The mediation role of the PMO in the transfer of knowledge between projects – a case study of five PMOs

Supplementary material

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Table A1. Overview of cases investigated

Case number	Division	Type of PMO (centralized or de-centralized)	No. of business units supported by PMO	Lowest value of projects supported (US$ – millions)	Highest value of projects supported (US$ – millions)	*Age of PMO (years)	*Experience of PMO manager (years)	No. of project directors	No. of senior PMs	No. of PMs	*PMO head count	No. of current projects
Case 1	Power and gas	De-centralized	3	0.3	142	4	10	2	2	2	7	10
Case 2	Energy	De-centralized	6	0.3	59	6	22	0	2	14	20	125
Case 3	Mobility	De-centralized	1	2.7	267	3	14	1	0	6	12	7
Case 4	Industry	De-centralized	6	0.1	84	4	19	0	4	14	20	61
Case 5	Power generation services	De-centralized	1	0.3	50	12	17	0	3	6	10	9

Note(s): *Age of PMO, experience of PMO manager and PMO head count refers to the number of years that the decentralized PMO has existed; number of years of experience of the PMO manager in the project management industry; and the total number of employees reporting to the PMO, respectively

Table A2. Details of respondents

Case number	Division	Respondent number	Position	Experience	Highest qualification
1	Power and gas	1	Project Director and Former PMO Manager	32 years	MBA
		2	Country Portfolio Manager	18 years	BSc Electrical Engineering
		3	Project Manager	12 years	BSc Electrical Engineering
2	Energy	1	PMO Manager	35 years	MBA
		2	Senior Project Manager	15 years	BSc Electrical Engineering
		3	Project Manager	9 years	BSc Electrical Engineering
3	Mobility	1	PMO Manager	28 years	MSc Electrical Engineering
		2	Senior Project Manager	17 years	MSc Project Management
		3	Commercial Project Manager	13 years	BCom Accounting
4	Industry	1	PMO Manager	21 years	MSc Civil Engineering
		2	Senior Project Manager	14 years	BSc Electronic Engineering
		3	Project Manager	8 years	BCom Financial Management
5	Power generation services	1	PMO Manager	24 years	BSc Electrical Engineering
		2	Senior Project Manager	27 years	BSc Electrical Engineering
		3	Project Manager	16 years	BSc Electrical Engineering

Table A3. Research questionnaire

Research question (RQ)	Proposition (P)	Questionnaire (interview questions)
RQ1: How does the articulability (explicitness and tacitness) of knowledge influence the PMO's mediation (facilitation) role?	P1: The articulability of knowledge influences the PMO's mediation (facilitation) role	(a) In your opinion, how does the PMO's mediation role improve the articulability of knowledge? (b) How does the articulability of knowledge influence the PMO's mediation role? (c) Explain how the PMO uses KM infrastructure (people, tools, systems) through its mediation role to improve the articulability of knowledge? (d) Explain how the PMO uses KM processes (create, store, share and apply) through its mediation role to improve the articulability of knowledge? (e) List and explain the advantages and disadvantages of the PMO's mediation role in improving the articulability of knowledge? (f) What improvements would you recommend to the PMO to improve the articulability of knowledge? Please justify and give reasons why these improvements will make the mediating effect of the PMO better
RQ2: How does the PMO's mediation role affect the usability of knowledge?	P2: The PMO's mediation role improves the usability of knowledge	(a) How does the PMO influence the usability of knowledge transferred across projects (from PMO to receiving projects)? (b) Please explain how the PMO uses KM infrastructure (people, tools, systems) to improve the usability of knowledge? (c) Please explain how the PMO uses KM processes (create, store, share and apply) to improve the usability of knowledge? (d) How does the PMO ensure that it understands the needs of the receiving projects to ensure that the specific needs are catered for? (e) What additional improvements on the process of transferring knowledge across projects (infrastructure, policies, techniques, attitudes, etc.) can the PMO establish to improve the usability of knowledge? Please explain and give reasons why these improvements will increase the usability of knowledge

