

The SQELT Strategic Partnership as a Case Study: (General) Perspectives and Insights for Benchlearning

Theodor Leiber

evalag (Evaluation Agency Baden-Wuerttemberg), Mannheim, Germany

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- The SQELT Strategic Partnership as a case study
- Benchlearning model
- Areas of Benchlearning in Performance Data Governance & Management (PDGM) and their strategic SWOT analyses
 - PDGM Policy
 - (Digital) PDM system
 - Performance indicator set
 - Ethics of PDGM
- Conclusions (selection)
- Open questions and limitations of the SQELT case study (selection)

Keywords: benchlearning; ethics of performance data governance and management (PDGM); PDGM policy; performance indicators; strategic SWOT analysis



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The SQELT Strategic Partnership as in-depth case study



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- Focused the object of contextualised PDGM systems in L&T at six European HEIs (representing the bounded system case)
- Used multiple sources of evidence for a descriptive, exploratory and evaluative case study design (Harrison et al., 2017, Section 4) which should tend to produce generic results.
- **Sources of evidence**: focus group interviews with several stakeholder groups (teachers, students, quality management staff, leadership); an online survey with the same stakeholder groups that were approached on national and European levels; expert feedback on selected project outputs; a strategic SWOT analysis; a comprehensive reception of *research literature*; and *discussion groups* at several multiplier events.

"Path-breaking research is, by definition, exploratory" (Gerring, 2004, p. 349). © Prof. Dr. Dr. Theodor Leiber - leiber@evalag.de - http://www.evalag.de



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Benchlearning of PDGM and its areas



Systematic benchlearning is fundamental to any development and implementation process of PDGM

Dimensions of benchlearning object in SQELT case study

- Performance Data Governance and Management (PDGM) Policy
- (Digital) Performance Data Management (PDM) System
- Performance Indicator (PI) Set
- Ethics of PDGM
- Resources

Focus on Analysis step of Benchlearning model







BENCHLEARNING is a way of monitoring and assessing the strategies and performance of an organisation against comparable, good-practice competitors; it includes an ongoing performance improvement strategy and change management process. © Theodor Leiber - leiber@evalag.de / www.evalag.de

Smarter 5

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Strategy matrix for SWOTs of a selected area of analysis/dimension of BL object

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	Weaknesses (W) (clearly defined; prioritised)				Opportunities (O) (clearly defined; prioritised)				Threats (T) (clearly defined; prioritised)			
	1.	2.	3.		1.	2.	3.		1.	2.	3.	
Strengths (S) (clearly defined; prioritised)	Strengths-based strategies to overcome weaknesses (S/W)			Strengths-based strategies to take advantage of opportunities (S/O)				Strengths-based strategies to avoid threats (S/T)				
1.												
2.												
Other measures	Other measures to overcome weaknesses (M/W)			Other measures to take advantage of opportunities (M/O)				Other measures to avoid threats (M/T)				
1.												
2.												

Revised after (Leiber, Stensaker & Harvey, 2018, p. 355, Table 3)

Smarter University Strategy matrix "aims at utilising strengths to overcome weaknesses, exploit opportunities and avoid threats" (Leiber, Stensaker & Harvey, 2018, p. 355).

5	Co-funded by the Erasmus+ Programme of the European Union SWOTs of PDGM and its strategy matrix									
	Strena	ths		Weaknesses						
	1. F L	Recognition on institutional level/by leadership of the importance of performance data, PIs and their analysis and interpretation, particularly in L&T (at certain sample HEIs)					No (well-)developed PDGM at the institutional and/or faculty/department levels (at certain sample HEIs)			
	2.F s a	Recognition on institutional level/by leadership that staff and other stakeholders need to be able to access PDM data and information in appropriate and responsible ways (at certain sample HEIs)					No or poor representation of PDGM in mission statements on various organisational levels			
	3. N r	Meta-strategic decision to build a HEI-wide PDM system that works for all relevant stakeholders in appropriate ways (at certain sample HEIs)					Performance data and information is mainly, if not exclusively used for reporting (accountability towards HE politics and the public), less for the enhancement of performance (at certain sample HEIs)			
	4. V p c b	Villingness of leadership and staf processes aimed at optimizing the collected performance data and in pureaucracy team; consolidation of	f to establish organisational s processing and presentation formation (e.g. installation of of IT works) (at certain sample b	4.	Lack of leadership commitment to PDGM					
	 Underpinning PDGM by established and accepted educational strategy (at certain sample HEIs) 						5. A failing coordination between the goals of the HEI's management and the goals of the faculties with respect to PDGM			
	Opport	tunities			Threats					
	-				-					
	Strateg	by matrix and its recommendation	is for organisational developh	nent						
		1	2	2			4	5		
	s	S/W	2.	5.			4.	5.		
	- 1.									
	2.	Establish shared understanding of the various								
	3.	purposes (evaluate; control;	Introduce PDGM policy in HEI's strategy documents Develop PE		M focus Imp		Improve on			
	4.	budget; motivate; promote; celebrate; learn; improve) of PDGM at institutional leadership level and across the largely autonomous institutional (sub-) units	(e.g. mission statements, structure and development plans) on various organisational levels	on performance enhancement (to supplement reporting and controlling) (e.g. establish improvement- oriented QM)		ng j. nt-	leadership commitment to PDGM (e.g. define relevant leadership roles in PDGM)	Establish working communication and coordination channels between HEI management and the faculties with respect to PDGM-related issues (e.g. define the roles of leadership, management and academics)		
	5.	-						_		
	М	M/W								
om										
Jni	versit	У	© Theodor Leib	er – <u>leiber@evalag</u>	<u>ı.de</u> / <u>ww</u>	w.evala	ag.de	(Leiber, 2020, Table 2)		



