October 2024

Government Office for Technology Transfer (GOTT): Progress Evaluation

Final Report





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Executive summary

- 1. Knowledge assets (KAs) are intangibles that organisations possess and which may have value. KAs include: *"inventions, designs, certain R&D outcomes, data and information, creative outputs such as text, video, graphics, software and source code, know-how and expertise, business processes, services and other intellectual resources as well as the reputation of the organisation itself"* (Rose Book, 2024). They are assets in that they have the potential to yield social, economic and/or financial benefits by application beyond the purpose for which they were originally developed.
- 2. In 2021, the Mackintosh report set out an implementation strategy to obtain greater value from KAs held by the public sector, as identified in the HM Treasury (2017) Balance Sheet Review and the HM Treasury (2018) Getting Smart report. The latter revealed that public sector organisations faced many barriers to effectively manage and exploit their KAs.
- **3.** The implementation strategy outlined support for public sector organisations and individuals by focusing on three pillars: 'good practice', 'incentives' and 'support'. A key announcement under the support pillar was the creation of the Government Office for Technology Transfer (GOTT) a new unit within the (former) Department for Business, Energy and Industrial Strategy (BEIS) and now part of the Department for Science, Innovation and Technology (DSIT).
- **4.** GOTT was established as a requirement of HM Treasury in 2022 with a budget of £30m over three years (2022/23 to 2024/25). Its corporate objective is *'to increase engagement in, and outcomes from, KA exploitation across the public sector'*. GOTT works with central government departments and their public sector bodies to help them identify, protect, develop and exploit their KAs. The Mackintosh report set out the intended role of GOTT as follows:

"The new unit will serve central government departments and their ALBs [Arm's Length Bodies], and will act as a leader and convener across government and a focal point for those that can enable the asset to reach its potential, including private sector investors. It will provide guidance and advice to central government organisations and offer more focused specialist support..."

- **5.** This evaluation has sought evidence on the effectiveness of the support GOTT has given to its clients and on how it is perceived by public sector stakeholders. The evaluation focused on the design and delivery of GOTT, and the progress made towards realising early outcomes. Clients and stakeholders were approached through semi-structured online interviews or a questionnaire survey, and discussions were held with GOTT staff. Across these, feedback was obtained from nearly 90 individuals. The self-reported nature of the feedback is based on the experiences and opinions of consultees/respondents and may be associated with some bias.
- 6. It is important to bear in mind that GOTT has been building up to the current scale/structure and that its government-wide task of encouraging and supporting KA management is exceptionally broad. It can be considered a pioneer in that there is no obvious prior model to be followed either in the UK or further afield.



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Key findings

- 7. The organisations which GOTT supports come from many parts of the public sector. They differ widely in scale and in their experience of KA management. By end of March 2024, GOTT had supported around **100 organisations** engaging with over 900 individuals. These included ministerial departments, non-departmental public bodies and executive agencies.
- 8. GOTT has provided a range of activities to reduce barriers and drive incentives: advice and practical support directly to clients; grant awards of up to £250k; upskilling of public sector personnel; building and managing the KA Network; and influencing the policy environment for KA management and exploitation. These activities have covered all stages of the KA management process. The most common KAs supported have been: software; know-how and expertise; data and information; invention; and non-software copyright.
- **9.** In terms of its organisation, **GOTT has clear and well-defined management and governance structures and arrangements in place for strategy implementation**. These appear to be robust in relation to the objectives of GOTT. The monitoring and reporting systems are fit-for-purpose and have enabled the tracking of activity with clients.
- 10. Overall, GOTT's position within DSIT provides a reasonable balance between its ability to influence policy and bring about cultural change on the one hand and, on the other, the flexibility and speed of decision-making needed to deliver practical support. There have been some minor "growing pains" during the start-up and expansion phase (e.g. external recruitment).
- 11. In terms of delivery, most of the client feedback suggests that the support received from GOTT so far has been effective. In nearly all cases, the client survey respondents and consultees rated the activities delivered by GOTT highly, with average ratings of at least 8 out of 10 across most activities (rating of 10 being 'very effective').
- 12. GOTT has been effective in progressing towards the achievement of early outcomes encompassing both 'soft' and 'hard' benefits. Moreover, there is feedback both from clients and stakeholders that GOTT's activities are starting to change cultural attitudes towards KAs, though it is recognised that this will take longer to achieve. Softer benefits reported include: increased enthusiasm for the wider KA agenda; increased profile and/or traction on KAs; increased knowledge and awareness of KAs; overall better appreciation of the value of KAs; and greater confidence in GOTT. Harder benefits reported include: KA strategies developed and implemented; improved capability/maturity on KAs; and progress towards exploitation of KAs. The overall findings on additionality are positive and demonstrate the value of GOTT support i.e. without GOTT support the benefits would have taken longer to achieve, been at a smaller scale or would have been of lower quality (this is based on self-reported evidence).
- 13. Finally, we conclude that GOTT has made good progress against its objectives and strategy so far, and it has the potential to deliver on the expectations set out in the Mackintosh report. Client and stakeholder consultees considered that GOTT should continue.

1. Introduction

What are knowledge assets?

- 1.1 Knowledge assets (KAs) are of increasing importance to the UK economy in terms of their contribution to productivity and growth. Modern economies are dependent on KAs, which are intangible assets such as research and development (R&D), intellectual property (IP), data, brands, designs and business processes. The Rose Book (2024)¹ categorises KAs into five broad areas: information, innovation, creative, reputational and knowhow.
- **1.2** KAs have certain economic characteristics that distinguish them from tangible assets: intangible assets are more likely to be **scalable**, their costs are more likely to be **sunk**, they are inclined to have **spillovers**, and exhibit **synergies** when combined with each other to produce more valuable assets.² There are KAs held by central government and a wide range of public sector organisations (e.g. Arm's Length Bodies) across different UK locations with potentially valuable assets at different stages of maturity.³
- **1.3** The successful management of KAs involves their **identification**, **protection and exploitation** by organisations to realise wider outcomes. This means ensuring organisations can efficiently utilise KAs to achieve their primary purpose and be able to identify and exploit (and realise) the wider value that they could generate outside of the organisation, in particular where the asset is unique. The exploitation of UK public sector KAs can bring value in terms of benefits to society such as to wellbeing, benefits to the UK economy, and benefits to government through financial returns:⁴
 - **Social** harnessing KAs to deliver better outcomes for citizens and improve the quality of public services
 - **Economic** making KAs available to help stimulate innovation, competition or development in part of the private sector
 - **Financial** licensing, selling or exploiting KAs through other commercial means to secure a financial return for the taxpayer.

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¹ Government Office for Technology Transfer (2024) The Rose Book – guidance on Knowledge Asset management in government.

https://assets.publishing.service.gov.uk/media/66151359c4c84de468346adc/GOTT_Rose_Book_2024.p df

² Haskel, J and Westlake, S (2017) Capitalism Without Capital: The Rise of the Intangible Economy.

³ HM Government (2021) The Mackintosh report. Getting smarter: a strategy for knowledge & innovation assets in the public sector.

https://assets.publishing.service.gov.uk/media/607d73bb8fa8f57362ca49b2/Getting_smarter_report_1 50421.pdf

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Policy context and GOTT's unique role

- **1.4** The Mackintosh report (2021) highlighted the need to better understand and exploit the potential of the UK's public sector KAs as identified in the HM Treasury (2017)⁵ Balance Sheet Review and the HM Treasury (2018)⁶ Getting Smart report. The latter showed that these assets are both undervalued and underexploited in the public sector because government departments, agencies and the wider public sector can face barriers to unlocking the value of KAs.
- **1.5** The Mackintosh report focused on UK central government, including government departments, agencies and public bodies, which are funded through public money. It did not cover local government, devolved administrations, and universities. HM Treasury (2019)⁷ Managing Public Money established that public sector organisations are expected to develop and operate an asset management strategy which should consider intangible (and physical) assets.
- **1.6** In this context, the Mackintosh report announced the creation of a new unit within the (former) Department for Business, Energy and Industrial Strategy (BEIS) - The Government Office for Technology Transfer (GOTT).⁸ It was established as a requirement of HM Treasury in 2022 with a budget of £30m over three years (2022/23-2024/25). GOTT's corporate objective is 'to increase engagement in, and outcomes from, KA exploitation across the public sector'.⁹ The aim is to work with central government departments and their public sector bodies to help them identify, protect, develop and exploit their KAs. This is through the provision of good practice, funding and specific expert support. Following departmental changes to BEIS in 2023, GOTT became part of the Department for Science, Innovation and Technology (DSIT).
- **1.7** GOTT as a dedicated unit within DSIT has a cross-government mandate to raise awareness on the value of public sector KAs, and to provide advice and support to organisations. This governmentwide approach to encouraging and supporting KA management can be considered pioneering – 'a first' in the UK. There is no prior model for how a unit with GOTT's unique role and corporate objectives should be set-up and run. There are similarities (and differences) to university technology transfer offices (a.k.a. knowledge exchange), but the higher education landscape is distinct and mature field with decades of experimentation and learning from within the UK and overseas - notably the USA.
- **1.8** Figure 1-1 presents the GOTT timeline highlighting some of the key developments and publications relating to public sector KAs.

⁹ GOTT Strategic Plan 2022-24.

⁵ HM Treasury (2017) The Balance Sheet Review Report: Improving public sector balance sheet management. https://www.gov.uk/government/publications/the-balance-sheet-review-reportimproving-public-sector-balance-sheet-management

⁶ HM Treasury (2018) Getting smart about intellectual property and other intangibles in the public sector: Budget 2018. https://www.gov.uk/government/publications/getting-smart-aboutintellectual-property-and-intangible-assets

⁷ HM Treasury (2019) Managing Public Money. See Annex 4.15. ⁸ https://www.gov.uk/government/organisations/government-office-for-technology-transfer

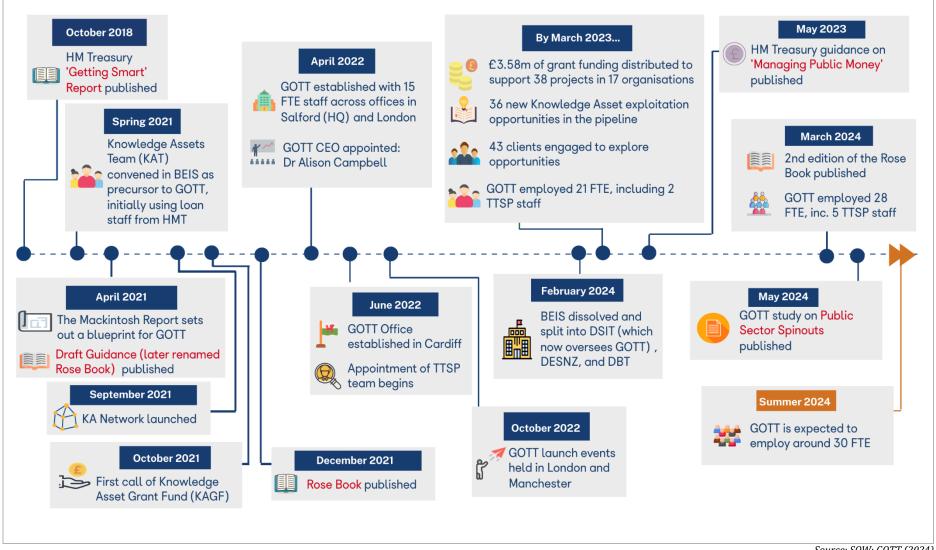


Figure 1-1: Government Office for Technology Transfer timeline (to end March 2024)

Source: SQW; GOTT (2024)

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Study objectives and scope

- **1.9** SQW was commissioned by GOTT to evaluate its progress since the organisation was set-up. There were three main objectives for the study:
 - Undertake a **process evaluation** of GOTT's performance to date: its services and products; offer to clients; and its potential to deliver on the expectations laid out in the Mackintosh report and to GOTT's objectives and strategy as agreed with its Advisory Board.
 - Provide robust evidence of the **effectiveness** of GOTT's programme to date in terms of GOTT's impact on the client base and to provide an indication of the potential to meet its objectives longer-term. This includes direct and indirect outcomes and impact. It also considers the counterfactual position i.e. what would have happened in the absence of GOTT.
 - An understanding of the way GOTT is **experienced** by its clients; perceptions from public sector stakeholders beyond GOTT's immediate client base; and those of others within the innovation/knowledge exchange landscape who are relevant to GOTT's work.
- **1.10** The evaluation focused on the design and delivery of GOTT and the progress¹⁰ it has made towards realising early outcomes.¹¹ It was important to take into consideration that GOTT is a new unit, in the early stages of development, that has had a relatively short amount of time working with clients.¹² Also, the long time it takes to generate culture change, embed the KA agenda, adopt and exploit KAs, and work across government on incentives and barriers, meant it was too early to undertake a full impact evaluation of GOTT. The evaluation therefore has sought to evidence the extent to which GOTT's programme of activity informed or influenced client attitudes and behaviours that would not have happened otherwise.
- 1.11 The overall aim of the evaluation was to *learn* from how GOTT has been delivered up till now. This included: what has worked well and less well, and why; and understanding how GOTT has been experienced by its clients.
- **1.12** In this context, the evaluation of GOTT is not intended to be an assessment of how it has performed so far against every expectation set out in the Mackintosh report. Rather, the Mackintosh report provides the overall strategic direction for GOTT. In view of this, it is more important to focus on how GOTT has been formed and operationalised, including how it has responded to its environment.

¹² Up until now, GOTT has been in 'start-up mode' which has involved engaging with clients and building its services. GOTT is now at the point where activities can start to be ramped up, hence the importance of an evaluation to show whether it is on track in terms of the type of support it is delivering.



¹⁰ This is expected to take into account progress against GOTT's objectives and the potential to deliver on the expectations set out for GOTT in the Mackintosh report.

¹¹ The original focus was expected to be on the process evaluation but the study scope expanded to evidence progress towards early outcomes (the latter was intended to be a secondary study objective but became more prominent).

1.13 GOTT was also interested in exploring whether there were any international comparator organisations to which they should be looking for inspiration (i.e. to learn from). GOTT's own short search did not find similar organisations other than universities and their technology transfer offices. We also were not able to find directly comparable organisations.¹³ Given that our limited search did not find an existing comparable model to GOTT, it may be argued that the UK is a global pioneer in this area. This was another reason for the evaluation to take a learning approach to address the study objectives.

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1.14 In undertaking the work, the core study team was supported by an Expert Panel comprising of David Secher (University of Cambridge), Elaine Eggington (Wellspring), Nick Hare (Aleph Insights), Bill Wicksteed (SQW) and Jonathan Cook (SQW). They brought expertise in knowledge exchange, technology transfer, innovation and evaluation of public policy. The Experts were involved throughout the study, supporting the core team with the design of research tools, fieldwork, analysis and reporting (including presentations and meetings with GOTT).

Key issues for the evaluation

1.15 We highlight the following as important for the evaluation:

- **GOTT supports a high number of diverse clients across different areas of the public sector and locations**. There are c. 300 potential clients across government departments and Arm's Length Bodies (ALBs). GOTT has not yet been involved with all these organisations and looking forward there will likely be some which are not relevant. GOTT works currently with around 100 organisations, and even this breadth creates a significant engagement challenge for GOTT given its limited resources. A question for the process evaluation was the basis on which GOTT decided which organisations to focus on, and how.
- There is a wide range of KAs across GOTT's potential public sector client base, and these are at different stages of maturity. The process for identifying, managing and exploiting KAs for economic and social benefit varies depending on the type of KA (and client). According to the Rose Book (2024), *"KA development includes establishing whether the asset has value outside of the organisation and progressing it to help realise that value"*.
- There is a need to have a clear and communicable understanding of the rationale, objectives, inputs and activities of GOTT. The role of GOTT in government across the research and innovation landscape is unique. There is no template for GOTT to follow on how it should operate or direct comparators against which it can be appraised. The assessment of GOTT has, therefore, to be made against the organisation's corporate objective, available resource, activities, and the wider context for the exploitation of KAs.

¹³ We approached some of our contacts in the technology transfer and knowledge exchange fields, and also undertook a quick online search of organisations directly comparable to GOTT. It is worth highlighting that the Mackintosh report also did not identify international comparator organisations.



