



### **METHODS**



# 1 PM<sup>2</sup> methodology v3.0.1 application

PM<sup>2</sup> was applied by the Principal Investigator (PI), Project Manager (PM) and Project Manager Assistant (PMA). Both the PI and the PM are researchers with training and/or experience with the PMBOK framework whilst the PMA is a student doing a capacity building internship.



### **2** Project Handbook: purpose

The Project Handbook (PH) documents the approach for implementing the project goals, key controlling processes, policies and rules, plus the overall management approach.



PH PM<sup>2</sup> artefacts templates

### **3** Project Handbook development

The Principal Investigator, Project Manager and Project Manager Assistant developed the Project Handbook based on the PM<sup>2</sup> templates, through loops of discussion for deciding on aspects such as tailoring, i.e. which artefacts templates would be used.







### **4** Team involvement

The grant application was a key input for the development process. Involvement of the remaining team members was ensured through a presentation of the draft version in the planning kick-off meeting followed by a period for comments and feedback on the Handbook.

# Applying the Project Management Methodology (PM²) to an interdisciplinary R&D project

## The R&D project

The **VA|PREVENTION project** aims to evaluate the effectiveness, implementation, and cost-effectiveness of a novel person-centred digital intervention to prevent type 2 diabetes in high-risk adults. The project consortium consists of 5 academic partners, supported by national funds with a total budget of EUR 250 K.

### The PM<sup>2</sup> Methodology

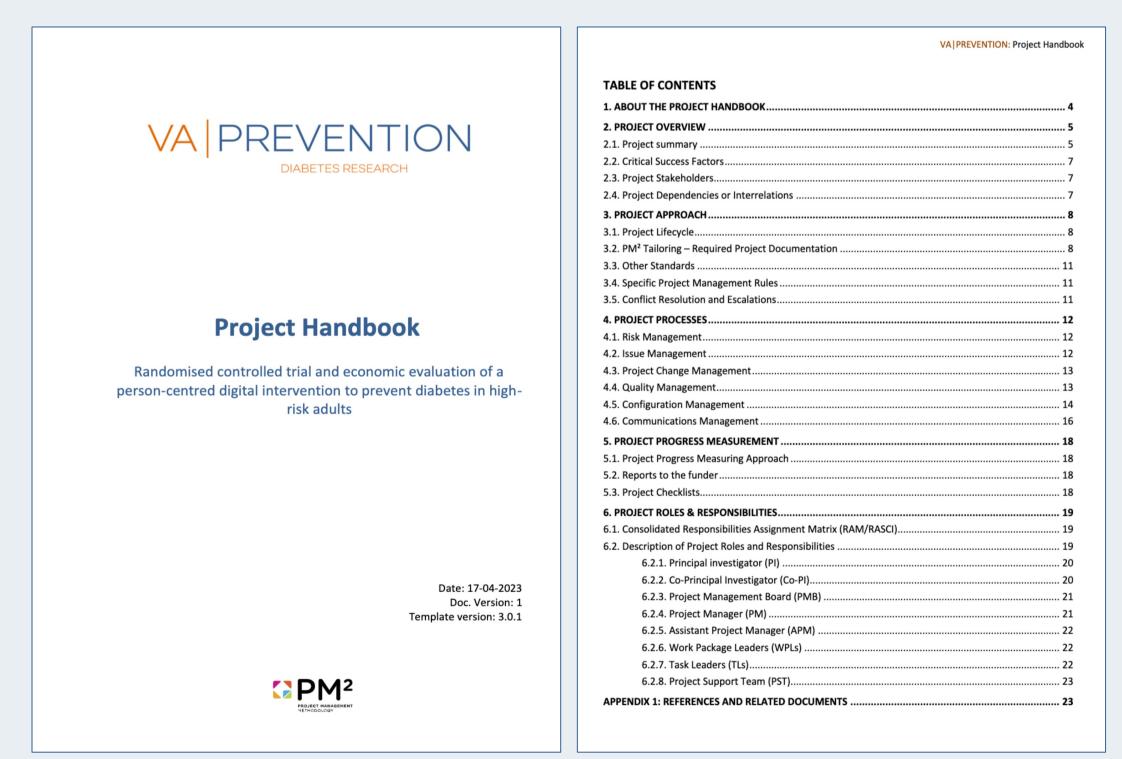
The **PM<sup>2</sup> methodology**, developed by the European Commission, was selected for waterfall project management, as it provides a structured approach based on acclaimed frameworks and offers a range of open access resources (European Commission, 2021). There is a scarcity of papers reporting the use of PM<sup>2</sup> in R&D projects.

# Aim

This paper contributes to address this gap by reporting on the application of PM<sup>2</sup> in the planning phase, to support the development of the Project Handbook.

