Syan, C. and Menon, U., Eds. 1994. *Concurrent Engineering*. Netherlands: Springer. 10.1007/978-94-011-1298-7

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