1.16 For this evaluation it is important to highlight that the Mackintosh report envisaged that the "new unit [GOTT] will serve central government departments and their ALBs" and according to the Rose Book (2024), guidance on KAs is intended for "UK government departments, agencies and public bodies... headed by an Accounting Officer, responsible for upholding Managing Public Money and managing that organisation's assets".¹⁴ It is also worth noting that there are three types of ALBs: an executive agency, a non-departmental public body, and a non-ministerial department.¹⁵

Note on definitions

Throughout the report, the following working definitions are used:

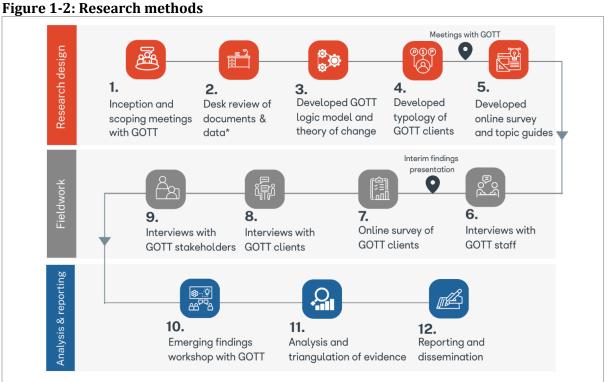
- **Client organisations (/clients):** These are the organisations that GOTT has engaged with to date to provide support.
- **Potential clients:** These are organisations that GOTT has *not* engaged with to date, but are eligible for support.
- **Stakeholders/partners:** In addition to clients, GOTT works with a range of organisations and individuals including: external suppliers with expertise in the KA, IP and associated commercialisation fields; partner organisations (cultivating relationships for collaborations, the exchange of information, or provision of services); as well as individuals, such as those standing as panel members for the grant fund or providing advice as members of GOTT's advisory board.

Approach and methods

1.17 Our approach involved a theory-based approach that developed and tested a logic model and theory of change to help answer the evaluation questions. This drew on mixed methods to collect evidence (Figure 1-2): desk review of documents and monitoring data; development of research tools; online survey of GOTT clients; face-to-face and telephone interviews with GOTT staff, indepth telephone interviews with GOTT clients and stakeholders; workshops with study team experts and the client group; and qualitative and quantitative analysis. The evidence was triangulated, synthesised and assessed against the GOTT logic model and theory of change framework to arrive at a narrative on the delivery and effectiveness of GOTT. We also held workshops and meetings with GOTT and our study team experts to share (and be challenged on) emerging findings.

¹⁴ Ibid 1.

¹⁵ <u>https://www.gov.uk/guidance/public-bodies-reform#arms-length-bodies</u>



Source: SQW; *This includes an online session with GOTT staff on the 'ADA' Customer Relationship Management tool

1.18 We received feedback from 89 individuals in total (online responses and interviews).¹⁶ This includes telephone interviews with GOTT staff; responses to the online survey of GOTT clients; telephone interviews with GOTT clients; telephone interviews with stakeholders. Of the 89 individuals providing feedback, **79 were GOTT clients and stakeholders** (Table 1-1). We consider this to be a good response given the relatively short timeframe available for the fieldwork (four weeks).

	No. of individuals contacted in sample	No. of survey completions/ interviews	No. of organisations engaged
Client online survey*	37	23 (23 individuals)	12
Client interviews	51	25 (36 individuals)**	20
Stakeholder interviews	24	19 (20 individuals)**	17
Total	112 individuals	79 individuals	34 organisations ¹⁷

Source: SQW;* Client online survey response rate = 62%; ** Some interview calls had multiple consultees

1.19 As set out in the table above, 25 interviews were undertaken with client organisations. These consultations involved 36 individuals, representing 20 unique client organisations. The breakdown by organisation type is shown in Table 1-2. Within their organisations, consultees

¹⁷ Some organisations were engaged through the survey as well as interviews, hence the total is lower than the sum of the rows above.



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¹⁶ Note, some 'interview calls' had multiple consultees.

held a variety of roles (with varying levels of seniority) and were mostly engaged in the KA agenda. All consultees had engaged with GOTT.

Public sector organisation type	Number of client organisations consulted
Agencies & other public bodies	11
Ministerial departments	3
Public corporation	2
High profile group	2
Non-ministerial department	1
Unit within ministerial department	1

Table 1-2: Client consultee	organisation type
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Source: SQW based on classification according to Departments, Agencies and Public Bodies: <u>Departments, agencies and public bodies -</u> <u>GOV.UK (www.gov.uk)</u>

- **1.20** Across the 20 stakeholders consulted, there were: five Advisory Board members, nine involved in the assessment of GOTT's grant funding, and one who was a member of both groups. A further five stakeholders were involved in other ways, for example having contributed to developing GOTT at the outset or being active in another organisation that is involved in technology transfer and/or knowledge exchange.
- **1.21** Given much of the evidence collected and analysed is from interviews with clients and stakeholders, it is important to highlight the following points.
- **1.22** The key findings of the evaluation have been informed by the <u>experiences</u> and <u>opinions</u> of consultees interviewed and respondents to the online survey, and so reflect the perceived relative effectiveness of specific engagement with GOTT. By this we mean, our consultees/respondents perceived that particular GOTT activities had been effective for them or that they are likely to be seen as effective in future.
- **1.23** The self-reported nature of the feedback may be associated with some confirmation and/or attribution bias. Further, the client sample for both the survey and the interviews was provided by GOTT, drawing on their client database. This group of individuals had therefore received support from GOTT, and their views may differ from organisations that have had no or very little engagement with GOTT (the latter group were not captured in this evaluation).¹⁸
- **1.24** Most of the public sector clients interviewed are focused on commercial routes to exploitation and so the findings in this report are tilted towards this group. GOTT's strategy has not been to

¹⁸ Organisations that had no or very little engagement with GOTT were not captured in this evaluation for a few reasons: (i) we did not have relevant contact details for these organisations; and (ii) the evaluation objectives outlined earlier in this section meant that the focus was on gathering evidence on the experiences of GOTT clients.



focus solely on commercialisation but to look at wider exploitation i.e. non-commercial routes to achieving benefits. In practice, GOTT also works with clients that are not commercially focused.

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Report structure

- **1.25** The remainder of this report is structured as follows:
 - **Section 2** sets out the GOTT logic model and theory of change
 - Section 3 profiles the portfolio of GOTT clients
 - Section 4 presents the environment for managing, developing and exploiting KAs
 - Section 5 presents findings from the process evaluation i.e. design and delivery of GOTT
 - Section 6 presents the evidence on progress towards early outcomes of GOTT
 - Section 7 sets out our conclusions.
- 1.26 Finally, there are seven supporting annexes: list of consultees; KA categories from the Rose Book; KA policy and the role of GOTT; further detail on the client typology; GOTT client survey results; details on the GOTT customer relationship management tool; and a list of publications by GOTT.

2. Logic model and theory of change

- **2.1** This section presents the GOTT logic model and theory of change (ToC).¹⁹ This captures how GOTT is expected to work setting out the steps involved in achieving the desired outcomes i.e. the causal chain from the inputs and proposed activities of GOTT through to the expected outputs, outcomes and impacts. This involves identifying the key assumptions²⁰ of the ToC and the wider context²¹ that may influence progress towards realising outcomes and impacts. The logic model and ToC were tested by collating and analysing evidence from the primary and desk research, and helped to inform our research tools and identify areas for exploration.
- **2.2** We highlight a few important points for interpreting the logic model and ToC. First, there are numerous GOTT activities, outputs and outcomes (with multiple routes to impact). Second, GOTT works directly with clients that have varying levels of maturity in relation to KAs, including where there are synergies with the work of GOTT and where clients are already active in identifying and exploiting their KA, as well as those with little experience.
- **2.3** The logic model and theory of change graphics are presented at the end of Section 2.

Strategic context, rationale and objectives

- **2.4** As highlighted in previous policy reports,²² the public sector faces barriers to unlocking the value of KAs at different stages of the value chain: identification, protection and exploitation of KAs. These barriers fall under five broad areas (Getting Smart, 2018):
 - **Identification** public sector organisations often do not know what KAs they hold or how much these might be worth (information failure)
 - **Insight** public sector organisations often lack the technical, legal and commercial expertise to develop, protect and exploit their KAs (capability failure)
 - **Infrastructure** there is limited central support for public sector organisations looking to improve the management of their KAs (institutional/coordination failure)
 - **Incentives** there are limited incentives for organisations and individuals in the public sector to invest in KA generation and exploitation
 - **Investment** the public sector budgeting cycle does not always support the long term and speculative investment that is often required to generate value from KAs.

¹⁹ The logic model and theory of change were co-developed with GOTT.

²⁰ Assumptions can be thought of as factors that enable (or potentially hinder) an intervention to function as planned.

²¹ Policy and other changes e.g. economic, social, environmental, technological, market, and legal.

²² Mackintosh (2021) report, Balance Sheet Review (2017), and the Getting Smart report (2018).

2.5 The Mackintosh report put forward an implementation strategy to support public sector organisations to overcome the above barriers and obtain greater value from their KAs. This strategy focused on three pillars: **'good practice', 'incentives', and 'support'**. Under the third pillar, a new unit – The Government Office for Technology Transfer (GOTT) – was announced to be set up within (former) BEIS with the overall aim of working with public sector organisations on how they should identify, protect and exploit their KAs. The Mackintosh report set out the intended role and functions of GOTT as follows:²³

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- 2.6 "The new unit will serve central government departments and their ALBs, and will act as a leader and convener across government and a focal point for those that can enable the asset to reach its potential, including private sector investors. It will provide guidance and advice to central government organisations and offer more focused specialist support. Its core functions will be:
 - **opportunities**, **scouting and mapping**: scouting for opportunities which could be developed for wider social economic or financial gain, employing venture capital style expertise
 - **opportunity development**: providing support to take an idea to market or repurposing for use elsewhere in the public sector, employing "tech transfer" style expertise
 - **funding support**: providing grants and helping central government bodies access funding or to find other investment opportunities, employing specialist commercial and administrative expertise
 - **networks and capability building**: promoting networks and building capability, employing expertise in comms, stakeholder relationships and strategic marketing, but partnering to deliver training with the organisations including IPO
 - **strategy, guidance and reporting**: developing policy and implementing a detailed strategy to drive forward change and further embed incentives, providing advice and guidance, and piloting evaluative frameworks, employing customer service, policy and strategy expertise."
- **2.7** The 'support' pillar also introduced new funding to invest in public sector KAs (especially earlystage opportunities) through grant awards and expansion of the UK Innovation and Science Seed Fund.
- **2.8** GOTT was established in 2022 as a cross-Government unit (now) based within DSIT, headquartered in Salford with offices in London and Cardiff. It has c. 300 potential public sector client organisations including central government departments and their public bodies, and has engaged directly in some way with around 100 organisations to date.²⁴ GOTT is expected to contribute to delivering a 'system-wide change' in how the public sector manages and derives value from its KAs.²⁵

²³ Ibid 3.

²⁴ GOTT monitoring data, March 2024.

²⁵ Ibid 3.

- **2.9** Given the above rationale, the objectives of GOTT are to **increase engagement in, and outcomes from, KA exploitation across the public sector by:**
 - Raising the profile of KA exploitation
 - Making it simpler to engage in KA exploitation
 - Creating engaged and energised communities
 - Delivering targeted interventions
 - Leading KA exploitation culture change within the public sector.

Theory of change

Inputs, activities and outputs

- 2.10 GOTT's <u>inputs</u> are the resources (people, time, materials, funds, etc.) dedicated to its design and delivery. Some of these inputs were in place before GOTT's formal establishment. Following the Mackintosh (2021) report, the HM Treasury Knowledge Assets Team (KAT) staff (on loan) undertook initial work with colleagues from (former) BEIS that led to the establishment of GOTT. The KAT team published draft guidance which later became the Rose Book (2021), established the Knowledge Assets Grant Fund (KAGF) and supported the case for the Spending Review settlement (2022). The GOTT CEO, Dr Alison Campbell, commenced her role in April 2022.²⁶
- **2.11** The "blueprint" for the new unit set out in the Mackintosh report anticipated that it would include specialist capabilities. The precursor team for GOTT was a combination of Treasury staff on loan and BEIS staff. The secondees returned to their home base as GOTT was created. According to GOTT, "recruitment of staff with specialist skills (which itself comes with a significant staffing overhead) then commenced." Further detail on recruitment is outlined in Section 4.
- **2.12** GOTT has been allocated a total budget of £30m over three years (2022/23-2024/25). This funding is broadly distributed as follows: GOTT staff, grant funding, research projects, events and external expertise. GOTT has grown from around 15 FTE at its inception, to nearly 28 FTE in March 2024. The GOTT team is multi-disciplinary with policy, analysis, client communications professionals, and knowledge and technology transfer experts.
- **2.13** An Advisory Board of 11 individuals²⁷ provides support and constructive challenge to GOTT on strategic issues, annual plans and performance, etc. DSIT, where GOTT is based, provides governance and other support. Further inputs are through the HM Treasury (Balance Sheet

 ²⁶ At the point of formation of GOTT, most of the HM Treasury staff returned to their home department.
 ²⁷ The Advisory Board includes representatives from HM Treasury, Cabinet Office, DESNZ, UKRI, ONS, IPO, University College London Business, and other.

Team) and other public sector partners with existing expertise in KAs (e.g. Intellectual Property Office).

2.14 GOTT delivers a suite of <u>activities</u> (i.e. advice, support, leadership, convening, stakeholder & client engagement, and operations) to clients which are organised under two functions: 'KA Strategy and Implementation'; and 'KA Capability and Partnerships' (Table 2-1).

Section	Activities
KA Strategy and Implementation	 Knowledge Asset Grant Fund (KAGF) KA Community building (manage the KA Network) Policy
KA Capability and Partnerships	 Technology Transfer Strategic Partners (TTSPs) Knowledge Asset Capability Enhancement (KACE) Contracts and Delivery Partnerships
Cross-cutting	 Client communication ('MarComms') Analysis Operational support

Table 2-1: Key activities of GOTT

Source: SQW; GOTT

- **2.15** KA Strategy and Implementation covers the provision of the **KAGF**. It also provides **community** development support through building and managing the **KA Network** across the GOTT client base, managing events and workshops that support sharing of best practice and encourage applications to KAGF. Another important activity area relates to influencing the **policy** environment for KA management and exploitation to reduce barriers and drive incentives, produce best practice guidance including the Rose Book. A full list of publications by GOTT is provided in Annex G.
- 2.16 Key activities under KA Capability and Partnerships include: TTSP team which provides advice and practical support directly to clients to identify and progress KA opportunities, including accessing additional external specialists (procured via GOTT's 'Dynamic Purchasing System');²⁸ KACE which helps to upskill public sector personnel to understand and handle KAs through training (e.g. events, bootcamps, workshops, online material). The KACE team manages a pilot programme, the KA Strengthening Programme (KASP), which provides funding for selected GOTT clients to recruit a KA Manager for two years who will work closely with GOTT.
- **2.17** Further information on KAGF and TTSP is provided in the box below.

²⁸ To be clear, GOTT use the DPS to support their TTSP capability. The DPS provides a way of increasing GOTTs capacity and capability by drawing down relevant sector-specific expertise in support of individual projects that TTSP may be working on.



The Knowledge Asset Grant Fund (KAGF)

KAGF provides up to £250k of funding to support the development of public sector-owned Knowledge Assets. These innovation projects should take these assets beyond business as usual to unlock their full potential. There are three streams of grants available:

- Explore grants up to £25k to help explore the potential of KAs
- Expand grants £25,001 to £100k for projects with established potential
- Extend grants £100,001 to £250k for projects sufficiently developed to require a significant investment to achieve proportionate benefit.

Eligible activities are broad and include: market research; technical development; expert advice; IP protection; and protecting staff time for KA development. Applicants are supported by GOTT's independent panel of innovation experts who provide helpful feedback on how to exploit KAs with the goal of benefitting the UK.

Technology Transfer Strategic Partners (TTSP)

GOTT's TTSP team of experts has knowledge across the full spectrum of commercialisation and KA exploitation activities. The team works with clients on a case-by-case basis to provide a range of support, including help to:

- identify KAs that could generate wider economic, financial and/or societal benefits
- evaluate and protect these KAs
- develop and action exploitation plans for KAs.
- **2.18** There are also **cross-cutting** activities relating to client communications ('MarComms'), analysis, contract management and operational support (e.g. monitoring, budget, CRM, risk, Advisory Board support, HR, central co-ordination) and management of the UKI2S relationship.
- **2.19** The above activities are expected to lead to a range of **<u>outputs</u>** i.e. direct effects from the activities undertaken that can be identified and monitored. The key GOTT outputs are as follows:
 - For TTSP, evaluation of client KA opportunities and then targeted support from GOTT based on client and KA needs. This may include; progression by stage of KA management, i.e. 'identification', 'protection' (where relevant) and 'exploitation' (supporting clients to develop KAs for market). Where required, the TTSP team can access additional external specialist expertise from GOTT's supplier list (DPS).



