**Manchester Business School**

**Megaproject Leadership and Governance (BMAN 72262)**

**- 2016/17 Second Semester -**

**SYLLABUS**

**MODULE COORDINATOR**

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**COURSE OVERVIEW AND OBJECTIVES**

This course introduces the students to fundamental conceptual frameworks and practical methods relevant to any graduate-standing student (in planning, management, or engineering) with ambitions to take leadership roles in major development projects and programmes. These so-called ‘megaprojects’ are large, project-based organizations purposely established to develop capital-intensive socio-technical systems including transport, energy, and water systems, telecommunication infrastructure, networks of social assets (prisons, schools, hospitals), and defence systems. Mega-projects are a complex form of organizing work employed by governments and businesses to achieve system goals, and thus an important form of public-private partnership.. Only in the domain of capital-intensive infrastructure, the world invests around $2.5 trillion a year on transportation, power, water, and telecommunications systems. And the McKinsey Global Institute estimates the world would need to invest an average of $3.3 trillion annually to support current rates of growth—with emerging economies accounting for around 60 percent of this need.[[1]](#footnote-1)

Clearly megaprojects are a critical instrument for socio-economic value creation and appropriation which is different from the firm, self-governing communities, or government. Conceptually, we frame megaprojects as organizational networks which unify under a system-level goal multiple independent actors which control interdependent resources including capital, land, political influence, regulatory power, knowledge of needs, and technical and managerial expertise. Hence megaprojects create large arenas of collective action that need to be governed and managed to create individual and collective value and avoid tragic outcomes (overruns, impasses, ‘white elephants’). In these settings, the risk of mismanagement is high and real, and so it is the risk of private interests destroying the common good.

The central theme of the course is to further our understanding of the challenges and opportunities facing the leaders of megaprojects, and how leaders can design organizational and governance structures that encourage social norms of collaboration to flourish, and thus bring out the best of people in megaproject organizational settings. The teaching approach follows a Socratic model which hinges on discussions of real-world case studies as a means to impart managerial and organizational insights to students. Our sample of cases is diverse, and varies by system goal and context (Europe, Africa, Asia), including:

* £45bn (2009 prices) UK’s Building Schools for the Future programme;
* £9bn (final prices) London 2012 Olympic park;
* $100bn (final prices) Mumbai-Delhi transport corridor;
* £100bn (final prices) Qatar World Cup 2022 scheme;
* £2.6bn (final prices) London Heathrow airport Terminal 2;
* UK’s £55bn (2015 prices) high-speed two (HS2) programme;
* multi-billion dollar scheme to modernise Lagos (Nigeria)’ public transport network;
* Uganda’s first toll highway (Entebbe –Kampala expressway),
* Egypt’s new Cairo city and Informal Settlement program
* Gulf 2000km Rail Project promoted by the Co-operation Council (GCC).

Throughout the course we will discuss leadership and managerial challenges endemic to megaproject organizations. The focus of the course will be on understanding how top management teams can tackle these challenges by designing organization and governance structures, development processes, product architectures, contracting and procurement strategies, and communication strategies. Our aim is to equip students with a rich ‘tool box’ of conceptual frameworks and practical methods which can help them make informed judgement calls in function of the environment surrounding the megaproject organisation.

Our model of leadership revolves around design. Accordingly, we will see leaders as designers of organisational structures, contracting and procurement strategies, communication plans, and development processes. And crucially, it is also the task of leaders to influence the product design architectures of the object of production. In sum, the course will equip students to overcome the following challenges:

* encourage norms of collaboration (trust, reciprocity, co-operation) to develop among powerful, resource-rich actors with conflicting goals and heterogeneous knowledge bases, value, and beliefs
* balance pressure to stay on ‘target’ with pressure to adapt performance targets over time
* assemble a vast supply chain, and ‘buy collaboration’ under uncertainty and ambiguity
* use ambiguous and inflated rhetoric practices to create space for interorganizational conflict
* use ‘polycentric’ organizational structures to decompose complex problems
* balance pressure to speed up development processes with potential costs of late adaptation (rework)
* sustain legitimacy to operate in the eyes of third parties in pluralistic settings
* resolve emerging disputes under conditions of resource scarcity (time, capital)