# Project Management Methodology Guide 3.0.1 Curopean Commission, Directorate General for Informatics, PMF Project monogement methodology south? 2.0.7, Publications Office of the European Union, 2021, https://data.europa.eu/doi/10.2799/08889

# **RESULTS**



The VA|PREVENTION Project Handbook v.1 is composed of the same 6 sections as the PM<sup>2</sup> template

Artefact	Yes/No	Location	If No, briefly explain the reason
			the risk log as an operational tool
Risk log	Yes	Documents > General > WP1 Project Management > Project Management Artefacts>	n.a.
Issue management plan	No	n.a.	Given the resources available, we will focus or the issue log as ar operational tool
Issue Log	Yes	Documents > General > WP1 Project Management > Project Management Artefacts >	n.a.
Decision log	Yes	Documents > General > WP1 Project Management > Project Management Artefacts >	n.a.
Requirements Management Plan	No	n.a.	Given the resources available, this will be addressed by the quality management section.
Project Change Management Plan	No	n.a.	Given the resources available, we will focus or change log as operationa tool
Change log	Yes	Documents > General > WP1 Project Management > Project Management Artefacts >	n.a.
Change Request Log	No	n.a.	Given the resources available, a change request will be identified and raised during meetings as a result of decisions, issues or risks and will be documented in the Change Log.
Change Request Form	No	n.a.	Given the resources available, a change request will be identified and raised during meetings as a result of decisions, issues or risks

Sixteen artefacts templates were excluded; reasons were documented in the Handbook. For example, risk and issue management plans were replaced by descriptions in the Handbook coupled with the use of available artefacts.

Risk Identification and Description								Risk Assessment					Risk Response						
ID		Title	Description	Status	Identified By	Identification Date	Likelihood (L)	Impact (I) Risk Le	Risk Owner	Escalation	Risk Response Strategy	Risk reduction actions		Mitigatio	on actions	Target Date	Traceability/Comments		
Guidelines	Work package concerned	<short for="" the<br="" title="">risk&gt;</short>		Status for the risk: One of the following values: - Proposed - Assessing - Awaiting for - Approval - Approval - Approval - Rejected - Closed> - Cl					leliverables, the person	<date on<br="">which the risk response is expected to be implemented.</date>	<related artefacts<="" p=""> - ID for the related mitigation tasks in the Project Plan - ID for related changes issues or decisions (entries). &gt;</related>								
R	isk l	og	<u>'</u>	'		'	<u>' '</u>	'	1	1 1	1		·			<u>'</u>	I		
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			Issue Identification and Description				Issue Assessment and Action Description							
ID	Category Title Description Status Identified Identification		Action Details	Urgency	Impact	Size	Target Date	Issue	Escalation	Traceability/Comments				
					Ву	Date	(effort & responsible)					Owner		
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	organised in	the issue>	(known risk, unknown risk,) and its impact on the project.>	issue: One of the	of the	issue was raised	For the remediation plan, the following main steps should be executed:	value from 1	value from 1	value	which the	the person	issue be	- ID for the related risk
	different			following values:	Person who	or was identified	- Identification of the non-conformities, impact and recommended actions;	to 5 denoting	to 5 denoting	denoting how	issue is	tasked	escalated to	- ID for the related tasks in
	categories			- Open	identified	<dd mm="" yy="">&gt;</dd>	<ul> <li>Analysis of the different scenarios and associated resources, timetable and costs;</li> </ul>	how urgent	the issue's	much effort	expected to	with	the Directing	the Project Plan
səu	such as			- Postponed	the issue>		- Selection of the most cost/effective action and assignment of responsibilities.>	the issue is:	impact:	will be	be resolved	resolving	or Steering	- ID for related changes in
elir	Business,			- Resolved				5- Very High	5- Very High	necessary to	<dd mm="" yy=""></dd>	the issue>	Layers?	the change log.>
nia	Staffing,			- Closed>				to	to	resolve the	>		<yes> or</yes>	
0	Contractor,							1- Very Low>	1- Very Low>	issue:			<no>&gt;</no>	
	Legal>									5- Very High				
										to				
										1- Very Low>				
	1		1											

A **total of nine additional artefacts** was used; customization was kept to minimum. The Handbook and associated artefacts were stored in the project shared repository, to ensure accessibility

# **CONCLUSION**

The application of PM<sup>2</sup> methodology to an interdisciplinary R&D project streamlined the development of the Project Handbook and associated artefacts in relation to prior projects. The project type, goal, needs and resources are key considerations for tailoring this methodology. Nonetheless, the process demands skilled human resources and a time commitment that may not align with smaller projects. Worked examples of Handbooks specifically for R&D projects can further enhance efficiency. Furthermore, it may be helpful to avoid falling into the trap of perfectionism and instead embracing the concept of a living document, which can be update based on emerging experiences and regular reviews of the methodology and artefacts

Acknowledgments: Thank you to team members for their contributions in reviewing and approving the VA|PREVENTION Project Handbook. This work was funded by FCT – Fundação para a Ciência e a Tecnologia, I.P., by means of national funds (grant reference 2022.02969.PTDC).



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Decision log