- The KAGF outputs are the grants awards to client applicants (including unique clients and first-time applicants); and the outputs and conclusions from the project being funded.
- There are also skills related outputs through KACE support (e.g. training through workshops and events).
- The community activities lead to outputs such as engagement of clients in 'community of practice';²⁹ and KA Network members.
- **2.20** GOTT also aims to influence policy and so key outputs here relate to the development of guidance on good KA management (e.g. Rose Book, GOTT Guides such as Guide to IP & Confidentiality); sign-posting and influencing content of cross-government guidance documents; appointment of Senior Responsible Owners (SROs) or equivalent senior managers responsible for KA management and exploitation in clients;³⁰ and development of KA management strategies in clients.

Intended outcomes and impacts

- 2.21 The above outputs relating to funding, incentives, guidance and other support translate into outcomes i.e. changes in the behaviour, capacity and performance of people, organisations and markets. These are realised over the short-medium and long term depending partly on the variation in clients at different stages of maturity in their journey to exploiting KAs, and the highly risky, uncertain and long pathway from concept to wider application and/or commercialisation. Importantly, funding and the TTSPs' work will both lead to KA decision-making and may lead onto further KA development towards market.
- **2.22** The **short-medium term outcomes** include: increased confidence in GOTT to deliver support and advice on KAs within organisations; increased enthusiasm for the wider KA agenda; increased profile and/or traction on KAs within organisations. There are also expected to be better incentives for organisations and individuals to pursue KA opportunities, these incentives provide a feedback loop which generates further enthusiasm and traction on KAs.
- 2.23 The above outcomes are expected to lead to increased knowledge and awareness amongst public sector organisations of the KAs they hold and their value; and more organisations developing dedicated KA management support capability (e.g. innovation function) or engaging with other organisations to access such capabilities. In turn, this is expected to result in greater capability/maturity of public sector organisations and individuals to identify, protect and exploit their KAs.

³⁰ Named individuals within an organisation with clear senior responsibility for the organisation's KA Management Strategy and showing active engagement.



²⁹ A community of practice (CoP) is a group of people who share a common concern, a set of problems, or an interest in a topic and who come together to fulfil both individual and group goals. CoP often focus on sharing best practices. <u>https://www.communityofpractice.ca/background/what-is-a-community-ofpractice/</u>

2.24 This improved maturity of organisations is expected to lead to **longer-term outcomes** such as increased investment in developing public sector KAs through KAGF;³¹ and more exploitation of KAs through commercialisation routes e.g. licensing, spinouts, joint ventures – and non-commercial transfer of KAs within the public sector. More broadly, there is expected to be increased influence on wider government priorities (e.g. data commercialisation and an innovative public sector).

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- **2.25** These longer-term outcomes are expected to contribute to a range of *social, economic and financial impacts* such as income/returns from licensing IP, spinouts, etc., increased productivity across government (and the wider economy), increased Gross Value Added (GVA); environmental (and other social) benefits; and knowledge spillovers e.g. through the movement of people across organisations.
- **2.26** The longer-term outcomes and impacts are also anticipated to bring about a *culture change for KA management across the public sector*, although it is recognised that this takes time and it is not something that GOTT can do alone. It requires commitment from the top in government and other public sector organisations.
- **2.27** Finally, it is common evaluation practice to set out some of the **key assumptions** that enable (or possibly hinder) the theory of change i.e. from a theoretical perspective what may influence how, and to what extent, GOTT realises intended outcomes and impacts.³²
 - GOTT resource (funding and staff) is sufficient to meet corporate and policy objectives
 - There is sufficient interest and demand from public sector organisations for GOTT to ensure take up of activities
 - GOTT activities are implemented as planned to generate intended outputs
 - There is capacity within client organisations to engage with GOTT support and more widely in KA development
 - There is potential to create and promote good incentives for client organisations and individuals to work on KAs
 - There is scope for learning and sharing of best practice to be embedded within client organisations on KAs
 - Stakeholder organisations (non-GOTT clients) are willing to help to influence policy on KAs.

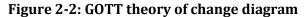
³¹ KAGF is expected to lead to changes in culture, KA decision-making, and some KAs moving closer to market. This may involve more support from TTSP, more funding from KAGF and/or external sources. ³² These assumptions can also be stated in the opposite way so they are interpreted as hindering the progression towards benefits (e.g. 'GOTT resource is **not** sufficient to meet corporate and policy objectives').

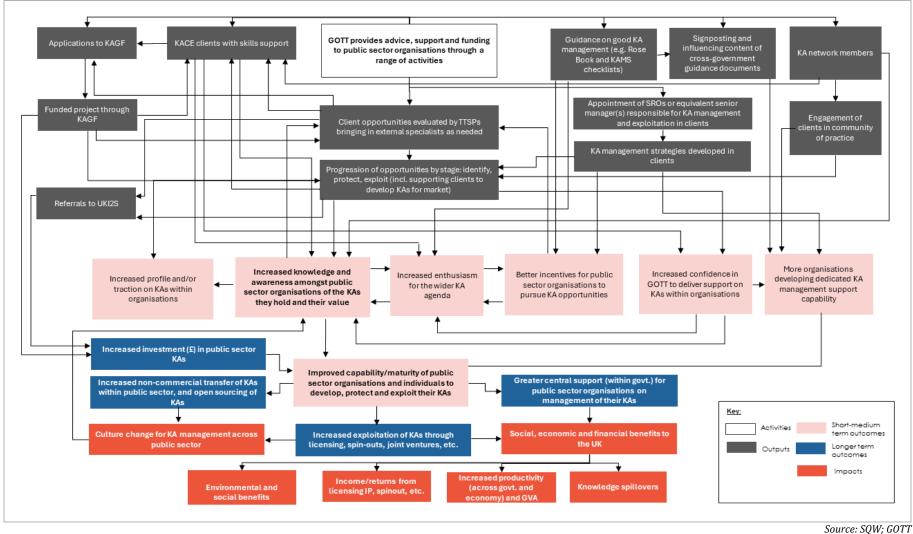


Figure 2-1: GOTT logic model

INPUTS		OUTPUTS		
 £30m total budget over three years (2022/23-2024/25): Grant funding Research projects Events External Expertise GOIT staffing 30 GOIT staff across Salford (HQ), London and Cardiff GOIT Advisory 	Iechnology Iransfer Strategic Partners (ITSPs) Provide advice and practical support directly to clients to identify and progress KA opportunities. Have ability to access external specialists and to recommend Rapid Response Awards Knowledge Asset Grant Fund (KAGF) Manage KAGF, award grants to public sector KA projects for exploiting their potential and further development towards exploitation readiness, with support from the KAGF panel (total £10m grant fund available over 3 years) Knowledge Asset Capability Enhancement (KACE) Upskilling of public sector personnel to understand and handle KAs through training (events, bootcamps, workshops, online training material). Knowledge Asset Strengthening Programme (KASP) - funding for a limited number of GOIT clients to allow them to recruit a dedicated KA Manager for two years (pilot	 Client opportunities evaluated Client opportunities with targeted intervention Client opportunities accessing services from delivery partners/external expertise Progression of opportunities by stage: identify, protect, exploit Referrals to UKI2S Applications for KAGF (incl. unique clients and first-time applicants) Funded projects through KAGF Access for clients to skills support (workshops, events, etc.) 	 Increased confidence in GOTT to deliver support and advice on KAs within organisations Increased enthusiasm for the wider KA agenda Increased profile and/or traction on KAs within organisations Increased knowledge and awareness amongst public sector organisations of the KAs they hold and their value Greater capability/maturity of public sector organisations and individuals to identify, protect and exploit their KAs More arganisations developing dedicated KA 	Social, econom Culture change for
UK Department for Science, Innovation and Technology (DSIT) provides governance, policy and other support HM Treasury (Balance Sheet Team) Other public sector partners with existing expertise in	initiative) Communities Build and manage KA network across the GOTT client base, manage events/workshops that support sharing best practice and encourage applications to KAGF Policy Activities to reduce barriers and drive incentives, working across government to influence those that own the levers for change - produce best practice guidance including the Rose Book Cross-cutting: Client communications (MarComms), analysis, contract management & operational support (incl. deliverables & tracking, budget, CRM, risk, Advisory Board support, HR, central	 Engagement of clients in community of practice KA network members Guidance on good KA management (e.g. Rose Book and KAMS checklists) Sign posting and influencing content of cross-government guidance documents Appointment of SROs by client organisations KA management strategies developed in clients 	 More organisations developing dedicated KA management support capability (e.g., Innovation function) Greater central support for public sector organisations on management of their KAs Better incentives for public sector organisations to pursue KA opportunities Increased investment (£) in public sector KAs through KAGF and UKI2S Increased exploitation of KAs through commercialisation e.g. licensing, spin-outs, joint ventures 	Culture change for KA management across public sector
(A (e.g. IPO)	co-ordination, UK InnovationScience andSeed Fund relationship management, etc)	 gov.ukwebsite users Followers/engagement on Linked-in Management information (and budgeting) Reporting and governance Staff support & resources 	 Increased non-commercial transfer of KAs within public sector, and open sourcing of KAs Increased influence on wider government priorities (e.g. data commercialisation and an innovative public sector) 	

Source: SQW





3. GOTT client portfolio

Key findings

- **GOTT supports a diverse portfolio of client organisations** across the breadth of the public sector. These organisations are of different scales and vary in their maturity in relation to KA management. This diversity is illustrated in the client typology developed as part of this evaluation.
- **GOTT has supported over 100 organisations** in some capacity, engaging with over 900 individuals. These organisations included ministerial departments, non-departmental public bodies, executive agencies, and other public bodies.
- A total of £10.5m of KAGF funding has been awarded to 110 projects between October 2021 and March 2024. There has been a steady increase in the funding awards across the financial years. Just over half of all applications were successful.
- **Through TTSP, GOTT has supported 57 client organisations across 166 projects**. The vast majority of these projects were initiated in 2023 as a result of the recruitment and growth of the TTSP team during this time.
- The KA Network has engaged 154 individuals across 51 organisations. The vast majority of these individuals are from client organisations, with just under one-half of the client organisations that GOTT has engaged with to date represented on the KA Network. There are also representatives of other public bodies with an interest in KA exploitation who actively participate in the network.
- GOTT's activities cover the full range of KAs and all stages of the KA management process. Looking at support provided to date, there is evidence of a skew towards projects at the earliest stages of KA management, meaning that the focus of GOTT support to date has been on helping KA-related projects "get off the ground". This is not surprising considering GOTT's role, objectives, engagement mechanisms, and the varying levels of maturity across the client portfolio.
- Across TTSP projects, the most common types of KAs are: software; know-how and expertise; data and information; invention; and non-software copyright.
- **3.1** This section provides an overview of the portfolio of clients supported by GOTT by the end of March 2024, specifically in relation to: the scale of support provided to clients; the types of clients supported (including the maturity of these organisations); and the types of KAs involved. The analysis is informed by monitoring data up to end March 2024 provided by GOTT, as well as other publicly available data. Some data in relation to clients and activities

were not available at the time of this evaluation, and so this section provides a partial picture of the client portfolio.

Overview of GOTT clients

Typology

- **3.2** GOTT was set up to support a large number of diverse clients across different areas of the public sector, working with a wide range of KAs at different stages of maturity. In order to demonstrate the diversity of the (potential) client base and the projects, we have developed a **client typology** which is set out in Figure 3-1. This includes a range of indicators to categorise the client organisations and projects supported by GOTT, based on the following:
 - **Client characteristics (organisational level)** which potentially influence the type/level of engagement with GOTT and/or their potential for KA management/exploitation, comprising:
 - key characteristics (e.g. organisation type, location, policy domain/sectors)
 - maturity in relation to KA management and exploitation (e.g. whether they have a KA management strategy or a KA register, have appointed an SRO, and have an active role within the KA Network)
 - **Type and maturity of projects (project level)**, including the types of KA involved, stage of project, partners/stakeholders involved, type of value delivered (economic, financial, social), and route to exploitation. Note that one client may have several projects at different levels of maturity.
- **3.3** This typology served as a theoretical framework for the evaluation and is intended to provide a tool for profiling GOTT clients and projects going forward. Further detail on the typology is provided in Annex D.
- **3.4** At the time of the evaluation, GOTT did not routinely collect data on all of these indicators, but some data were available in relation to: organisation type; maturity of KA management; KA type; and stage of project.³³ Descriptive analysis of these indicators is presented in the subsections that follow, alongside other data to assess the scale of GOTT activity.

³³ Note also that GOTT is tracking a range of maturity indicators across a subset of its client base.

Figure 3-1: Client typology

1. Client characteristics						
Key characte			Maturity of KA mana	gement		
Organisation type	type locations boadcount (budget) strategy or Register or Owner (SPO)					Active KA Network Member(s)
type Policy domain / sector						
2. Type & maturity of project/initiative KA types Partners/stakeholders, e.g. public sector, academia, industry Type(s) of value (economic, financial, social) Route to exploitation						
KA typ	es	Stage	Partners/stakeholder e.g. public sector, academia, industry	(economic	of value c, financial, Ro cial)	ute to exploitation
				Some da	ata available at the t	ime of the evaluat

* Where available/relevant

** Where available/relevant, no. of staff from: Government Science and Engineering Profession; Government Analysis Function; Government Digital and Data; Knowledge and Information Management profession; other researchers

Client organisations supported by GOTT

- **3.5** By end of March 2024, GOTT has supported around 100 organisations in some capacity, including ministerial departments, non-departmental public bodies, ALBs, executive agencies, and other public bodies. Across these client organisations, GOTT has engaged with over 900 individuals. This demonstrates the breadth of GOTT's reach.
- **3.6** These organisations are of different scales and vary in their maturity in relation to KA management. Figure 3-2 shows the total headcount (FTE equivalent) for a sub-set of GOTT clients for which data are available, demonstrating the considerable differences in scale.

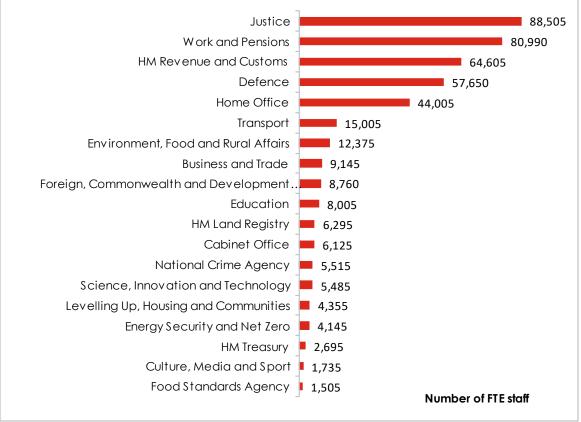


Figure 3-2: Total number of FTE staff employed by a subset of client organisations

Source: ONS <u>Public Sector Employment Data</u> December 2023

3.7 The number of staff in specific professions and functions can also potentially influence engagement with GOTT, and the potential for KA management and exploitation. Table 3-1 provides a breakdown of headcount by the key professions and functions relevant to KAs for a sub-set of GOTT clients in the Civil Service sector.³⁴ This again demonstrates the differences in scale and focus of activities across the client portfolio, though the data do not include all of the wider public sector clients that GOTT engages with such as some of the ALBs.

³⁴ Including the GOTT client organisations for which ONS data were available. Note this only includes Civil Service and excludes Public Service.