Table A4. Codes and themes generate

Theme	Codes	
1. Influence of articulability of knowledge on PMO's mediation role through KM infrastructure: Proposition 1	(a) Mediation: Transfer Method: Systems – Organizational Structure – Experience, credibility, accessibility and maturity of PMO (b) Mediation: Transfer Method: People – Incentives (c) Mediation: Transfer Method: People – Management involvement/support (d) Mediation: Transfer Method: Systems – Communities of practice (e) Mediation: Transfer Method: Systems – Mentoring and peer assist (f) Mediation: Transfer Method: Systems – Project reviews (g) Mediation: Transfer Method: Systems – Best practices (standards, processes and templates)	(h) Mediation: Transfer Method: Systems – Training/KT workshops (i) Mediation: Transfer Method: Systems – Transfer of individual (j) Mediation: Transfer Method: Systems – User-friendly and rich knowledge repositories (k) Mediation: Transfer Method: Systems – Collaboration (l) Mediation: Transfer Method: Tools – Information and Communication Technology (ICT) (m) Mediation: Transfer Method: Tools – Reporting tools (n) Mediation: Transfer Method: Systems – Continuous learning culture (o) Mediation: Transfer Method: Systems – Lessons learnt
2. Influence of articulability of knowledge on PMO's mediation role through KM processes: Proposition 1	(a) Mediation: Activity/Process: Knowledge Alignment (b) Mediation: Activity/Process: Knowledge Classification (c) Mediation: Activity/Process: Knowledge Creation (d) Mediation: Activity/Process: Knowledge Integration	(e) Mediation: Activity/Process: Knowledge Protection (f) Mediation: Activity/Process: Knowledge Transfer – Personalization and codification (g) Mediation: Activity/Process: Knowledge Re-use (h) Mediation: Activity/Process: Knowledge Identification

3. Effects of the PMO's mediation role on knowledge usability through KM infrastructure: Proposition 2	(a) Mediation: Transfer Method: Systems – Organizational Structure – Experience, credibility, accessibility and maturity of PMO (b) Mediation: Transfer Method: People – Incentives (c) Mediation: Transfer Method: People – Management involvement/support (d) Mediation: Transfer Method: People – Physical engagement and involvement (e) Mediation: Transfer Method: People management (show them benefits) (f) Mediation: Transfer Method: Systems – Best practices (standards, processes and templates) (g) Mediation: Transfer Method: Systems – Collaboration (h) Mediation: Transfer Method: Systems – Communities of practice (i) Mediation: Transfer Method: Systems – Continuous learning culture (j) Mediation: Transfer Method: Systems – Double fills/job rotation and shadowing	(k) Mediation: Transfer Method: Systems – Exit interviews (l) Mediation: Transfer Method: Systems – Expert advice and interviews (m) Mediation: Transfer Method: Systems – Lessons learnt (n) Mediation: Transfer Method: Systems – Mentoring and peer assist (o) Mediation: Transfer Method: Systems – On-the-job training/internships (p) Mediation: Transfer Method: Systems – Organizational structure (q) Mediation: Transfer Method: Systems – Project reviews (r) Mediation: Transfer Method: Systems – Training/KT workshops (s) Mediation: Transfer Method: Systems – Transfer of individual (t) Mediation: Transfer Method: Systems – User-friendly and rich knowledge repositories (u) Mediation: Transfer Method: Tools – Information and Communication Technology (ICT) (v) Mediation: Transfer Method: Tools – Reporting tools
4. Effects of the PMO's mediation role on knowledge usability through KM processes: Proposition 2	(a) Mediation: Activity/Process: Knowledge Alignment (b) Mediation: Activity/Process: Knowledge Classification (c) Mediation: Activity/Process: Knowledge Creation (d) Mediation: Activity/Process: Knowledge Identification (e) Mediation: Activity/Process: Knowledge Integration	(f) Mediation: Activity/Process: Knowledge Protection (g) Mediation: Activity/Process: Knowledge Sharing improvement (h) Mediation: Activity/Process: Knowledge Transfer – Personalization and codification (i) Mediation: Activity/Process: Knowledge Re-use