To develop well-grounded understanding of what project leaders do and how they do it, you will have to prepare four case-analysis reports, an individual assignment, and participate in a group exercise. There is no exam for this course. The goal of the course is to create as much hands-on interaction as possible with megaproject realities, allowing you to develop suitable leadership and management skills. Through case discussions, we will ‘dive’ into different projects and debate judgement calls faced by the leaders. The focus will not be on the traits of leadership from an organizational behaviour lens or the practice of leadership from a sociological perspective. We will focus instead on leadership as a design practice to get things done. Through the case studies, and working in groups, you will be asked to think and do as leaders: articulate complex problems in simple ways; spell out the pros and cons of alternatives; and make choices. You will also be asked to design narratives, development strategies, implementation plans, and feedback loops. As in the real-world, you will never have ‘all’ the information you would like to have at hand – rather, you will have to make assumptions, and argue for their plausibility.

**CLASS PREPARATION**

You are advised to form study groups and meet with your group each week to prepare for class discussion. This approach increases learning, develops a sense of teamwork, and encourages good preparation for class discussion. In a typical session, one or more students will be asked to begin discussion of a selected topic. If you have prepared thoroughly the case and/or readings, you should have no difficulty in handling such a lead-off request. You want to use the study questions for each case provided at the end of this document to guide your thinking. During case discussions, we will analyse the case situation and address the problems and issues it presents. We will ask students to make recommendations and discuss their implementation. A portion of the class will be a lecture/discussion of concepts and methods brought out in the case or reading, but useful to a broader range of organizations developing capital projects.

Development of argumentative, verbal skills is a priority in this course. The classroom will be an opportunity where you can develop your ability to present your analyses and recommendations clearly, to convince your peers of the correctness of your approach, and to persuade them about how the implementation of your recommendations can help the organisation achieve the desired results. Please display a nameplate on your desk in each session. Whilst class participation is not graded, the criteria that I would use to judge effective class participation are:

* Is the participant a good listener? is there willingness to participate?
* Are points made relevant to discussion and linked to comments of other?
* Is there willingness to test new ideas, or are all comments “safe”?
* Do comments show clear evidence of appropriate and insightful analysis of the case data?
* Do comments clarify and highlight the important aspects of earlier comments?

**MODULE MATERIAL**

This module will be mainly taught using selected materials posted on Blackboard/sent by email.

**CASE ANALYSIS REPORTS**

Each group will have to submit *four* written reports marked in the detailed course outline. Each written assignment is due in the beginning of the class on the day when the case will be taught. A good report should state clearly and succinctly the recommendations in the first paragraph or two to provide the reader with a framework. The rest of the report should present the rationale for the recommendation in terms of the desirable and undesirable consequences of adopting it. Some common problems in preparing the reports result from inadequate analysis. Analysis for a report is a time consuming and intellectually challenging task. Each case has a set of questions that are a guide to help you with the analysis. Do not structure, however, the report as a set of answers to those questions. The objective is that each group evaluates a range of alternatives, chooses a recommendation, and discusses how to implement such recommendation. **Papers should be typed double-spaced, with size 12 Times New Roman font, 1-inch margins, and cannot exceed 5 pages**. **Late submissions won’t be accepted.**

**INDIVIDUAL ASSIGNMENT**

Each student is expected to write a reflective analysis on the class exercise on the second session. The structure of the assignment follows the structure described for the case study reports (5-page limit).

**MARKING SCHEME**

Your module mark will be determined by an evaluation of your performance on the following activities:

* Individual Assignment 30%
* Group Exercise Output 30%
* Average of case study reports (4 submissions) 40%

**OTHER ADMINISTRATIVE INFORMATION**

You should be prepared for every session. Since I frequently call on students whose hands are not raised, you should let me know before the session if an emergency has made it impossible for you to prepare adequately. In these situations, I still encourage you to attend.