	Hea	dcount by profess	Headcount by function		
Organisation	Science and Engineering	Knowledge and Information Management	Digital, Data and Technology	Analysis	Digital, Data & Technology
Animal and Plant Health Agency	575	0	15	0	30
Cabinet Office	100	55	1,345	135	1,415
Centre for Environment, Fisheries and Aquaculture Science	455	0	55	500	55
Defence Science and Technology Laboratory	2,775	55	0	1,045	0
Department for Culture, Media & Sport	5	10	30	145	30
Department for Education	5	25	1,020	605	1,090
Department for Environment Food and Rural Affairs	1,045	55	940	545	1,005
Department for Levelling Up, Housing and Communities	0	75	185	270	210
Department for Transport	185	75	1,210	415	1,185
Department for Work & Pensions	515	455	4,250	685	4,370
Department of Health & Social Care	1,850	40	450	245	450
Driver and Vehicle Licensing Agency	0	0	805	0	760
FCDO Services	0	70	105	0	105
Food Standards Agency	135	5	55	50	55
Foreign, Commonwealth & Development Office	0	70	470	50	470
Government Actuary's Department	0	0	[c]	185	[c]
Government Internal Audit Agency	0	0	5	0	5
Government Property Agency	0	0	30	0	0
Health and Safety Executive	515	25	100	65	100

Table 3-1: Civil service headcount by profession and function

	Headcount by profession			Headcount by function		
Organisation	Science and Engineering	Knowledge and Information Management	Digital, Data and Technology	Analysis	Digital, Data & Technology	
HM Courts and Tribunals Service	0	15	330	60	385	
HM Land Registry	0	0	700	30	700	
HM Prison Service	0	[c]	0	10	0	
HM Revenue and Customs	0	50	2,720	835	3,975	
HM Treasury	0	15	60	230	60	
Home Office	110	95	1,820	575	1,650	
Intellectual Property Office	365	5	245	60	255	
Medicines and Healthcare products Regulatory Agency	350	25	75	80	80	
Met Office	755	10	335	0	1,495	
Ministry of Defence	8,075	855	2,535	1,370	3,345	
Ministry of Justice	0	140	1,470	765	1,430	
National Crime Agency	0	0	265	0	265	
Office of the Public Guardian	0	10	0	0	0	
Rural Payments Agency	0	0	0	45	0	
UK Health Security Agency	1,480	[c]	325	0	325	
UK Hydrographic Office	25	15	170	0	200	
UK Space Agency	15	[c]	[c]	[c]	5	
Valuation Office Agency	0	15	10	60	10	

Note: [c] = confidential and suppressed due to small numbers of between 1 and 4. Source: ONS Civil Service Statistics 2023

- **3.8** Where KAs are derived from R&D active public sector organisations, the potential for KA exploitation can be related to its R&D expenditure (e.g. investing in the development of new technologies will create potential commercialisation routes). We note that this is not always the case and GOTT's remit is wider/extends beyond R&D-active client organisations. ONS publish data on UK government net expenditure on R&D and knowledge transfer activities (aggregated), which covers some of the GOTT client organisations.³⁵ Across these organisations, annual R&D and knowledge transfer expenditure varied between £7 million and £6.2 billion, with the top three organisations accounting for 95% of the total. Whilst this gives an indication of the differences in scale and maturity across the client base, these figures should be interpreted with caution because:
 - the ONS data only cover a sub-set of GOTT clients, and these organisations do not fully align with the monitoring data (e.g. ONS records expenditure for UKRI overall and includes data for BEIS which has since been restructured;³⁶ and much of UKRI R&D funding gets passed on to universities with responsibility for KA exploitation – but universities are not in scope for GOTT support).
 - there is evidence from GOTT of some clients actively engaging in knowledge asset management without such net expenditure recorded.

³⁵ <u>UK Government net expenditure on R&D and knowledge transfer by department, 2011 to 2022</u>. Note that these figures include primarily R&D expenditure, with data on knowledge transfer expenditure available only for five of the client organisations (UKRI=£229m; DCMS=£5m; BEIS=£3m; HSE=£1m; FSA=£1m).

³⁶ In 2023, BEIS was split to form the Department for Business and Trade (DBT), the Department for Energy Security and Net Zero (DESNZ) and the Department for Science, Innovation and Technology (DSIT).

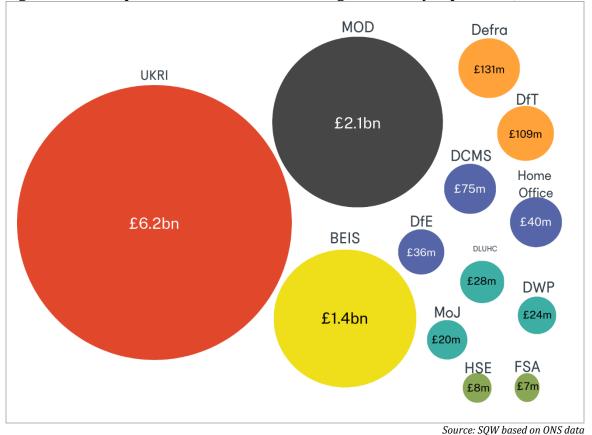


Figure 3-3: Net expenditure on R&D and knowledge transfer by department, 2022

- **3.9** In terms of maturity in relation to KA management, GOTT's monitoring data indicate that 17 of the c.100 clients whom GOTT has supported so far have appointed a Senior Responsible Officer (SRO) with clear responsibility for KAs.
- **3.10** As outlined in Section 2, GOTT provides a range of support to the organisations it engages with. Below, we have analysed the available monitoring data for three key streams of activity: KAGF, TTSP³⁷ and the KA Network.

Support through KAGF

3.11 A total of £10.5m of KAGF funding has been awarded to 110 projects³⁸ across 11 funding rounds (between October 2021 and March 2024).³⁹ The number of successful projects and the funding awarded by financial year is shown in Figure 3-4, indicating a steady increase across the years. In total, there have been 199 applications to KAGF, of which just over half

³⁷ Note that there is some overlap between KAGF and TTSP, with some KAGF projects also being supported through TTSP. Of the 166 TTSP projects, 105 were associated with KAGF applications (and 87 of these were successful in getting funding).

 ³⁸ Including only projects that were approved by the independent assessment panel for funding which was subsequently drawn down, i.e. excluding any that were withdrawn or terminated.
 ³⁹ Including four rounds in 2021/22, three in 2022/23, and four in 2023/24.

(55%) were successful and the majority of the remainder were either ineligible or not approved for funding.⁴⁰

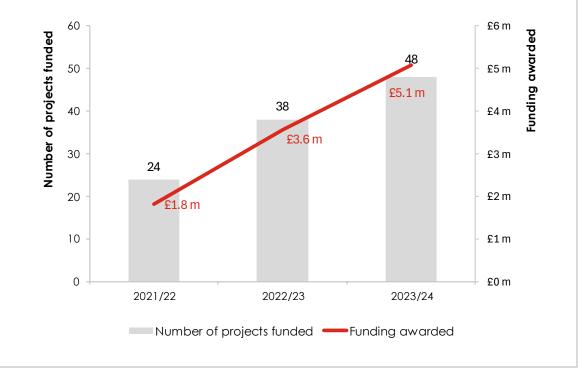


Figure 3-4: Funding awarded by financial year

3.12 KAGF funding has been awarded to 40 different organisations. One-quarter of all funded projects were led by the National Physical Laboratory (25%), followed by the UK Atomic Energy Authority (9%) and the Science and Technology Facilities Council (8%). These three organisations account for around one-half of the awarded funding (48%).

Support through TTSP

3.13 Through TTSP, GOTT has supported 57 clients on 166 projects. The vast majority of these projects were initiated in 2023 (Table 3-2), as a result of the recruitment and growth of the TTSP team during this time. The organisations with the most projects are the National Physical Laboratory (22), the UK Atomic Energy Authority (18), and the Health and Safety Executive (10) – collectively accounting for just under one-third (30%) of all TTSP projects.

Table 3-2: TTSP projects by year

	2022	2023	2024 (Jan- March)
Number of TTSP projects initiated	21	139	6
Source: GOTT monitoring data (May 2024)			

⁴⁰ There were also a small number of applications that had been withdrawn, terminated, or were pending decision.

Source: GOTT monitoring data (May 2024); n=119 projects

KA Network

3.14 The KA Network has engaged 154 individuals across 51 organisations. Of these, the vast majority (148 individuals from 46 organisations) are from client organisations. As a maturity indicator, this shows that just under one-half of all client organisations (i.e. the c. 100 organisations currently receiving GOTT support) are represented on the KA Network. The highest number of representatives are from the National Physical Laboratory (15 individuals), followed by the Environment Agency (8 individuals) and NHS England (7 individuals). The KA Network has also engaged representatives of other public bodies with an interest in KA exploitation who actively participate in the network by exchanging advice and sharing enthusiasm with other members.

Type and maturity of KAs

- **3.15** GOTT's remit covers the full range of KAs as set out in the Rose Book, from software and data to know-how and inventions. Across these, the support provided by GOTT covers all stages of the KA management process. Monitoring data give an indication of the *stage* of KAs associated with both TTSP and KAGF projects, but data on the *types* of KAs are collected only for TTSP.
- **3.16** Data on KAGF and TTSP indicate that most of the support has gone to projects at the earliest stages of the KA management process. This is not surprising considering GOTT's role and objectives, and the varying levels of client maturity.
- **3.17** KAGF includes three grant streams: 'explore', 'expand' and 'extend' (in the order of project maturity). The breakdown of projects across these is shown in Figure 3-5, with fewer projects at the more mature stages.

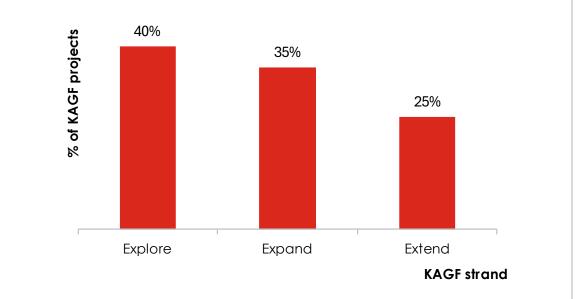
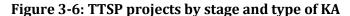
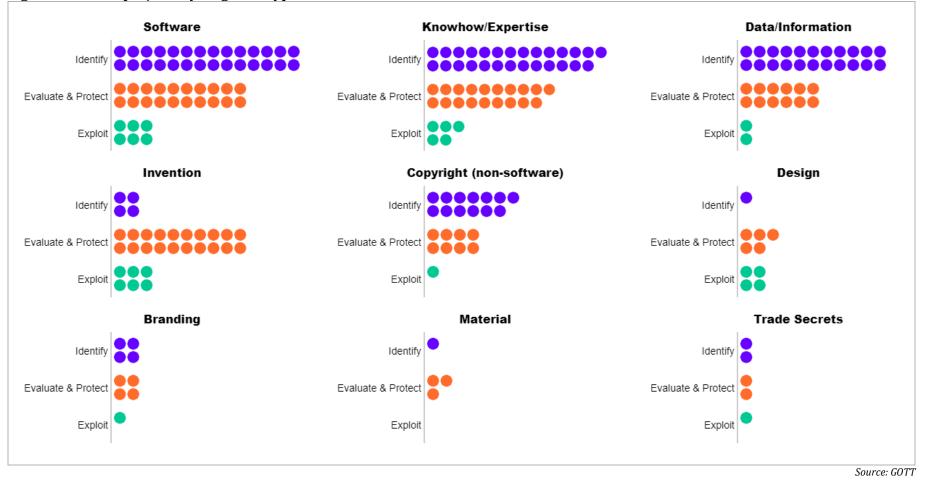


Figure 3-5: KAGF projects by grant stream

Source: GOTT monitoring data (May 2024); n=119 projects

3.18 Figure 3-6 maps the TTSP projects by type of KA, and the stage of KA exploitation process (note there is overlap across these, i.e. one project can involve several types of KAs, and one KA can spawn more than one project). The most common types of KAs across TTSP projects are: software; know-how and expertise; data and information; invention; and non-software copyright. The majority of projects are at the 'identify' or 'evaluate and protect' stages, with only 13 projects that have made it to the 'exploitation' stage.





4. Environment for managing and exploiting knowledge assets

Key findings

- According to stakeholder consultations the profile and importance of KAs has been on the rise in recent years. The consultation evidence suggests that the interest, awareness and capabilities of public sector organisations for managing, developing and exploiting KAs varies substantially.
- Stakeholders and clients (interviews and online survey) identified the following key issues/barriers for organisations to realise the value of KAs:
 - > lack of headcount/budget to effectively manage KAs
 - > the nature of the public sector budgeting cycles and organisational priorities
 - > identifying potential KAs, and their value, in the first place
 - > lack of skills and expertise (e.g. technical, legal and commercial skills)
 - > lack of external incentives to invest in KA management and exploitation.
- The qualitative feedback from stakeholders highlighted some further relevant issues: the **potential conflict between innovation and entrepreneurial "spirit" versus government and public service**; the **high level of staff churn within government** that hinders progress on KA activity; and that **changing culture and behaviours (policy and organisation levels) is a long-term game**.
- Most GOTT client consultees thought that managing, developing and exploiting KAs was important for their organisations to produce social, economic and financial benefits.
- Clients embedded learning and knowledge sharing on KAs within their organisations in different ways, from no set process or formal route to exploitation, to more structured processes and personnel dedicated to this activity.
- Most stakeholder consultees thought that GOTT was set up to address the barriers identified in the Getting Smart and Mackintosh reports. In addressing these barriers, GOTT objectives were considered to be the **provision of good practice, funding, incentives and support on KAs** to government departments and their public bodies.

4.1 This section provides consultees' perspectives on the environment (i.e. interest, awareness and capabilities) for managing and exploiting KAs in government and other parts of the public sector. This includes the key issues and barriers in realising the value of KAs. It also presents feedback on GOTT's objectives and its alignment with other actors in the KA landscape. The findings in this section are based on the views of GOTT clients, stakeholders and staff.

Interest, awareness, capabilities and barriers

- **4.2** Overall, stakeholders thought that the environment for managing, developing and exploiting KAs was very mixed in terms of the interest, awareness and capabilities of public sector organisations. The profile and importance of KAs was generally perceived to be on the rise. However, the picture varies substantially across public sector organisations. At one end of the spectrum there are "mature" (and engaged) organisations with senior management that *"get it"* and drive the KA agenda hard, and at the other end there are, in the view of one consultee, *"vast chunks of government where they do not have a clue"* about KAs. The interest, awareness and capabilities depend on the organisation, stage of the commercialisation journey, and the type⁴¹ and/or maturity of KA.
- **4.3** According to one stakeholder consultee, there appears to be a more mature approach taken by those who work in a science/technical environment who are aware of the IP associated with their work, versus those at the other end of the spectrum who are less mature in their practice (e.g. know-how, information). The latter group generally have less history and culture in terms of the importance of developing and exploiting KAs. According to another stakeholder, there is a key difference between organisations set up to do R&D, and those that create assets that are for themselves (e.g. to deliver services). This distinction could affect models for exploiting KAs, commercialisation routes, capability requirements, timescales, etc.
- **4.4** Interestingly, there was consensus amongst stakeholders and clients (interviewed and online survey) on the key issues/barriers for organisations to realise the value of KAs. Table 4-1 presents the results of the 10 main barriers reported. The top five most cited were as follows: lack of headcount/budget to effectively manage KAs; the nature of the public sector budgeting cycles and organisational priorities makes it difficult to commit to the long-term investment required; identifying potential KAs, and their value, in the first place is difficult; lack of skills and expertise (e.g. technical, legal and commercial skills); and lack of external incentives to invest in KA management and exploitation.
- **4.5** There was general consensus amongst GOTT staff consultees on the key barriers relating to public sector KAs prior to the establishment of GOTT in 2022. These related to the five barriers originally identified in the Getting Smart (2018) report: 'identification, insight, infrastructure, incentives and funding' (see paragraph 2.4). There were mixed views on which barriers were more acute. For example, some thought that awareness and skills of KAs were

⁴¹ Depending on the type of KA it may be more or less easy to put it into a commercial vehicle.

considered more important versus those who stated that *"we never have prioritised one [barrier] over another"* partly because barriers can vary by organisation.