Recommendations for PDGM Policy



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PDGM Policy regulates issues of **PD strategy**, **governance**, **management**; **ethics** and responsibility, including sustainability, quality, accessability & usability of information & data about HEI performance; **investments** of human & financial resources

Core purposes of a **PDGM Policy** include (see "SQELT Guideline"; SQELT-MIO 2020)

- Defining roles & responsibilities for different data creation & usage types, cases or situations, & establishing clear lines of accountability;
- Developing good quality practices for effective management & protection of (performance) data:
- Protecting the HEI's data against internal & external threats; particularly, assuring protection of privacy, academic freedom, intellectual property, information security & compliance;
- Ensuring that the HEI handles (performance) data in accordance with applicable laws, regulations & standards;
- Ensuring that the HEI effectively documents a (performance) data trail within the processes associated with accessing, retrieving, exchanging, reporting, managing & Universitoring of data.



Template¹

Performance Data Governance and Management Policy (PDGMP)

of [insert name of higher education institution]

With Focus on Performance Data of Learning and Teaching, including Learning Data Analytics, to be Accompanied by Supporting Documents

Governance Guidelines/PDGM Policy

Full version will be available after end of SQELT project (https://www.evalag.de/sqelt/)



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Recommendations for EIOD towards PDGM Policy (see "SQELT Guideline": SQELT-MIO 2020)

PDGM domains	Domain decisions	Potential roles or locus of responsibility		
Data principles and responsibilities: clarifying the role of performance data (PD) as an asset and the responsibilities	What are the uses of performance data (PD) for the organisation (i.e. the university)? What are the mechanisms for communicating organisational uses of PD on an ongoing basis? What are the desirable behaviours for employing PD as assets? How are the opportunities for sharing and reuse of PD identified? How does the regulatory environment influence the organisational uses of PD?	PD owner, individual and organisational PD producer/supplier PD processor and dresser (e.g. ranker) PD steward PD custodian PD consumer Organisational PD committee/council PD owner, individual and organisational PD subject matter expert PD quality manager PD quality analyst		
Data quality including data processes and technology: establishing the requirements of intended use of PD	What are the standards for PD quality with respect to accuracy, timeliness, completeness and credibility? What is the strategy for establishing and communicating PD quality? How will PD quality as well as the associated strategy be evaluated?			
Data interpretation: establishing the semantics of PD to make it interpretable	What is the program for documenting the semantics of PD? How will PD be consistently defined and modelled so that it is interpretable? What is the plan to keep different types of meta-PD up-to-date?	Organisation PD architect Organisation PD modeller PD modelling engineer PD architect Organisation architecture committee		
Data access: specifying access requirements of PD	What is the organisational value of PD? How will risk assessment be conducted on an ongoing basis? How will assessment results be integrated with the overall compliance monitoring efforts? What are PD access standards and procedures? What is the program for periodic monitoring and audit for compliance? How is security awareness and education disseminated? What is the program for backup and recovery?	PD owner, individual and organisational PD beneficiary Chief information security officer PD security officer Technical security analyst Organisation architecture development committee		
Data life cycle: determining the definition, production, retention and retirement of PD	How is PD inventoried? What is the program for PD definition, production, retention, and retirement for different types of PD? How do the compliance issues related to legislation affect PD retention and archiving?	Organisation PD architect Information chain manager		