**GROUP EXERCISE**

The exercise will provide each group of students (ideally 4-5 students) an opportunity to demonstrate the students’ skills acquired throughout the course. **The theme for the group projects this year will be the development of new infrastructure to cope with population growth. As of August 2016, the United Nations estimate the world population will increase from 7.4 billion to near 10 billion by 2050, with Africa’s population expected to double and Asia’s population to grown an additional billion.** Each group will have to identify a contemporaneous topic, e.g., new Cairo city, Kibera (Africa’s largest slum), UN Habitat, Bill & Melinda Gates foundation, United Nations Habitat, UK new garden cities, etc. The groups will be required to identify a focal problem and characterize the surrounding context. They should provide an in-depth analysis of the problem, and suggest recommendations to overcome the problem. Groups will be encouraged to adopt the methods and cognitive frameworks discussed in the class to focus their report and provide meaningful analysis and recommendations. Each group will deliver a 10min presentation (using a maximum of 5 slides), submit a written report, and field questions from the audience.

**MODULE OUTLINE**

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| **Session** | **Date** | **Reading/Assignment** | **Topic Area** |
| **1** | **31.1** | Read: Lundrigan, C., Gil, N., Puranam, P. (2014). *The (Under) Performance of Mega-projects: A Meta-organizational Approach.* MBS Working Paper. Lundrigan, C., Gil, N., Puranam, P. (2014). *Why Megaprojects (seem to Fail? A Meta-organizational perspective* (translation for practitioners)Puranam, P., Alexy, O., Reitzig, M. 2014. What’s New in New Forms of Organizing? Academy of Management Review, 39 (2) 162-18Additional Read: Flyvbjerg, B. (2005). Policy and Planning for Large Infrastructure Projects: Problems, Causes, Cures. *World Bank Policy Research Working Paper 3781* | **Introduction:** Megaproject organizations; escalation of commitment; optimism bias; strategic misrepresentation; stakeholders |
| **2** | **7/2** | Class exercise: *Gil, N. (2005). The Collective Project*Read: Rittel, HWJ, Webber, M 1973. Dilemmas in a General Theory of Planning. Policy Sciences 4, 155-169.Denis, J.-L., Dompierre, G., Langley, A., & Rouleau, L. 2011. Escalating indecision: Between reification and strategic ambiguity. ***Organization Science***, 22(1): 225-244.Additional Read: Child, J. (1972). Organizational Structure, Environment and Performance: The Role of Strategic Choice. Sociology, 6 (1) 1-22 | **Pluralistic Organizing** wicked problems ; non-decomposable problems; choice-environment interdependency  |
| **3** | **14/ 2** | Case:Gil, N. (2009). The BSF programme: Teacher Involvement in Design (A). *MBS-CID Case Study Series.*Read: Gil, N., Baldwin, C. (2013). Creating a Design Commons: lessons from Teachers’ Participation in School Design. *Harvard Business School working paper.*Ostrom, E. et al. (1999) Revisiting the Commons: Local Lessons, Global Challenges*, Science* 284, 278–282.Hartford, T. 2013. Do you believe in sharing? *Financial Times.* August 30Economic Sciences Prize Committee of the Royal Swedish Academy of Sciences (2009), *Economic Governance. Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel*Additional Read: *Hardin, G. 1968. The Tragedy of the Commons. Science, New Series 162 (3859) 1243-48.*Olson, Mancur 1965. A Theory of Groups and Organizations (parts A and B in *The Logic of Collective Action. Public Goods and the Theory of Groups.* **CASE ANALYSIS REPORT DUE** **ONE-PAGE GROUP REPORT DUE** | **Designing Governance (I)**Collective action;Common-pool resources; Polycentricity Commons logic |
| **4** | **21/2** | Case: *Lundrigan, C. Gil, N. (2014) London 2012: The Regeneration Games*Read: Gil, N., Pinto, J. (2016). Pluralism at the Front-end of Complex Systems Projects: Governance and Performance Implications.Gulati, R., Puranam, P., Tushman, M. (2012). Meta-organization design: Rethinking Design in Interorganizational and Community Contexts. *Strategic Management Journal*, 33, 571-586.Additional Read: Miller, R., Lessard, D. (2007). Evolving Strategy: Risk Management and the Shaping of Large Engineering Projects. *MIT Sloan Working Paper 4639-07***CASE ANALYSIS REPORT DUE** | **Designing Governance (II)**Dispute resolution; Organizational slack;Performance slippages |