Barrier	Count of "yes" responses, by			
	client survey	client consultations (n =24)	stakeholder consultations (n = 16)	Total (n=63)
	(n = 23)			
Identifying potential KAs, and their value, in the first place was difficult	5	11	8	24
A lack of skills and expertise (e.g. technical, legal or commercial) to effectively manage our knowledge assets	4	10	7	21
A lack of the headcount/budget to effectively manage our knowledge assets	16	15	6	37
Limited central support available across government to improve management of KAs	10	5	2	17
A lack of individual buy-in to invest in KA generation, management and exploitation	4	9	3	16
A lack of buy-in at senior levels in the organisation to invest in KA generation, management and exploitation	5	6	5	16
A lack of external incentive in the face of competing pressures to invest in KA generation, management and exploitation	8	6	9	23
The nature of the public sector budgeting cycles and/or organisational priorities makes it difficult to commit to the long-term investment	14	8	3	25
Little or no pre-existing culture of KA exploitation in the UK public sector	N/A	11	7	18
Engaging in KA agenda is not perceived as important	N/A	7	5	12
None – there were no barriers	1	0 Source: SOW a	0 nalysis of GOTT consult	1 ations and survey

Table 4-1: Barriers to realising the value of knowledge assets (top 5 shown in italics)

Source: SQW analysis of GOTT consultations and survey

- **4.6** In this context, stakeholder consultees highlighted some related points.
 - **First, there is a potential conflict between innovation and entrepreneurial spirit versus government and public service**. There is a perceived tension that is unresolved between how to incentivise and reward KA activity, whilst at the same time stay within the principles of public life i.e. in the view of one stakeholder, *"civil servants not getting rich on the back of government stuff"*. The organisations which had embraced KA exploitation activity tended to view this as another route to achieve their governmentgiven organisational goals, rather than an independent activity in its own right.
 - Second, there is a high level of churn in staff within government (e.g. two-year job cycle) that makes it challenging to progress KA activity. It is rare to find people who stay long term in a particular role and build up the skills that could progress the KA agenda within departments and other public sector bodies. We understand from GOTT that this is an issue with civil servants in central government but less applicable to other public servants within the rest of GOTT's client base.
 - Third, culture change takes a very long time to bring about (politically and organisationally), so substantial changes in behaviours cannot be expected straight away it is a long-term game. A few consultees reported it can take decades, as has been the case in the university knowledge exchange and technology transfer scene in the UK and internationally. Also, in certain sectors and/or technology areas there can be confidentiality issues associated with KAs (e.g. from a security or commercial angle) which can mean no or limited culture of sharing within or outside of organisations.
 - Consultees suggested that organisational change in some organisations will not be significant until there is a change within senior government / the parent departments to monitor, celebrate and expect KA exploitation activity. This suggests that culture change needs to be "forced" from the top down, as well as nurtured from the bottom up.
- **4.7** Notwithstanding the above, most GOTT client consultees thought that identifying, managing, developing and exploiting KAs was very important for their organisations mainly to derive social, economic and financial benefits. However, it should be noted that most client consultees were involved in or (in a minority of cases) had a formal role in KA management or exploitation and so their views may not be representative of the wider organisation. Around half of the clients interviewed had an organisational strategy and/or policies for KA management and exploitation, a minority had an SRO for KAs in their organisation and have (or are part of) a dedicated team to manage KA exploitation.
- **4.8** Not surprisingly, there were different ways in which learning and knowledge sharing on KAs is embedded within consultee organisations. Some did not have a set process or formal route, but did this on a more ad hoc or "as we need it basis", or it was not done as a separate activity but more a side effect of other work. For some, KA is not a readily recognised concept and the

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exploitation process is not thought of in the Rose Book way. For others, there is *"already a deep culture for doing these things"* and a more *"solid structure"* in place with staff allocated to identify and exploit KAs (making use of patent lawyers, IP specialists and "ambassadors"), and frequent training for scientists.

4.9 One client consultee acknowledged that a "strategy will only ever go so far, so the embedding bit is really important: there is something in a formal document but actually it is a combination of a lot of things that are embedded across the organisation".

GOTT's objectives

- **4.10** Most stakeholder consultees thought that GOTT was set up to address the five barriers identified in the Getting Smart report (2018). To address these barriers, GOTT's objective was to provide good practice, funding, incentives and support to government departments and their public bodies.
- **4.11** Furthermore, the consultations with GOTT staff found that there was clear understanding of the objectives of GOTT: 'to increase engagement in, and outcomes from, KA exploitation across the public sector' by raising the profile of KA exploitation; making it simpler to engage in KA exploitation; creating engaged and energised communities; delivering targeted interventions; and establishing GOTT's credibility in leading KA exploitation culture change within public sector.
- **4.12** GOTT staff considered these objectives to be appropriate in relation to the above identified barriers. In addition, GOTT staff considered the organisation as *"the answer to all the pillars"* in the Mackintosh report: 'good practice', 'incentives' and 'support' (see below paras. 4.14-4.15).

GOTT's alignment with other actors active in KAs

4.13 Overall, the majority of stakeholder consultees thought GOTT was fairly well aligned with and complemented existing government funded organisations /activity in the KA space. They pointed to the "drive" within GOTT to ensure it aligns with other organisations involved in KA management and exploitation. For example, working with Innovate UK (to deliver the KAGF); UKI2S, Ploughshare; and GOTT partners to deliver the training programme.

The '5-3-5' matrix – link between barriers, pillars and the objectives of GOTT

4.14 How the <u>five</u> barriers in the Getting Smart report, the <u>three</u> pillars identified in the Mackintosh report, and the <u>five</u> objectives of GOTT are linked (the '5-3-5' matrix) is set out in Annex C (see Figure C-1). This identifies the work undertaken by GOTT under its five objectives and how these align with the barriers and the pillars.

4.15 We make the following observations from a look across the matrix:⁴²

- GOTT's objectives and related activities address all five barriers and three pillars to varying degrees
- There is some overlap of GOTT activities across the five objectives (this is expected given the inter-related nature of the objectives)
- Importantly, there is activity under the 'incentives' pillar and across all five objectives.⁴³
- **4.16** Going forward, we think the 5-3-5 matrix can be a useful tool to update to ensure GOTT's work continues to focus on the problems in the public sector that it was designed to ameliorate.

GOTT's development and challenges

- **4.17** It is important to recognise that GOTT has evolved over time and encountered particular challenges as it developed its operations. These are distinct from the barriers to KA exploitation across government described in the Mackintosh report (see Section 2 and above). GOTT documentation identifies the following challenges:⁴⁴
 - The diversity of public sector organisations (e.g. in terms of age; scale; budget; function; geographical location; maturity of KAs) means no intervention can operate on a "one-size-fits-all" basis and that each approach must be tailored to suit the needs of the organisation⁴⁵
 - **The UK public sector is not one entity**, with no central communications platform or directory/handbook for the government landscape. Thus, as GOTT has grown and developed, it has had to adopt and create new platforms for information collection, retention and communication.
 - **Recruitment of staff has taken time**, recruiting staff with technology transfer and IP commercialisation experience has been challenging. This has meant that by the end of the first year of its operations, GOTT had just two TTSP staff plus Deputy Director and one KACE recruit. By the end of its second year, GOTT added a further three TTSPs. The TTSP team is only expected to reach its full complement in early summer 2024.

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⁴² In making these observations, we recognise that it is not possible to capture from the matrix alone the depth or complexity of the work undertaken by GOTT.

⁴³ Examples of GOTT's work on incentives: producing relevant guidance on local incentives mechanisms; working with clients to think creatively about organisational incentives and rewards to innovators. GOTT also undertakes cross-government policy-related work which is less "product" focussed but essential.

⁴⁴ GOTT Growth and Barriers – updated (June, 2024).

⁴⁵GOTT has used activities such as the grant fund to help start conversations with people at all levels across government.

4.18 In addition to the above, GOTT highlights the following two points. First, the dominance of various government policy agendas has meant that public sector organisations have often been *"resistant to pivoting to an approach which is KA-aware"*. As a consequence, GOTT had to be *"creative"* in aligning the KA agenda to a wide variety of different government policy agendas. Second, it has been challenging for GOTT to find ways to connect with senior leaders across government as their *"time is extremely limited and circumscribed by competing priorities"*.

5. Process evaluation

Key findings

- In terms of the design of GOTT, the overall stakeholder feedback suggests that GOTT's position within DSIT provides a reasonable balance between ability to influence policy and bring about widespread cultural change, whilst delivering practical support.
- There are clear and well-defined management and governance structures and arrangements in place to implement its strategy. These appear to be robust in relation to the objectives of GOTT. The monitoring and reporting systems are fit-for-purpose and have enabled the tracking of activity with clients. In this context, the development and use of the bespoke 'All-GOTT Data Asset' (ADA) CRM tool has been exemplary.
- Most of the client feedback suggests that the support received from GOTT so far has been effective. In nearly all cases, the client survey respondents and consultees rated the activities delivered by GOTT highly. This not only related to the type of support on offer (e.g. KAGF, expertise and advice, KASP and KACE) but also to the way support was delivered by GOTT (e.g. by a knowledgeable and approachable team).
- Most stakeholders expressed positive views of GOTT's work with clients and more widely in influencing government policy/KA agenda. However, a small minority of stakeholders thought that GOTT should be more targeted and strategic in the delivery of its support.
- **5.1** This section presents the findings of the process evaluation, i.e. the design and delivery of GOTT to date. This includes an assessment of GOTT's management and governance, as well as its monitoring and reporting processes. It also assesses how *effective* the GOTT support delivered to clients has been. In keeping with guidance set out in the Magenta Book (2020),⁴⁶ the focus of this section is on *learning from how GOTT has been delivered so far, including what worked well, and less well (and why).* The findings are based on our review of GOTT documentation, an online survey of GOTT clients, and consultations with GOTT staff, clients and stakeholders.

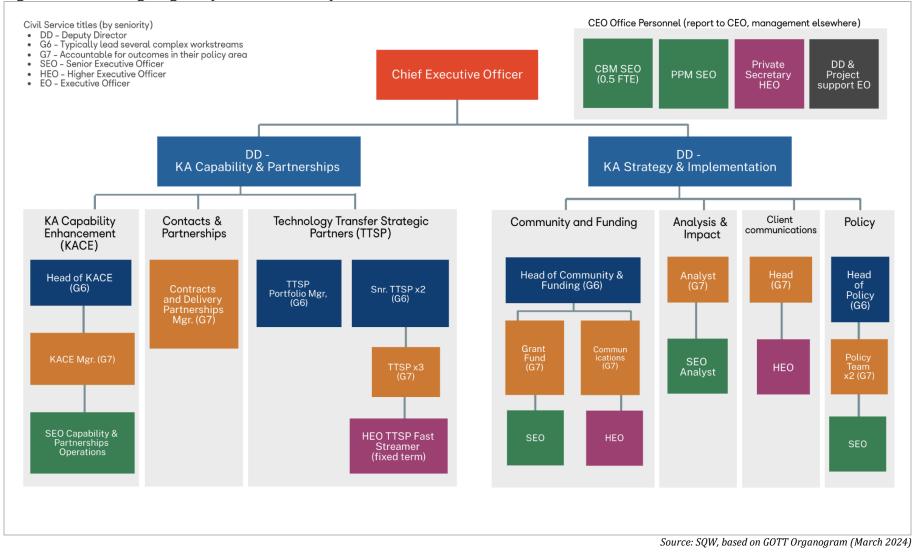
⁴⁶ HM Treasury (2020) <u>Magenta Book - Central Government guidance on evaluation</u>.

Design of GOTT

- **5.2** This sub-section presents an overview of the design and set-up of GOTT. It draws primarily on documentation provided by GOTT as well as consultations with GOTT staff, focusing on the following topics:
 - Management and governance arrangements
 - Monitoring and reporting
 - Reflections on the design of GOTT.
- **5.3** As outlined in Section 2, the HM Treasury Knowledge Assets Team (KAT) undertook work to establish GOTT as a cross-Government unit within (former) BEIS. Following departmental changes to BEIS in 2023, GOTT became a directorate within DSIT with a total budget of £30m over three years (2022/23 to 2024/25). In March 2024, GOTT had nearly 28 FTEs across different civil service grades. Figure 5-1 (overleaf) depicts GOTT's management and governance structures. This includes the personnel and functions relating to the different grades/roles of staff.⁴⁷

⁴⁷ Institute for Government (2017) Grade structures of the civil service

Figure 5-1: GOTT organogram (as of March 2024)



Management and governance

- **5.4** The management and governance arrangements for GOTT, including roles and responsibilities, are outlined below. This covers GOTT's role in DSIT, the Advisory Board, the Sections and Functions of GOTT, shared functions and working arrangements. This is based on GOTT management information and our discussions with GOTT staff.⁴⁸
 - **<u>GOTT's role in DSIT</u>**: GOTT is part of DSIT and is designated as a directorate within this department. This means GOTT's CEO is also a DSIT Director with membership of DSIT Senior Leadership Team as well as duties and responsibilities shared with fellow DSIT Directors. The GOTT CEO reports to a Director General who leads the Science, Innovation and Growth (SIG) group of directorates, and who, in turn, reports to DSIT's Permanent Secretary. GOTT completes regular corporate returns such as monthly delivery and risk reporting.
 - Advisory Board: GOTT's Advisory Board consists of a group of professionals with expertise and experience in GOTT's fields of activity. They serve as advisors, 'critical friends' and sometimes champions for GOTT's work, but they do not govern or regulate GOTT and are not responsible for approving GOTT's agenda. The Advisory Board meets 3-4 times per year and members are occasionally asked to participate in additional meetings as required. The members are from HM Treasury, Cabinet Office, Department for Energy Security and Net Zero (DESNZ), UK Research and Innovation (UKRI), Office for National Statistics (ONS), Intellectual Property Office (IPO), University College London Business, and other organisations.
 - <u>GOTT sections</u>: Under the CEO, GOTT is organised into two collaborating and mutually supportive sections, each led by a Deputy Director. Capability and Partnerships leads on work with clients (both via TTSP and KACE functions) and also manages the cross-GOTT 'Delivery Partners & Contracts' function. Strategy and Implementation also provide client services (via the 'Communities and Funding' and 'Communications' functions), in addition to having responsibility for the Policy and Analysis functions.
 - <u>Shared functions</u>: GOTT's HR, payroll, estates, IT etc. are managed centrally by DSIT or by cross-government providers. GOTT has an embedded Analysis function (often a shared resource in DSIT) and buys out the time of a specialist (G7) who is a member of the DSIT Commercial team. There is a Client Communications function in GOTT which underpins the work of the delivery teams and GOTT products. An Events Specialist has been used for large external facing events. These functions work across all the other teams within GOTT as required, as does the CEO Office which provides secretariat and other central functions within GOTT.
 - **Working arrangements:** GOTT operates out of three DSIT offices Salford (head office), London and Cardiff. GOTT uses the MS Teams platform (same as DSIT colleagues) which enables working across and between offices and homes. Staff are required to work 40-60%

⁴⁸ Government Office for Technology Transfer Context and Configuration (May, 2024).

of their time from the office. Collaboration across and between teams takes place through a network of formal and informal meetings at different levels.

5.5 GOTT staff feedback suggests that the internal set-up of teams, structures and processes are appropriate and function well. In particular, the skills and activities of each team are clearly linked to the objectives of that team. There was a minority view amongst GOTT consultees that the internal structures and ways of working could be refined to enhance delivery. For example, there may be an opportunity to strengthen the linkages between the TTSP and the Communities and Funding teams (specifically KAGF), because the support provided by these teams is considered *"highly complementary"*. This was supported by evidence from a client consultation where a *"lack of connection"* between the grant funding and the non-financial support was highlighted. In particular, the client reported that an opportunity they had developed with help from GOTT had been unsuccessful in a KAGF application. This came as a surprise as they expected that GOTT would have provided them with a better indication of the likelihood of success.⁴⁹

Monitoring and reporting

- **5.6** In terms of monitoring and reporting, GOTT's Analysis team collects data relating to KPIs on a quarterly basis. Information on GOTT's KPIs is tracked "live" where possible. Progress against KPI targets is collected and presented by the Analysis team and reviewed quarterly alongside narrative covering GOTT's progress in affecting culture change; developing KA opportunities, etc.
- **5.7** Our review of the monitoring data found that GOTT has achieved or made good progress against certain KPI targets, such as the appointment of SROs. However, the targets around exploitation outcomes and KA strategy development have not been achieved. This is likely due to the timeframes required for KA exploitation and the cultural change needed to engage an organisation in developing a KA management strategy. Furthermore, the KPI targets were set early on, when GOTT had limited awareness of the baseline position (and what targets would be realistic).
- **5.8** To measure workstream-level performance, each team within GOTT has their own set of KPIs. Performance against these KPIs show an increasing reach and awareness across their client organisations and wider audience. From 2022/23 to 2023/24, the number of unique client organisations applying to KAGF increased, and targets have been met. Engagement with GOTT resources on gov.uk and social media websites (LinkedIn and X, formerly Twitter) has also continued to increase and been on target. However, performance against other metrics relating to KAGF (i.e. number of applications and projects funded by type) fell short of targets in 2023/24 (87 applications vs 155 target; 50 funded projects vs 120 target. This is likely due to GOTT tightening the application criteria (e.g. by excluding NHS Trusts) as well as the fact that the first KAGF round may have absorbed any latent demand. Despite not meeting these targets, GOTT has actually increased the total number of organisations funded.

