



THE **CHARTERED BODY** FOR THE
PROJECT PROFESSION

THE GOLDEN Appendix and Methodology THREAD



Research commissioned by APM
and undertaken by PwC Research

This research project consisted of 5 key stages:

1. Literature review

- a. To both familiarise ourselves with the existing relevant research and also to review any previous approaches to market sizing (see Appendix 1.1 for full list of reviewed literature).
- b. The literature review was also used to help build our definitions for both 'projects' and 'project management' and to decide on key sectors on which the research should focus.

Definition of a **project** as follows: "A temporary, non-routine endeavour or rolling programme of change designed to produce a distinct product, service or end result. It has a defined beginning and end, a specific scope, has a ring-fenced budget, involves a dedicated team with a project manager in charge and is undertaken to achieve planned objectives, typically to bring about outputs and outcomes. It goes beyond 'business as usual'."

Definition of **project management** as follows: "The application of processes, methods, knowledge, skills and experience to achieve the project objectives and bring about planned outputs and/or outcomes. This includes project initiation, planning, executing, controlling, quality assuring and closing the work of a dedicated team according to a specified budget and timeframe."

2. Validation interviews - with industry experts to stress-test definitions and the market sizing approach before commencing the research.

- i. **Overarching objective of this stage:** To stress-test proposed methodology, to validate findings from desk research phase, to explore definitions of projects and project management and to help develop assumptions around project management levels in industries less commonly associated with project work

ii. Final priority sectors:

Aerospace and defence
 Central Government
 Charities
 Construction
 Energy and Utilities
 Financial and Professional Services
 Healthcare (including Pharma)
 Higher Education
 Hospitality and Leisure
 Telecommunications
 Local Government
 Manufacturing
 Other public sector
 Project management consultants
 IT/Technology
 Transport

3. Desk based research - Information was gathered from data sources including, but not limited to (see Appendix 1.2 for extensive list);

- ONS Annual Business Survey
- ONS Labour Force survey
- BEIS Small Business Survey
- House of Commons whitepapers
- APM Annual Salary Survey

The desk research phase enabled us to establish total employment levels at sector level, as well as average salary levels for project managers in each sector. The online survey was used to stress-test and validate the findings of our desk research and also to calculate the proportion of employees that work within projects and project management.

4. Online survey - An online survey was designed in consultation with our academic panel and wider project steering group. In total, the survey achieved 438 valid responses from businesses across the UK. The questionnaire was comprised of five main sections:

1. A profile of the respondent's organisation and their role within it. (See 1.3 appendix for full list of job titles included in our research).
2. The type of projects and project management being undertaken in their organisation
3. Expectations for the future of projects and project management
4. Any challenges the industry is currently facing or may face in the future
5. Required skills for a good project manager and any potential skill gaps in the industry

The results of the online survey enabled us to calculate the type of projects being undertaken, the size of these projects in terms of budget and FTEs involved and the proportion of project activity for each of the key sectors.

5. Full Time Equivalent (FTE) and Gross Value Added (GVA) calculation of key sectors - Standard Industrial Classification (SIC) codes were used as a starting point to the desk research phase. The Standard Industrial Classification (SIC) is a system for classifying industries by a four-digit code. The SIC codes can be grouped into progressively broader industry classifications: sections (industry group), major group, and division. The ONS Annual Business Survey has key economic statistics for the majority of SIC codes in the U.K. In order to do the analysis for this project, we went through the SIC codes individually and re-classified them into the key sectors identified at the start of the research. After this process was completed, key statistics were taken including; total employment and total number of enterprises for each of the key sectors that had been reclassified. This was also

combined with additional sources for sectors where detail was insufficient. By applying the data from the online survey to total employment we calculated the FTE levels for these key sectors.

Using data from APM Salary Survey 2017, we calculated the estimated wage and salary bill as a bridge to obtain GVA figures. The ONS statistics provide the relationship between employment costs, GVA and turnover. This enables us to calculate an estimated GVA value across each of the key sectors. An example of how to calculate GVA from these ratios is provided below.

Estimated wage and salary bill

Estimated wage and salary = £1.00 million

Wage and salary bill to GVA = 1.84 (1.00/0.54)

Estimated GVA = £1.00 million x 1.84 = £1.84 million

For all other sectors outside of the priority list, we used the ONS Labour Force Survey as a source of total UK employment, and applied pre-agreed assumptions on the level of project management activity based on desk research and expert opinion.

6. GVA and FTE validation interviews. Industry experts from across a range of businesses representing our key target sectors were interviewed and their opinions used to validate and stress-test the interim findings (GVA and FTE figures) and to discuss our survey data of the proportion of employees engaged with projects and project management activity in their sector or industry.

The research project has been advised throughout by academics and colleagues from APM acting as a steering group to inform and support the research (please see report for more information on this). The steering group met throughout the research, including at project initiation, design, interim reporting, draft report and final reporting.

Acknowledgements:*APM team:*

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Dr Andrew Schuster

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Professor Andrew Edkins

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Appendix:**1.1 Full list of academic and business literature:**

Cicmil, S., Williams, T., Thomas, J. and Hodgson, D., 2006. Rethinking project management: researching the actuality of projects. *International journal of project management*, 24(8), pp.675-686.

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Schooper, Y.G., Wald, A., Ingason, H.T. and Fridgeirsson, T.V., 2017. Projectification in Western economies: a comparative study of Germany, Norway and Iceland.

1.2: Desk research datasets and data sources:

Main sources:

- ONS Annual Business Survey (Published Nov 2018). Available at: <https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/datasets/uknonfinancialbusinesseconomyannualbusinesssurveysectionsas/>
- ONS Labour Force survey (Published Dec 2018). Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/december2017>

- the BEIS Small Business Survey [to insert year] (available at: <https://www.gov.uk/government/collections/small-business-survey-reports>)
- APM Annual Salary Survey (2017) [Fieldwork Dates: 15th December 2017 - 7th February 2018]. N.B. APM shared the dataset for this but the overall report is available at: https://www.apm.org.uk/media/6219/apm_salariesurvey2017_digital_v2.pdf

Other sources:

Adsgroup.org.uk. (2018). [online] Available at: <https://www.adsgroup.org.uk/wp-content/uploads/sites/21/2018/05/Annual-Facts-2018-LoRes-spreadsREV2.pdf> [Accessed 10 Dec. 2018].

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Gov.uk. (2018). Departments, agencies and public bodies - GOV.UK - GOV.UK. [online] Available at: <https://www.gov.uk/government/organisations> [Accessed 10 Dec. 2018].

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Thomas, M. (2016). Financial and insurance services industry review, 2016. ONS, Part 1, Page 7. Source available at: <file:///C:/Users/938155/Downloads/financialservicesindustryreview.pdf>

1.3 Full list of job titles:

Account manager	Programme Planner
Associate Project Director	Project Administrator
Business Analyst	Project Administrator
Campaign manager	Project Co-ordinator
Change Manager	Project Delivery Manager
Chief Project Officer	Project Director
Contracts manager	Project Engineer
Director of Event	Project Lead
Events manager	Project Manager
Festival coordinator	Project Office Support
Head of Change	Project Planner
Head of Risk and Planning	Project Planner
Large Projects Manager	Project Sponsor
PMO administrator	Senior Creative Director
PMO Manager	Site supervisor
PMO officer	
PMO Director	
Programme Director	
Programme Manager	
Programme Office Support	

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