| **5** | **28/2** | Class exercise: Msulwa, R., Gil, N. (2014). *High-Speed 2: All Aboard (A).* MBS Case StudyRead: Simon, H. (1962). The Architecture of Complexity: Hierarchic Systems. *Proc. American Philosophical Society*, 106: 467-482.Baldwin, C. (2014). *Bottlenecks, Modules, and Dynamic Architectural Capabilities.* Harvard Business School working paper.Additional Read: Mitchell, R.K., Agle, B.R., Wood, D.J. 1997. Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts, *Academy of Management Review* 22 (4) 853-886.**CASE ANALYSIS REPORT DUE** | **Designing Organizational Structures (II)**Cooperation vs. collaboration; integration of effort; information and reward provision; mirroring theory  |
| **6** | **7/3** | Case: Gil, N. (2008). *The T5 Project: Single Terminal Occupancy Change (A*). Ref. ECCH 308-310-1Read: Gil, N., Tether, B. (2011). *Project Risk Management and Design Flexibility: Analysing a Case and Conditions of Complementarity.* Research Policy. Fichman et al. (2005). Beyond Valuation: ‘Options Thinking’ in IT Project Management. *California Management Review.*Additional Read:Baldwin, C., Clark, K.B. (2004). *Modularity in the Design of Complex Engineering Systems.* Harvard Business School working paper.**CASE ANALYSIS REPORT DUE** | **Designing Development Processes**Overlapped vs. sequential approachrisk management; vs. flexibility; **o**ptions logic; modularity, design safeguards; |
| **7** | **14.3** | Case: Gil, N. (2008). *BAA: The T5 Project Agreement* (A) ECCH Ref. 308-308-1.Read: Gil, N. (2009). Developing Project Client-Supplier Cooperative Relationships: How much to Expect from Relational Contracts? *California Management Review*, Winter, 144-169.Rowark et al. (2013). Procurement and Packaging. Infrastructure UKSantos, F. Eisenhardt, K. (2005). Organizational boundaries and Theories of Organization. *Organization Science*, 16 (5) 491-508..Additional Read: Gibbons, RS, Henderson, RM. (2012) Relational Contracts and Organizational Capabilities. Organization Science, 23 (5) 1350-136**CASE ANALYSIS REPORT DUE****FIVE-PAGE GROUP REPORT DUE** | **Designing Contracting and procurement strategies**: What is a contract?; Buying collaboration; relational vs. arm’s length contracts; contracting strategy |
| **8** | **21.3** | Case: Drews, F., Gil, N. (2015). *Thames Tideway Tunnel: Reinventing PFI* (A). MBS Case StudyRead: Williamson, O.E. (1979). Transaction-Cost Economics: The Governance of Contractual Relations. *Journal of Law and Economics*, 22 (2) 233-261Additional Read: Jacobides, M.G. and Winter, S.G. (2005). The Co-evolution of Capability and Transaction Costs: Explaining the Institutional Structure of Production, *Strategic Management Journal*, 26 (5) 395-413 **CASE ANALYSIS REPORT DUE** | **Contracting and procurement strategies**: the 4-force method; contracting maps; four logics: efficiency, capabilities,Power, and organizational identity |
| **9** | **28.3** | *Case: Msulwa, R. Gil, N.(2015). Lamata: Transforming the Face of Lagos (Nigeria) Public Transport . Case Study, Centre for Infrastructure Development, The University of Manchester*Read: Hirschman, AO (1965) *The Principle of the Hiding Hand. Development Projects Observed*. Brookings Institution Press Washington DC (reprinted in 2015).Levy, Brian (2011). Can Islands of Effectiveness Thrive in Difficult Governance Settings? The Political Economy of Local-level Collaborative Governance. The World Bank. Poverty Reduction and Economic Management Network. Public Sector Governance Unit**CASE ANALYSIS REPORT DUE** | **Developing Contexts:** Contexts of multiple ‘lacks’ ; the Hiding hand principle; islands of effectiveness; overlapped vs. sequential approach |
| **10** | **25.4** | *Case: Gil, N. (2013). Qatar 2022 World Cup: Expect Amazing Infrastructure. Centre for Infrastructure Development. The University of Manchester, UK.*Read:.Beblawi, H. (1987). The Rentier State in the Arab World . Arab Studies Quarterly, 9 (4) 383-398Hertog, S.2010. Defying the Resource Curse: Explaining Successful State-owned Enterprises in Rentier States. World Politics 62(2) 261-301.Additional Read: Ansell, C., Gash, A. 2008. *Collaborative Governance in Theory and Practice*. J Public Adm Research and Theory,18 (4): 543-571Schein, E.H. (2009). *Helping: An Urgent new Role for Leaders.* Leadership Ivey Business Journal**CASE ANALYSIS REPORT DUE****GROUP PROJECT PRESENTATIONS & REPORT DUE**  | **Conclusion:** Leading Pluralistic Organizations: The Lightening Rod Model Pluralism in autocratic settings |
| **11** | **2.5** | *Buffer session to catch up with eventual delays in project presentations if the class becomes very large***INDIVIDUAL ASSIGNMENT DUE** | **Buffer session to catch up with eventual delays** |