⁴⁹ We understand from GOTT that "there is a deliberate decision to run TTSP and KAGF as separate functions to protect the panel process and ensure that TTSP support does not guarantee success with KAGF."

- **5.9** It is worth noting that, given GOTT's early stage of delivery, the KPI metrics are recognised by GOTT as being somewhat experimental in nature, and do not yet provide a robust reflection of the effectiveness of a particular team within GOTT. GOTT is expecting to revisit its KPIs as part of the next phase of development to ensure all elements are relevant and align with the future strategy. DSIT does not require GOTT to report against KPIs, but GOTT regards them as important in measuring and communicating its progress in key areas.
- **5.10** Most of GOTT's data (including those which feed into the KPIs) is held in the All-GOTT Data Asset (ADA) customer relationship management (CRM) tool, developed in-house.⁵⁰ ADA was created in order to address the limitations of using multiple Excel spreadsheets for data storage, by centralising information within a relational database managed with Microsoft Dataverse. Unlike generic CRM systems, ADA is tailored specifically for GOTT's operational requirements, featuring structured data storage that differs from the unstructured format of a typical data lake.
- 5.11 There are around 100 fields of substantive information within ADA, describing GOTT's activities and clients. These fields collectively describe five main categories of object: Organisations with which GOTT has interacted; People with whom GOTT has interacted; Activity carried out by GOTT, in terms of contact with customer organisations (emails, phone calls, meetings etc); TTSP projects which are described with dates, project stage, text descriptions and other data; and KAGF applications, with data on dates, value of grant, status etc.
- **5.12** We understand from GOTT that parts of the system are still in development with additional data being incorporated, including on GOTT's Dynamic Purchasing System and KAGF Competitions. The data contained in ADA is inputted manually by data creators who are members of the GOTT team. Data consumers in GOTT can access the data via a suite of bespoke dashboards implemented in PowerBI,⁵¹ typically to gain insight into recent activity, identify required actions, analyse trends, and inform strategy.

Reflections on the design of GOTT

- **5.13** In our view, there are clear and well-defined management and governance structures/ arrangements in place for the implementation of GOTT's strategy. These appear to be robust in relation to the objectives of GOTT. The monitoring and reporting systems are fit-forpurpose and have enabled the tracking of activity with clients. In this context, the development and use of the bespoke ADA CRM tool has been exemplary. We recognise that processes have evolved over time (and continue to do so), reflecting GOTT's recent formation.
- **5.14 A key feature of GOTT relates to its position within DSIT**. The stakeholder consultations highlighted the advantages of GOTT being a standalone unit within DSIT. For example, being within government, and reasonably close to the centre, lends credibility and means that GOTT is well positioned to influence senior people. Moreover, being a relatively self-contained unit (e.g.

⁵¹ https://www.microsoft.com/en-us/power-platform/products/power-bi



⁵⁰ CRM is a comprehensive approach to managing an organisation's interactions with current and potential customers. CRM tools are used to compile data on customers in order to promote organisational objectives.

5.18 The results from the online survey indicate that clients found out about the support available from GOTT mainly through word of mouth, direct approach by GOTT, or from the GOTT website (Table 5-1). This was similar to the clients interviewed⁵² who typically reported GOTT had approached them directly, whilst others contacted GOTT after hearing about them through word of mouth, at an event, or via GOTT's client communications (marcomms) activities. Furthermore,

rather than positioned within an ALB) provides GOTT with more freedom to set its strategic and operational objectives. However, a few stakeholders queried whether GOTT would be able to achieve more operationally (particularly around hands on KA exploitation support) if it were positioned further from government. At present, GOTT is considered a functional unit embedded in a policy unit, which may limit the 'hands on' elements of GOTT support. There is a balance to be struck between GOTT's ability to influence policy whilst achieving 'on the ground results'. That said, most stakeholders thought that by being part of DSIT, GOTT was able to deliver both policy and support clients.

- 5.15 As might be expected, there have been some minor "growing pains" with the start-up and **expansion of GOTT**. Examples highlighted in consultations with GOTT staff include: staff churn; challenges with external recruitment of specialised technology transfer staff; and the need for additional resource to monitor and report progress (e.g. on KAGF projects). However, the consultation evidence also suggests that these issues are (mostly) being addressed as GOTT moves forward.
- 5.16 In this context, the ADA CRM system represents a significant capability for GOTT to manage interactions and data systematically. It is designed with a logical and coherent structure, and is distinct from other solutions operating within government. As such, it has the potential to be a model for similar future implementations across other departments (i.e. a KA which GOTT could exploit). The tool is still in the early stages of its deployment, and there are opportunities for further refinement and expansion to fully capitalise on its capabilities. A list of opportunities for further development of ADA is included in Annex F.

Delivery of GOTT

- **5.17** This sub-section presents the findings on the delivery of GOTT based mainly on client responses and some feedback from stakeholders. It focuses on the following topics:
 - How clients found out about the support available from GOTT
 - In what ways clients have been engaged with GOTT (i.e. activities undertaken)
 - The perceived effectiveness of GOTT activities.

Client awareness and engagement

⁵² The clients interviewed represented a highly aware and reasonably well supported group. They had a range of motivations for engaging with GOTT, reflecting the barriers outlined in Section 4.

GOTT staff and stakeholders pointed out that GOTT has been both *proactive* and *reactive* in engaging with clients. The proactive side has involved the marcomms activities, as well as a significant investment of time and resource to go out and speak with potential clients, talk at events, build new relationships, etc.

5.19 Overall, GOTT's MarComms activities were considered to be effective at "*spreading the word*" and generating a brand image for GOTT. However, recognising the vast breadth of its potential client base, some stakeholders mentioned that GOTT could do more to "*spread the net wider*" to reach less engaged organisations. Clients suggested that not yet engaged organisations may benefit from a 'menu of options' of the support offered.

Table 5-1: How did you find out about the support available from GOTT? Please select all that apply. (n=22)*

Response	Count	%
Word of mouth	12	55%
Directly approached by GOTT	10	45%
Website	7	32%
Event/ Conference - organised by GOTT	5	23%
Event/Conference - not organised by GOTT	2	9%
GOTT's Annual Snapshot Report	2	9%
Social media	1	5%

Source: SQW analysis of GOTT client survey

* Asked if client had direct or indirect engagement with GOTT

- **5.20 Clients had received different levels of support from GOTT based on their specific interest and needs**. Some clients described the amount of support as "*low to medium*" whilst others had received intensive support, for example through regular meetings with GOTT or multiple grants. According to the survey responses, clients had mostly engaged with GOTT through an introductory meeting (in person or online), received further support/advice in conversation with GOTT, had submitted an enquiry or an application to KAGF, or accessed GOTT's published guidance (Table 5-2).
- **5.21** The reasons for engagement reported by client consultees related to the barriers identified within their organisation (see Section 4 for details of these barriers). This included the need to: access funding to progress specific opportunities; seek advice or guidance on a specific project or issue; and access general advice around KA management and exploitation.

Response	Count	%
Attended introductory meeting with members of GOTT (in person or online)	18	82%
Received support/advice in conversations with members of GOTT	17	77%
Submitted enquiry to and/or application to the grant fund	17	77%
Accessed GOTT's published guidance e.g. Rose Book, Managing Public Money concerning KAs, etc.	14	64%
Interacted with GOTT's Gov.UK pages	13	59%
Received site visitors from GOTT	12	55%
Attended GOTT in-person event (such as workshops, GOTT Conference etc.)	11	50%
Provided input/support to GOTT or other GOTT clients	10	45%
Read or engaged with GOTT social media activity (e.g. LinkedIn)	9	41%
Been involved with/ member of the KA Network	8	36%
Been involved in cross-government working supported or facilitated by GOTT	6	27%
Attended a GOTT online teach-in, talk or webinar	5	23%
Accessed specialist expertise specifically through GOTT's TTSP	5	23%
Encountered GOTT at Civil Service Live or other event organised by someone other than GOTT	2	9%

Table 5-2: In what ways have you engaged with GOTT? Select all that apply. (n=22)*

Source: SQW analysis of GOTT client survey

* Asked if client had direct or indirect engagement with GOTT

Effectiveness of GOTT activities

- **5.22** Overall, the client feedback suggests that the support received from GOTT so far has been effective. In nearly all cases, the clients rated the activities delivered by GOTT highly. Underpinning this positive assessment was the quality of the GOTT team and the direct interaction clients have had with them. Most stakeholders also had positive views of GOTT's work with clients and more widely in influencing government policy/KA agenda. However, a minority of stakeholders thought that GOTT should be more targeted and strategic in the delivery of its support, in terms of: (i) the types of organisation it supports; and (ii) the portfolio of support offered.
- **5.23** The following paragraphs provide more detail on the effectiveness of GOTT activities, drawing on feedback from both clients and stakeholders.

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Client feedback

- **5.24** The survey asked clients to rate the effectiveness of different types of support received from GOTT so far, with 0 being 'Not effective at all' and 10 being 'Very effective'. The results indicate that the average rating per activity ranged from 7.2 to 9.3 (with most above 8.0). The highest number of ratings and responses were for the following activities:
 - In-person visits by GOTT staff at the client site •
 - Support/advice in conversations with members of GOTT
 - Meeting with members of GOTT (in-person or online).

Table 5-3: Please can you rate the effectiveness of the support received from GOTT so far with 0 being 'Not effective at all' and 10 being 'Very effective' (n=22)*

Support/advice in conversations with members of GOTT (n=21)9.Meeting with members of GOTT (in person or online; n=21)9.0GOTT at Civil Service Live / other event organised by someone other than GOTT (n=3)9.0Specialist expertise specifically through GOTT's TTSP (n=9)8.0Enquiry to and/or application to the grant fund (n=20)8.1KA Network (n=8)8.1GOTT in-person event (such as workshops, GOTT Conference etc.; n=11)8.1GOTT's published guidance e.g. Rose Book, Managing Public Money concerning KAs, Guide to IP and Confidentiality, etc. (n=16)7.1		Average rating
Meeting with members of GOTT (in person or online; n=21)9.4GOTT at Civil Service Live / other event organised by someone other than GOTT (n=3)9.4Specialist expertise specifically through GOTT's TTSP (n=9)8.4Enquiry to and/or application to the grant fund (n=20)8.5KA Network (n=8)8.5GOTT in-person event (such as workshops, GOTT Conference etc.; n=11)8.5GOTT's published guidance e.g. Rose Book, Managing Public Money concerning KAs, Guide to IP and Confidentiality, etc. (n=16)7.5	In-person visits to your site with GOTT staff (n=14)	9.3
GOTT at Civil Service Live / other event organised by someone other than GOTT (n=3)9.0Specialist expertise specifically through GOTT's TTSP (n=9)8.0Enquiry to and/or application to the grant fund (n=20)8.1KA Network (n=8)8.1GOTT in-person event (such as workshops, GOTT Conference etc.; n=11)8.1GOTT's published guidance e.g. Rose Book, Managing Public Money concerning KAs, Guide to IP and Confidentiality, etc. (n=16)7.1	Support/advice in conversations with members of GOTT (n=21)	9.1
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GOTT in-person event (such as workshops, GOTT Conference etc.; n=11)8.3GOTT's published guidance e.g. Rose Book, Managing Public Money concerning KAs, Guide to IP and Confidentiality, etc. (n=16)8.3GOTT's GOV.UK pages (n=15)7.3	Enquiry to and/or application to the grant fund (n=20)	8.3
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		8.3
Been involved in cross-government working supported/facilitated by GOTT (n=7) 7.	GOTT's GOV.UK pages (n=15)	7.7
	Been involved in cross-government working supported/facilitated by GOTT (n=7)	7.7
GOTT social media activity (e.g. LinkedIn; n=10) 7.3	GOTT social media activity (e.g. LinkedIn; n=10)	7.3
GOTT online teach-in, talk or webinar (n=7) 7.2	GOTT online teach-in, talk or webinar (n=7)	7.2

* Asked if client had direct or indirect engagement with GOTT

5.25 The client survey and consultation feedback provided reasons for the most effective elements of support. Table 5-4 shows the most effective elements of support, as specified by clients, as well as quotes demonstrating why it was important. Importantly, for many clients it was not just what was delivered, but also how it was delivered. For example, clients highlighted that clear

communication from GOTT had been important. This included both mass communication (e.g. via the website and marketing of specific opportunities) and individual communication (e.g. responsiveness to emails, availability for meetings and calls). It also related to the accessibility of support offering, and clear examples of the type of support available.

5.26 Furthermore, **there were numerous examples where the GOTT team themselves were seen as key to the effective delivery of support**. They were described as *"very responsive, pragmatic, forward thinking, solutions orientated"* and as *"extremely helpful and supportive"*. The most effective elements of GOTT support are summarised below with direct interaction with GOTT valued highly.

Support	Summary	Example (client survey and consultation responses)
KAGF	Enabled clients to explore or progress plans, both directly by providing funding, and indirectly by generating interest in KA. A clear signalling effect.	 "Knowing that the funding is available means that there are opportunities that will be noticed and taken forward in the future" (consultee) "Provision of financial support through grants has been incredibly useful in order to explore opportunities on real KA" (survey) "The provision of KA Grant Fund has enabled us to progress our exploitation plans, which would have been impossible to do without the funding" (survey)
KACE and KASP pilot	These were considered effective in overcoming barriers around skills and expertise, although we acknowledge that this support is in its very early stages of delivery.	 "Funding for the KA manager role has been key the role funded by GOTT will make the case that it should be a permanent FTE position" (consultee) "The new KA manager position will help to identify leads and develop internal policies" (consultee)
Expertise and advice	This gave clients a better understanding around how to progress opportunities. One client reported that they had received "invaluable" advice from GOTT regarding establishing a spinout company.	 "The technical support has been vital in order that we can learn how best to approach exploitation and signpost us to partners and further support" (survey) "Highly technical and specialist advice about IP management has been invaluable. To buy-in that resource/expertise would have been a barrier, but to have that available was superb" (survey) "The combination of this [grant support] with the expert advice from conversations with the GOTT Team and contacts enabled the projects funded by the grant to be focused on the most important thing for that stage of development" (consultee)
Networking	This included GOTT events, opportunities for	• <i>"There is nothing quite like being in a cohort of people and the natural knowledge exchange that</i>

Table 5-4: Most effective elements of support



Support	Summary	Example (client survey and consultation responses)
	secondment, and the KA Network. These activities were thought to have helped engage the community, improve cross-government working, and share best practice. Both more and less experienced organisations reported finding this useful.	 happens. It is hard to quantify but it is part of the reason you come to these things" (consultee) "Networking with other organisations e.g. British Museum. This contact has never happened before" (consultee) "They have gone to enormous efforts to engage the community, organise networking opportunities and communicate" (consultee)

Source: SQW analysis of GOTT client consultations

- **5.27** A minority of clients identified activities that had worked less well. These were highlighted in the context of enhancing delivery and were considered as relatively minor points in the overall good work GOTT was undertaking on KAs with clients. For example:
 - There may be more value from networking opportunities if they are grouped around certain themes or challenges this would provide a platform to address issues which are common to certain groups.
 - KAGF processes could be enhanced by adopting quarterly invoicing (instead of monthly), allowing greater flexibility in the spend profile, and allowing for more detail in the application process.
 - There were some suggestions that the support offering could be further broadened and/or deepened depending on their specific needs (e.g. to include legal IP support or a more 'hands on' technology transfer offering). Notwithstanding this, according to one consultee: "GOTT is responding in a sensitive way to what the marketplace is saying".

Stakeholder feedback

5.28 Stakeholders tended to focus on the 'bigger picture' issues around GOTT's design and delivery. In particular, stakeholders noted that **GOTT should be more targeted and strategic in the delivery of its support, in two key ways**. First, in relation to the types of organisation supported, stakeholders perceived that **much of the demand has come from clients that are more 'mature'** in terms of KA management, which limits the potential long-term impacts attributable to GOTT. Second, in terms of the overall support offering, **GOTT's support is perceived by some to be currently too broad and lacking focus** (note this is in contrast to some of the client feedback suggesting that the support offer could be broadened further). The following views from stakeholders illustrate both these points:

"One challenge is that some institutes are very savvy about this and put a lot of demand on GOTT, whereas others might not be so aware or have the resources to push for it... The key organisations



taking up the funding are the ones that are already active and are using the funding for short-term opportunities that were ready to go." (Stakeholder)

"They are trying to do everything. They need to make up their mind about what they want to get from each piece of activity." (Stakeholder).