Framework issues for PDGM, adopted from (Kathri & Brown, 2010, p. 149) with revisions

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	Strengths							Weaknesses					
	1.	Availability of im (quantitative) PIs	ailability of improvement-oriented conceptualisation of existing antitative) PIs of L&T (at certain sample HEIs)						 Not all (quantitative) PIs that could be relevant for L&T quality improvement at the HEI are defined and/or collected and/or used (at certain sample HEIs) (e.g. lack of teachers' view points in the PI sets; gap in the L&T environment PIs; broad topic of student assessment is not looked at) 				
	2.	High comparabil of Ministry-drive	In comparability of (quantitative) Pls in national HE system because Ministry-driven standardization (at certain sample HEIs)						 Existing small PI collection fails to adequately address current needs of the HEI (at certain sample HEIs) (e.g. because PIs are driven by HE politics) 				
	3.	Availability of clo certain sample HE	o se-to-complete Els)	HEI-specific s	Reliability of PI da collection through f for collecting data/i Development of (certain HEI perfor Danger of reducin	iability of PI data and information is often questionable (e.g. ection through faculty and processing by staff; various mechanisms collecting data/information) (widespread; at certain sample HEIs) velopment of (quantitative) PIs that do not adequately grasp a tain HEI performance nger of reducing PDGM to only quantitative (under-complex) PIs							
	Орро	rtunities					Threat	ts					
	1. 2. 3.	Introducing addi close-to-complet as continuing edu for Sustainable De Gaining more tra through use of inte Enhancing the av HEI performance sample HEIs)	 Expectation of the environment that HEIs can or will be characterized and qualified by a few simple (quantitative) PIs (e.g. based on rankings) Expectation of the environment that HEIs can or will be characterized and qualified by a few simple (quantitative) PIs (e.g. based on rankings) Expectation of the environment that HEIs can or will be characterized and qualified by a few simple (quantitative) PIs (e.g. based on rankings) Intervention of the environment that HEIs can or will be characterized and qualified by a few simple (quantitative) PIs (e.g. based on rankings) 										
	Strate	egy matrix and its	s recommendati	ons for organis	ational dev	elopment							
		W						0			Т		
		1.	2.	3.	4.	5.		1.	2. 3		1.		
	S	S/W						S/O			S/T		
	1.	-	-	-	-	-		-	-	-	-		
	2.	-	-	-	-	-		-	-	-	-		
	3.	-	-	-	-	-		-	-	-	-		
	М	M/W						M/O			M/T		
SI		Complete collected and used, HEI-specific PI set	Evaluate performance monitoring needs of HEI and revise existing (small) PI set accordingly	Implement QA of data acquisition and stratify methodology of PI collection and processing	Evaluate (existing) Pl set for adequate representati / grasp of H performance	Compleme quantitative set of qual on EI complex) e	nt set of PIs with tative PIs	Complete PI set towards close-to- complete HEI- specific set	Introduce internal organisational PIs	Foster the development of a national student survey	Education about the explanatory possibilities and limits of PIs and rankings etc.		
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Conclusions



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- Benchlearning and strategic SWOT analyses exhibit the need of several EIOD initiatives to further develop, improve & refine the PDGM models of the case study universities
 - Procedures of data processing & communication, software platforms & responsible organisational bodies for collecting & interpreting Pls must be (further) developed to improve quality as well as usability & accessibility of data & information; particularly: need of better organizing PDGM systems that avoid multiple island solutions & unnecessary resources' consumption.
 - The **organisational performance monitoring needs of HEIs** must be balanced with demands from education politics & traditional disciplinary attitudes.
 - Processes, organisational bodies & human resources for fostering participative responsibility for PDGM including more efficient decision-making of collegial bodies must be established.
 - Educational strategies (mission, values, vision) must be established, including the prospects & ambiguities of PDGM & Learning Data Analytics.



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Critical success factors of PDGM (may be supportive to guidance for other HEIs that engage in developing their PDGM) (based on the stocktaking & benchlearning insights of the SQELT project including stakeholder focus group surveys & discussions):

- **Provide justifiable belief in success promises of PDGM** surveyed stakeholders are often unsure about the possibility to fulfil all promises of PDGM, particularly Learning Data Analytics.
- Leadership engagement is a core driver of PDGM development & implementation some stakeholders diagnose insufficient engagement of leaders in PDGM.
- Reflected understanding and practice of PD(G)M based on adequate/sufficient & self-determined, HEI adequate PI sets is also of basic importance surveyed stakeholders see various deficits in their HEIs' PI sets.
- **Reflected and applied PDGM ethics** is indispensable this is **seen as a very important issue** by most surveyed stakeholders (while the **willingness to practice** this theoretical insight does not always seem to keep pace with the claimed importance).
- An adequate financial climate is necessary underfinanced & project-driven L&T is often experienced as one of the obstacles to implement appealing PDGM solutionscater