**Case questions**

Case: Gil, N. (2009). *The BSF program*

Study questions:

1. How do you characterize the Manchester BSF program governance?
2. What are the main constraints in new school development projects?
3. What’s the role of school teachers in the development process?
4. How can interests of teachers and local authority be reconciled?
5. What recommendation shall Paul give for the next phase of the program?

Case: *Gil, N. (2008). The T5 Project: Single Terminal Occupancy Change (A)*

Study questions:

1. How would describe the T5 project in terms of timescales and uncertainties? How would you describe BAA’s approach to development?
2. How did BA’s Single Terminal Occupancy request impact the T5 project?
3. Should the T5 project go ahead with STO? Why?
4. If BAA decides to implement STO, which recommendations would you provide to them?
5. How can the project team best balance T5 with the BA and BAA corporate interests?

Case: Drews, F., Gil, N. (2015). *Thames Tideway Tunnel*

Study questions:

1. How would you characterise the two procurement processes taking place?
2. Which work do you outsource vs. keep in house?
3. How do you divide the scope of work into supplier packages?
4. What is the strategy to procure the financiers?
5. What is the strategy to procure the supply chain?

*Case Gil, N. (2008). BAA: The T5 Project Agreement (A)*

Study questions:

1. Characterize the T5 project agreement
2. What was the motivation for implementing the T5 agreement?
3. Discuss which factors determine the implementation of the T5 agreement
4. Should the T5 agreement apply to the fit-out work packages?

Case: Msulwa, R., Gil, N. (2014). *High-Speed 2: All Aboard ?(A).*

Study questions:

1. What is the system goal of the High-speed 2 scheme?
2. Who are the critical resource-holders? Which are those resources?
3. What are the salient differences in the interactions between HS2 Ltd, London, and Manchester?
4. How would you characterize the role of the local communities in the Chilterns?
5. What value does the UK Parliament bring to the development process?

*Case: Msulwa, R. Gil, N.(2015). Lamata: Transforming the Face of Lagos (Nigeria)*

Study questions

1. What is Lamata?
2. What is the role of the World Bank?
3. How can Lamata remove the bottlenecks to enable the red Line scheme to forge ahead?
4. What have been the enablers for the blue Line to forge ahead/
5. How would you characterize the performance of Lamata?

Gil, N. (2013). Qatar 2022 World Cup: Expect Amazing Infrastructure.

Study questions:

1. Is there pluralism in Qatar 2022?
2. What is the role of suppliers in Qatar 2022?
3. How would you describe the Qatar 2022 governance model?
4. How would you characterize the interdependency with the global environment?
5. If you were a supplier, what would be your stance relative to Quatar Kafala policy?

Gil, N. (2013). London 2012: The Regeneration Games (A,B)

Study questions:

1. Who governs the London 2012 Olympics?
2. What are the performance targets?
3. What is the system goal?
4. What is the impact of an immovable deadline?
5. How are interorganizational disputes resolved?
6. How would you deal with the Olympic Stadium case?
1. Woetzel, J., Garemo, N., Mischke, J., Hjerpe, M., Palter, R. (2016). Bridging Global Infrastructure Gaps. June, McKinsey Global Institute MCKinsey & Company [↑](#footnote-ref-1)