6. Early benefits of GOTT support

Key findings

- The client consultation and survey evidence indicates progress towards early-stage **benefits**, as a result of the support received from GOTT. These include:
 - 'Softer' benefits increased enthusiasm for the wider KA agenda; increased profile and/or traction on KA; increased knowledge and awareness of KAs; overall better appreciation of the value of KAs; and more confidence in GOTT.
 - 'Harder' benefits KA strategies developed and implemented; improved capability/ maturity to develop, protect and exploit KAs; increased investment in KAs; and progress towards exploitation of KAs.
- There is also some evidence of wider policy related outcomes. GOTT has had some impact on public policy through publications such as the Rose Book as well as driving the policy agenda in government. However, it is still early days for the full impact of this to be evident, and further work in this area is required.
- Feedback from both clients and stakeholders indicates that **GOTT is starting to influence the culture relating to KA management and exploitation in the public sector**. This is being achieved both through the 'ground-up' work with organisations (and associated signalling effect of successful projects) as well as getting 'top-down' buy in from senior leaders in the civil service (e.g. through policy).
- Client consultees identified various factors as being important in enabling benefits to be achieved at the organisation level. These include: securing buy-in throughout the organisation, having sufficient capacity and resource to deliver projects, and the 'baseline' maturity of organisations in relation to KA management. Also, according to stakeholders several factors are likely to influence GOTT's ability to deliver long-term impacts, in particular continued funding for GOTT and development of a long-term strategy.
- Most clients (two thirds) considered the benefits reported to be partially additional
 i.e. the benefits would have happened but not over the same time period or at the same
 scale or quality. GOTT support often helped to accelerate the time to realise benefits.
 Importantly, around one third of clients reported that none of the benefits would
 have been achieved without GOTT support (i.e. full additionality). The stakeholder
 feedback generally support the above findings on partial additionality.
- Overall, GOTT has been effective in progressing towards the achievement of outcomes the findings on additionality are positive and demonstrate the value of GOTT support. It is important to recognise the self-reported (biased) nature of the evidence presented.

- **6.1** This section details the key benefits that have been achieved by GOTT to date and are expected in the future. These can be broadly categorised into organisation level benefits (achieved directly through GOTT support) and wider public sector benefits (many of which are longer-term). The section draws on evidence from the survey of GOTT clients as well as interviews with clients, stakeholders and the GOTT team.
- **6.2** It is important to caveat that the findings presented in this section are based on the self-reported views of clients and stakeholders. They are therefore subject to potential confirmation bias.

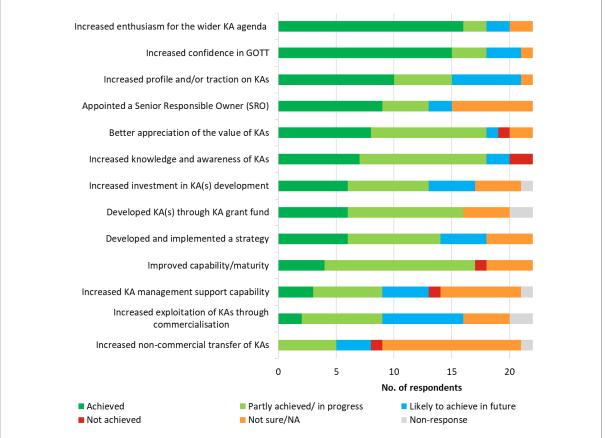
Key benefits

Organisation level benefits

'Softer' benefits

6.3 As might be expected at this early stage in GOTT's life, many of the benefits achieved to date relate to 'softer' outcomes e.g. around knowledge and awareness raising. This was clear in the client survey results, with individuals frequently reporting benefits such as: increased enthusiasm for the KA agenda; increased confidence in GOTT to deliver support; increased profile and traction of KAs within their organisation; and a better appreciation of the value of KAs (Figure 6-1).

Figure 6-1: Which of the following benefits have you achieved or expect to achieve as a result of GOTT support? (n=22 survey respondents*)



Source: SQW. * Asked if client had direct or indirect engagement with GOTT. Note that responses are by individual.

- **6.4 Further detail on these early-stage benefits was provided in the client consultations**. For example, across client interviews the most common benefits achieved were around increased knowledge and awareness of the KAs within their organisation and better appreciation of the value of these KAs. Moreover, when asked about the most significant benefits achieved as a result of GOTT support, many of the responses could be grouped around the following three themes: setting organisational direction and momentum, knowledge development, and networking and collaboration benefits. These are discussed in more detail below.
- **6.5 Setting organisational direction and momentum** was a theme which came up repeatedly in the client feedback. In several client interviews, it was reported that the support from GOTT helped to establish the direction, through both the policy side and its advisory role. It was clear from the feedback that some client organisations were at a reasonably early stage in this process, but GOTT had been important in kickstarting the journey: *"GOTT is helping departments to start on the journey of KA management and exploitation. This includes encouraging thinking about broader potential uses, encouraging less siloed working on projects within departments, and helping relationships between departments" (stakeholder).*
- **6.6** In other cases, organisations had a pre-existing direction and simply required further resource (e.g. through KAGF or KA manager programmes) to implement their plans and *"provide momentum"*. For example, one individual noted that: *"We had the other ingredients to make it work, but not the funding"*. Part of the process of setting the organisational direction and momentum relies on getting buy-in from senior leaders to pursue the KA agenda. Indeed, in some cases GOTT had helped individuals within client organisations to promote their KA management activities internally, which in turn had led to senior recognition of the work.
- **6.7 Knowledge development**, including improved awareness and understanding of KAs and their value, was the key benefit for several consultees. There were some examples of where individuals could point to specific things they had learned, whilst other learning was more generalised, and clearly benefitted clients that were less informed about KA management before engaging with GOTT. For example, one individual reported that: "*[GOTT] have helped me to understand a lot more about what KAs are, what IP management is, and certain dos and don'ts.*"
- **6.8** Finally, benefits associated with **networking and collaboration** were also highlighted. In some cases these were closely linked to the knowledge development theme outlined above (i.e. learning from other organisations working on similar projects). Furthermore, the funding for KA manager role was expected to lead to additional opportunities for cross-public sector learning.
- **6.9** Specific examples of these benefits are detailed in Table 6-1.

Theme	Example	Key relevant outcomes
Organisation direction and momentum	Client organisation had a pre-existing tech transfer capability, but KAGF helped to energise the KA agenda and generate increased profile and traction of KAs. In particular, it was important for bringing new ideas to the fore, and as a result they have two or three new opportunities to license.	Increased enthusiasm for KA agenda Increased profile & traction of KAs
	Client journey around KA management was shaped by GOTT support. They had a good handle on exploiting data but were " <i>further behind on the journey with non-</i> <i>data IP</i> ". GOTT helped them to focus on this and provided key input on practical steps around the exploitation of non-data assets.	Greater capability & maturity to identify, protect and exploit KAs
Engagement with GOTT had helped another client to set an organisation-level expectation that more would be done with regards to KA management and exploitation. This will be achieved by putting new policies and structures in place (facilitated by GOTT- funded KA manager).		Increased enthusiasm for KA agenda Increased profile & traction of KAs
Knowledge development	Client organisation had significant quantity of 'grey data'. GOTT support (via TTSP) gave them a better understanding the value of these data, and suggestions around how they could be accessed and exploited.	Increased knowledge and awareness of KAs and their value Greater capability & maturity to identify, protect and exploit KAs
	Client was aware of a KA with exploitation potential, but had no prior experience of doing this. Conversations with GOTT helped them understand more about what the management of KAs involves and <i>"certain dos and don'ts"</i> around commercial exploitation.	Greater capability & maturity to identify, protect and exploit KAs
	At the lower end of maturity in relation to KAs, client did not previously have the term "knowledge asset" in their <i>"conceptual vocabulary"</i> . Through conversations with GOTT, they now have a better understanding of what KAs are, and improved awareness of the potential KAs within their organisation.	Increased knowledge and awareness of KAs and their value Greater capability & maturity to identify, protect and exploit KAs
Networking and collaboration	A key benefit (expected) for client related to learning from other organisations in the public sector around best practice in on KA management and exploitation. Expected to be achieved through the KA manager funded by GOTT and their interaction with other KA managers.	Greater capability & maturity to identify, protect and exploit KAs

Table 6-1: Examples of 'softer' benefits for organisations

GOTT introduced client to another organisation it has supported. This organisation was seen as mature in relation to KA management: *"those who have been there and done that"*. It was valuable for the client to speak to interact with another, experienced organisation.

Client was introduced to partner organisations to help deliver a project. This saved the client time in finding the right expertise.

Source: SQW based on consultation feedback

'Harder' benefits

- **6.11** Whilst much of the narrative was around the softer benefits, there were also various examples of progress towards 'harder' benefits (either achieved or expected). These include the implementation of new internal structures, roles and processes for KA management, which may provide a more firm indicator of the organisational direction and momentum point mentioned above. They also include progress towards exploitation outcomes and increased investment in KA development.
- **6.12** In terms of the **implementation of new structures**, **roles and processes**, a significant minority of client consultee organisations had appointed an SRO or developed and implemented a strategy for KAs as a result of the support from GOTT. This was also evident in the survey results which showed that just under half (9/22) of client respondents had appointed an SRO whilst over a quarter (6/22) had developed and implemented a strategy for KAs (see Figure 6-1 above). In some cases, these outputs were achieved with indirect support from GOTT, e.g. guided by the recommendations of the Rose Book. In other cases, the change was a result of direct GOTT support. In one example, GOTT funding for a KA manager was expected to lead to new organisational policies to guide KA management. Importantly, these structures and processes put in place will provide the "*framework for future exploitation*". In contrast to the survey and consultation feedback, GOTT monitoring data indicates that only 17 out of around 100 client organisations had appointed an SRO. This suggests that, whilst a minority of client organisations are highly engaged and adopting the key recommendations of the Rose Book, it is not yet mainstream guidance within government.
- **6.13** There were several examples where **GOTT** is helping clients to progress KAs towards exploitation, and a small number of cases where KAs have already reached exploitation. Indeed, of the 22 surveyed clients who had directly interacted with GOTT:⁵³ two had already achieved *commercial* exploitation; seven noted they were making progress towards this; and a further seven were likely to achieve this in the future. Clients were also asked about *non-commercial* exploitation. Five surveyed clients were making progress towards non-commercial exploitation and three were likely to do so in the future (none had achieved this to date). The survey evidence around *commercial* exploitation was backed up by several examples from the consultations which are detailed in Table 6-2. These demonstrate that the commercial exploitation of KAs is most

⁵³ Note the survey reports *individual* responses not organisation level responses.

frequently happening through licensing and spinout activity. This was also evident in the survey results where licensing and spinouts were the most common expected routes to exploitation (12 clients reported each), followed by joint ventures (reported by five).

- **6.14** Feedback indicates that **KAGF has been essential in bringing about the early commercial exploitation outcomes to date**. The organisations reporting this outcome tended to be more science and technology focused, with a history in developing and exploiting KAs such as through protecting IP. In these cases, the funding provided the means by which projects could be progressed, and an incentive to develop new exploitation projects or progress existing ones. Several clients reported that KAGF was the only source of this type of funding for their organisation, and without it projects would be much slower or not happen at all. For organisations with less experience in this area (and potentially different types of KAs), KAGF remains important, but only alongside the policy guidance, expertise and advice provided by GOTT. It is expected that these organisations will take far longer to achieve commercial exploitation outcomes.
- **6.15** There were also **some early signs that GOTT clients are making progress towards the** *non-commercial* **transfer of KAs** within the public sector. For example, one consultee noted that the most significant outcome they achieved through interactions with GOTT was a better understanding of the non-commercial transfer of KAs within the public sector as well as open sourcing. Whilst GOTT support had kickstarted the thinking around non-commercial routes to KA exploitation, it was noted that it would take several years for these ideas to be progressed with tangible benefits. There were some examples where organisations seemed more driven to achieve non-commercial exploitation compared to commercial exploitation. In one instance, the client had approached GOTT to get support around a cross-government exploitation opportunity, which had subsequently developed into a commercial opportunity as well (the client had only previously considered non-commercial exploitation).
- **6.16** Often linked with exploitation, clients also reported **increased investment in KA development**. Across the survey respondents, over three-quarters had achieved this benefit, made progress towards it, or expected to achieve this in the future. Consultation evidence suggests GOTT has had both a direct role (e.g. through KAGF) as well as an enabling role (e.g. in one case GOTT introduced a client to a private investor and in another, UKI2S invested into a project which had previously received KAGF funding).
- **6.17** Examples of the 'harder' benefits are detailed in Table 6-2.

Theme	s of 'harder' benefits for organisations (and Example	Key relevant output / outcome
	Client drew on Rose Book guidance to develop a new KA management strategy and assign SROs . The Rose Book was useful policy as it demonstrated this is something that central government wants them to focus on.	SRO appointed KA management strategy developed
New structures roles and processes	Client recruiting for new KA manager role, funded by GOTT. A key responsibility of this role will be to design and implement new internal policies which both stimulate the identification of new opportunities and also provide a structure to progress these opportunities.	KA management strategy developed (expected)
	By leveraging funding from KAGF and drawing on advice from GOTT as well as a consultant sourced through GOTT, one client reported they had been able to retain ownership of IP and secure a licence deal for it.	Increased exploitation of KAs through commercialisation
Exploitation (commercial and non-commercial)	In another case, GOTT grant funding was used to upgrade a software user interface which directly led to an increase in licence fees of 50% . In this situation the funding was essential to accelerate the development of the software ahead of competitors.	Increased exploitation of KAs through commercialisation
	A consultee from another organisation noted that they now have two or three opportunities to license IP as a result of KAGF funding.	Increased exploitation of KAs through commercialisation (expected)
	In some cases, commercial exploitation was being directly enabled through the new policies which had been implemented with GOTT support. For example, one consultee reported that their organisation had recently approved a new spinout policy . The need to develop and implement this policy came about due to KAGF driving more KA exploitation ideas : <i>"there is</i> <i>a longer funnel of ideas that might be spinouts"</i> .	Increased exploitation of KAs through commercialisation (expected)
	GOTT support was " <i>critical</i> " for one organisation to progress their largest exploitation project. GOTT reviewed documentation and provided advice which achieved buy in from senior leaders. Key benefit was the internal " <i>sign off and go ahead</i> " to progress the exploitation project . At the time	Increased exploitation of KAs through commercialisation (expected)

Table 6-2: Examples of 'harder' benefits for organisations (and progress towards these)

Theme	Example	Key relevant output / outcome
	of interview the client was about to launch a commercial competition to find an exploitation partner. GOTT has helped to shape how the client engages with industry.	
	GOTT policies and the Rose Book helped client to understand non-commercial tech transfer . Noted that the outcomes of this will " <i>happen</i> <i>over years not months</i> " and so not yet achieved.	Increased non-commercial transfer of KAs within public sector, and open sourcing (expected)
	Consultees from one organisation have signed an agreement to share the knowledge and technology behind one of their knowledge assets with an overseas government . The involvement of GOTT was important in achieving this as they were seen as " <i>trusted</i> <i>advisors</i> " who gave the organisation the confidence to move forward and helped to accelerate the process.	Increased exploitation of KAs through commercialisation (expected)
Investment	One example where project that had received funding from KAGF has gone on to secure investment from UKI2S to develop an investment pitch.	Increased investment in public sector KAs
	In another example, the client had been introduced to UKI2S by GOTT, and it was hoped that this may lead to investment in the future.	Increased investment in public sector KAs (expected)
	There were many examples where clients reported that KAGF had directly increased investment in public sector KAs. In some cases this had led to follow on investment from other sources.	Increased investment in public sector KAs

Source: SQW based on client consultation feedback

Key enabling factors

- **6.19** Many of the **factors which enabled benefits to be achieved were directly related to the design and delivery of GOTT**, and were highlighted in Section 5. This includes the competency of GOTT's team, the type of support offered (e.g. combination of policy, advice and funding), and the networking opportunities provided.
- **6.20** In addition, there are a number of **factors relating to the client organisations themselves** which were regarded as enablers. These align with the key barriers for KA management (covered in Section 4), including the following:

- **Maturity in relation to KA management:** As would be expected, clients perceived a high 'baseline' level of maturity in relation to KA management to be an important enabler. For example, having a "*well aligned culture*" was highlighted by one consultee, whilst another reported a pre-existing internal incentive scheme.⁵⁴
- **Internal capacity and resource availability:** Several consultees noted that having sufficient time and resource available to dedicate to KA management was a key enabling factor.
- Achieving buy-in throughout the organisation: This includes buy-in from senior management, as well as more junior civil servants who are handling and developing KAs. Importantly, the two did not always coincide: several consultees reported that, whilst they and some of their peers had bought into the KA agenda, the message had failed to penetrate more senior levels of their organisation. This conflict is important, and indicates the case for sustained efforts to change both policy and attitudes.