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Some limitations of the case study

Limitations of SQELT project

- SQELT project limited in time (36 months) and funding
- **Time window too short for** PDGM-related **EIOD:** the BL steps Integration, Action, Maturity can only be addressed after the project's lifetime
- Impact analysis explorative (instead of strict before-after comparison)
- Fluid stakeholder participation in HEIs (particularly students)
- ..

Limitations of Benchlearning

- Danger of viewing BL as a one-time project; focusing on quantitative output data; self-mirroring; emulating, mimicking competitors; fostering rat race
- Organisations' inability of readiness and flexibility to implement change; inability of transparency and communication; fear of detecting and exposing weaknesses (and threats)
- Problem of complexity and costs

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Some limitations of the case study

Limitations of SWOT analysis

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- SWOT analysis may lack links to an implementation phase
- SWOT analysis may use unclear and ambigious words and phrases
- Can inform strategic decisions but does not necessarily automatically offer solutions
- Though it is relatively cheap and focuses on the most important factors,
 SWOT analysis cannot replace more in-depth research
- SWOT execution becomes complicated if factors are uncertain or many-sided with respect to the four factor types of strengths, weaknesses, opportunities and threats

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- SWOT analysis does not prioritise issues
- ...

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Addendum:

Other most prominent/frequent weaknesses and threats

- Complicatedness of decision-making processes because of institutionalised understanding of open-ended knowledge-based deliberative decision-making and acting in the collegial university of academics (cannot be completely overcome)) [W-PDGM]
- Little joined-up working in PDGM within the HEI (at certain sample HEIs) [W-PDGM]
- Low involvement of users in the design and validation processes of the PDM-suggested improvements to be implemented (at certain sample HEIs)) [W-PDGM]
- <u>Relevant PI data and information is not available to every relevant stakeholder</u> (at certain sample HEIs) [W-PDGM]
- There is a <u>bottleneck in communication</u> as performance data and information are accessible only to a few people (at certain sample HEIs) [W-PDGM]
- Lack of integrated PDM system (e.g. data warehouse) of all PIs, instead <u>parallel island</u> solutions, i.e. numerous performance data and information is stored locally and in unstructured forms which makes it difficult to use it systematically and on an operational level (at certain sample HEIs) [W-PDGM]
- Dependence of performance data reporting on the commitment of programmes' directors (at certain sample HEIs) [W-PDGM]



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Addendum: Other most prominent/frequent weaknesses and threats



- Learning Analytics is in its very early infancy (at most sample HEIs) [W-PIs]
- Various uncoordinated and/or incompatible software solutions in DPDM are used in the HEI (at certain sample HEIs) [W-(D)PDM]
- <u>Resources allocated for the implementation and sustainability of the DPDM model are not</u> <u>enough</u> (at certain sample HEIs) [W-RES]
- Implement and develop DPDM system in spite of limited resources and underfinancing (at certain sample HEIs) [T-RES]
- Raise third-party funding and/or research projects for DPDM implementation and development [T-RES]

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Addendum: Other most prominent/frequent weaknesses and threats



- **Privacy concerns related to PDM models are not recognized** ("no sensibility for ethical issues") (at certain sample HEIs) [W-ETH]
- **Privacy concerns** (e.g. teacher evaluations; students' satisfaction; students' study success) **limit** accessibility of performance data and information (cannot be avoided) [T-ETH]
- **Different subject areas of the HEI are under different ministerial authorities** (e.g. medicine and other faculties) (at certain sample HEIs) [W-PDGM/POL]
- Available performance data and information is partly not analysed or analyses not published "because of policy decisions" (at certain sample HEIs) [W-PDGM/POL]
- Imbalance towards policy-driven PIs (at certain sample HEIs) [W-PDGM/POL]
- Ministry-driven PI sets which do not entirely fit the HEI's profile and needs (at certain sample HEIs) [T-PDGM/POL]
- Ministry-driven changes in PDM of HE could restrict the autonomy of HEIs and faculties, e.g. in the context of PDM relating to debates about student fees, value for money etc. (at certain sample HEIs) [T-PDGM/POL]
- "Hidden agendas" of HE politics for PDM (e.g. policy-driven sets of PIs) (at certain sample HEIs) [T-PDGM/POL]



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