Cross public sector benefits

Policy influence

6.21 GOTT has already had an impact on government policy, including through the publication of the Rose Book. Most clients and stakeholders seemed to be aware of the Rose Book and held it in high regard:

"The Rose Book is a real unifier and GOTT is starting to get a community of practitioners." (stakeholder)

"The Mackintosh report and Rose Book have been incredibly useful. The Rose Book helped [organisation] to make the argument for technology transfer." (client)

6.22 The overarching message in relation to policy is that GOTT has made good progress so far, but it is still very "*early days*" and activity in this area should continue. Whilst consultees agreed that GOTT is "*driving the policy agenda*" in government, this is clearly a longer-term activity where further effort is required: "*GOTT must continue to drumbeat its messaging and its funding. This will lead to more engagement, and policies will develop in areas where they don't yet exist.*" Indeed, several consultees reflected that GOTT has not been established for long enough to see a significant policy impact. Moreover, one consultee highlighted various areas that the policy side needs to cover, which are not currently set out in the Rose Book or elsewhere, including: stimulating demand within industry, attracting investment; and aligning the KA agenda to the UK and government's broader priorities.

 $^{^{54}}$ One client consultee reported that their organisation had a scheme whereby employees were given £1,000 if their idea contributes to a patent.

Culture change

- **6.23** GOTT's policy-related activity, combined with other forms of support, is beginning to have an impact on the culture around KA management in the public sector. There is evidence of this happening from:
 - the 'ground-up', i.e. where GOTT is working with organisations and achieving culture change through the 'softer benefits' outlined earlier in this section *and* where specific projects successfully reach exploitation and so have a signalling effect around the potential for KA exploitation
 - the 'top-down', i.e. where policy rolled out centrally brings about a shift in attitude towards KA management amongst senior leaders in the civil service. Also, the very fact that GOTT has been established shows it is a government priority and this signals importance.
- **6.24** Both routes lead to similar benefits around **signalling the potential benefits of KA management and exploitation, and changing attitudes towards risk.** For example, one client consultee, at an ALB, highlighted that a key barrier to (commercial) KA exploitation was the perceived risk of this activity in the Ministerial department that the organisation reports to. For them, a benefit of GOTT's activities was therefore to provide examples of other organisations across government undertaking KA-related activity. In turn, this was expected to positively influence the degree of risk deemed acceptable by the Ministerial department.

Delivering social, economic and financial value

- **6.25 GOTT's activities are also beginning to deliver social, economic and financial value**. Whilst specific examples of this were highlighted (e.g. commercialisation outcomes mentioned earlier in this section), it was widely acknowledged that **this will take time to achieve in a more widespread and tangible way**. In these early stages, consultee feedback focused more on financial value rather than social or economic value. This is partly due to the nature of projects supported by KAGF examples provided for this study tended to focus on commercial exploitation through licensing and spinouts.
- **6.26** A key message echoed across clients and stakeholders was that "success breeds success". Ultimately, the more evidence of success stories that GOTT has, the easier it will be to deliver culture change. However, this should not mean focusing solely on organisations that are more mature in relation to KA management where there are opportunities for 'quick wins' in terms of commercial exploitation only. Examples of (i) projects from *less mature* organisations (particularly those which are not science and innovation focused), and (ii) delivering value to the public sector through *non-commercial* exploitation, are also essential.

Factors influencing GOTT's ability to deliver long-term outcomes

- **6.27** From the discussion above, it is clear that GOTT's objectives to significantly influence policy, drive a shift in culture, and generate social, economic and financial value are going to take time to fully come to fruition. Therefore, GOTT requires continued support from central government.
- **6.28** Most importantly, **achieving impact relies on the continued funding of GOTT**. For example, stakeholders highlighted the uncertainty in long-term commitment to such initiatives that the UK political cycle introduces. Meaningful change in this area will take years (one consultee indicated up to ten years), and meanwhile GOTT must provide consistent support to build and maintain momentum. This was also recognised at the client level: *"We are at such an early stage in this process that if GOTT went away, we would be a bit stranded. It needs a long-term approach."*
- **6.29** Relatedly, achieving meaningful impact **relies on action from the top of government to stimulate culture change**. It is important for government to give clear indication that KA exploitation is now actively expected, rather than merely allowed. Such a shift would require organisations to justify why they did *not* take an exploitation route rather than why they *should*. This, in turn, would improve engagement and buy-in from both senior people in public sector organisations and lower grade civil servants responsible for implementing changes in delivery.

Early assessment of additionality

- **6.30** A key question in evaluation is the level of additionality associated with support provided, that is the extent to which the benefits that the support has brought about would not have occurred otherwise. This sub-section provides details of client and stakeholder reflections on the levels of early benefit additionality associated with GOTT support.
- **6.31** It is important to highlight that the evidence presented below is based on self-reported views of consultees and so subject to biases. Also, the number of responses is small.

Client feedback

- **6.32** Two thirds of clients (25/38)⁵⁵ reported that the benefits achieved were partially additional. The results suggest that benefits were realised more quickly: just over half of clients (20/38) reported that the benefits would have taken longer to achieve in the absence of GOTT support. The results also indicate some scale and quality additionality, but only in a small minority of cases.
- **6.33** Importantly, **nearly a third of clients (12/38) perceived benefits to be fully additional**, i.e. they considered that benefits would not have been realised at all without GOTT support. Feedback from client consultees provided insights into why this is the case, with some noting that KAGF was fully additional and there would have been no other funding sources available, while

⁵⁵ Note that, where possible, survey responses were combined with consultation feedback on additionality. Survey responses are by individual whereas consultation responses are by interview.

one consultee reported that the advice *and* funding available together from GOTT was unique and could not be sourced elsewhere.

6.34 Table 6-3 provides a breakdown of the additionality responses. In interpreting this data, note that: (i) consultees could report more than one type of partial additionality (e.g. scale *and* timing); (ii) not all client consultees provided an assessment of additionality, hence n=18 for client consultations.

Scale of additionality	Count of responses by	
	client survey (n=20)*	client consultations (n=18)
Full additionality: None of the benefits would have happened	6	6
Partial additionality: The benefits would have happened but not over the same time period or at the same scale or quality	13	12
• Speed additionality: The benefits would have happened anyway, but they would have taken longer to achieve	8	12
• Scale additionality: The benefits would have happened anyway, but at a smaller scale	3	5
• Quality additionality: The benefits would have happened anyway, but they would have been of lower quality	2	3
No additionality: The benefits would have happened anyway, over the same time period and at the same scale and quality	1	0

Table 6-3: What do you think would have happened to the benefits achieved <u>without</u> GOTT support? (Client survey and consultations)

Source: SQW * Question asked of those who achieved at least one benefit

Stakeholder feedback

6.35 Stakeholder feedback broadly aligned with the findings above, with the emphasis on partial additionality and some examples of full additionality. The majority of stakeholders considered GOTT support to have accelerated benefits being achieved. Stakeholders perceived GOTT support to have supported a *"degree of acceleration"* amongst clients with regards to progress towards KA benefits. Likewise, some stakeholders reported that GOTT support had improved the quality and scale of benefits achieved, with elements of speed, scale and quality additionality demonstrated in the quote below.

"I think probably things would have carried on and matured, but much of it would have taken a lot longer. I think a lot of things would have been missed. I think there would be some institutes that probably would never bother to do this sort of thing and I think some assets might have gone out of the door without getting the appropriate returns to the institutes that develop them." (stakeholder)

- **6.36** Some stakeholders also identified full additionality with GOTT support. Stakeholders perceived that it would be unlikely that client organisations would have had the knowledge, capacity or funding to focus on KAs. For example, one stakeholder noted that GOTT support has provided funding, capabilities and wider awareness raising activities which, collectively, have brought KAs to clients' attention, rather than it *"getting lost in the noise"*.
- **6.37** That said, **some stakeholders recognised that additionality will vary across clients** based on their knowledge and awareness of KAs. Two stakeholders raised questions regarding the level of additionality of KAGF activities in particular (note, both had direct involvement with this stream of support). One perceived that KAGF is primarily attracting organisations that were already engaged in the KA agenda, and would have pursued these projects without the support from GOTT: *"There isn't enough evidence that organisations that didn't think about KAs are now thinking about them".* The second backed this, suggesting partial additionality in most cases: *"Every single project they have funded would have got funding elsewhere, although it might have taken a bit more time. GOTT funding has not been transformative".*
- **6.38** Despite this perspective on KAGF from a few stakeholders, the overall findings on additionality of GOTT support are positive.

7. Conclusions

- **7.1** Knowledge assets (KA) are important for the UK and other modern economies because of their potential to contribute to productivity, economic growth and wider societal benefits. KAs are intangible assets such as R&D, IP, data, brands, designs and business processes. They can be categorised into the following broad areas (Rose Book, 2024): information, innovation, creative, reputational and knowhow.
- **7.2** The Mackintosh report highlighted the need to better understand and exploit the potential of the UK's public sector KAs. It announced the creation of a new unit within (former) BEIS. In 2022, GOTT was established with the corporate objective 'to increase engagement in, and outcomes from, KA exploitation across the public sector'. GOTT as a dedicated unit within DSIT has a cross-government mandate to raise awareness on the value of public sector KAs to help them identify, protect and exploit their KAs, by providing advice and support to organisations.
- **7.3** This government-wide approach to encouraging and supporting KA management can be considered pioneering 'a first' in the UK. There is no prior model for how a unit with GOTT's unique role and corporate objectives should be set-up and run.
- **7.4** This evaluation report, undertaken around two years since the establishment of GOTT, is a timely early assessment of the design and delivery of GOTT, and the progress it has made towards realising early outcomes. This took into account that GOTT is in the early stages of development, and so has had a relatively short amount of time working with clients.
- **7.5** In presenting our conclusions, we highlight the following:
 - The key findings of the evaluation have been informed by the experiences and opinions of client and stakeholder consultees (56 individuals) and client respondents to the online survey (23 individuals), and so reflect the perceived relative effectiveness of specific engagement with GOTT. The self-reported nature of the feedback may be associated with some confirmation and/or attribution bias.
 - The client sample for both the survey and the interviews was provided by GOTT, drawing on their client database. This group of individuals had therefore received support from GOTT, and their views may differ from organisations that have had no or very little engagement with GOTT (the latter group were not captured in this evaluation).

Environment for knowledge assets

- **7.6** The consultation evidence suggests that the profile and importance of KAs has been increasing in recent years. However, the interest, awareness and capabilities of public sector organisations for managing, developing and exploiting KAs varies substantially. Both stakeholders and clients identify the following as key issues/barriers for organisations to realise the value of KAs:
 - lack of headcount/budget to effectively manage KAs
 - the nature of the public sector budgeting cycles and organisational priorities
 - identifying potential KAs, and their value, in the first place
 - lack of skills and expertise (e.g. technical, legal and commercial skills)
 - lack of external incentives to invest in KA management and exploitation.
- **7.7** The stakeholder feedback also highlighted some further relevant issues: the potential conflict between innovation and entrepreneurial "spirit" versus government and public service; the high level of staff churn within government that hinders progress on KA activity; and that changing culture and behaviours (policy and organisation levels) is difficult and a long-term game.
- **7.8** Most stakeholder consultees thought that GOTT was set up to address the barriers identified in the Getting Smart and Mackintosh reports. In addressing these barriers, GOTT's objectives were considered to be the provision of good practice, funding, incentives and support on KAs to government departments and their public bodies. This is a positive finding indicating stakeholders are clear on the rationale and objectives of GOTT.

GOTT client portfolio

- **7.9** GOTT supports a diverse portfolio of client organisations across the breadth of the public sector. These organisations are of different scales and vary in their maturity in relation to KA management. This diversity is illustrated in the client typology which served as a theoretical framework for the evaluation, and is intended to provide a tool for profiling GOTT clients and projects going forward.
- **7.10** By March 2024, GOTT had supported around **100 organisations** in some capacity, engaging with over 900 individuals. These organisations included ministerial departments, non-departmental public bodies, executive agencies, and other public bodies.
- **7.11** GOTT provides a range of support to the organisations it engages with. By end of March 2024, GOTT had:
 - Awarded £10.5m of KAGF funding to 110 projects, with a steady increase in the funding awards across the financial years.

- Supported 57 clients across 166 projects in the TTSP strand.
- **Engaged 154 individuals across 51 organisations in the KA Network**. The vast majority of these individuals were from client organisations, with just under one-half of the client organisations represented on the KA Network.
- **7.12** GOTT's activities cover the full range of KAs and all stages of the KA management process. Across TTSP projects, the most common types of KAs were: software; know-how and expertise; data and information; invention; and non-software copyright. Looking at support provided through KAGF and TTSP to date, there is evidence of a skew towards projects at the earliest stages of KA management. This is not surprising considering GOTT's role, objectives, engagement mechanisms, and the varying levels of maturity across the client portfolio.

Process evaluation

- **7.13** In our view, there are clear and well-defined management and governance structures/arrangements in place for the implementation of GOTT's strategy. These appear to be robust in relation to the objectives of GOTT. The monitoring and reporting systems are fit-for-purpose and have enabled the tracking of activity with clients. In this context, the development and use of the bespoke ADA CRM tool has been exemplary. We recognise that processes have evolved over time (and continue to do so), reflecting GOTT's recent formation.
- 7.14 Overall, the consultation evidence suggests that GOTT's position within DSIT provides a reasonable balance between ability to influence policy and bring about widespread cultural change, whilst delivering practical support. There have been some minor "growing pains" with the start-up and expansion of GOTT. For example: staff churn; challenges with external recruitment of specialised technology transfer staff; and the need for additional resource to monitor and report progress (e.g. on KAGF projects). However, the consultation evidence also suggests that these issues are (mostly) being addressed as GOTT moves forward.
- **7.15** In terms of delivery, most of the client feedback suggests that the support received from GOTT so far has been effective. In nearly all cases, the client survey respondents and consultees rated the activities delivered by GOTT highly. Underpinning this positive assessment was the type of support on offer (e.g. KAGF, expertise and advice, KASP and KACE) and also the way support was delivered by GOTT, in particular the quality of the GOTT team and the direct interaction clients have had with them. The GOTT team was considered to be knowledgeable and approachable. GOTT was found to be both proactive and reactive in supporting clients.
- **7.16** Most stakeholders expressed positive views of GOTT's work with clients and more widely in influencing government policy/KA agenda. However, a minority of stakeholders thought that GOTT should be more targeted and strategic in the delivery of its support. Reflecting on the stakeholder (and client) feedback, GOTT may want to consider how it can be more focused and prioritise its support to clients. GOTT will need to decide where to target its efforts, but it should be where it can maximise impact/make more of a difference on KA exploitation.



Effectiveness of GOTT

- **7.17** We conclude from the consultation and survey evidence that GOTT has been effective in progressing towards the achievement of early outcomes as identified in the GOTT logic model and theory of change (see Section 2). Overall, GOTT is being implemented as planned with activities and outputs being translated into early outcomes and signs of progress towards later stage outcomes. GOTT's clients report 'softer' benefits, such as improved confidence and enthusiasm for KAs, and improved knowledge and understanding of the management and exploitation of KAs. Encouragingly, 'harder' benefits are beginning to be achieved, including development and implementation of KA strategies; increased investment in KAs; improved capability/maturity to develop, protect and exploit KAs; and progress towards exploitation of KAs.
- **7.18** There have been a range of factors which have enabled benefits to be achieved at the organisation level. These included: competency of GOTT's team, the type of support offered (e.g. combination of policy, advice and funding), and the networking opportunities provided; organisations having sufficient capacity and resource to deliver projects; and securing buy-in within the organisation from senior management to more junior civil servants. On the latter, the consultation feedback suggests that securing buy-in from more senior levels of their organisation has proven difficult. This is important and indicates the case for sustained efforts to change both policy and attitudes.
- **7.19 There is some evidence of wider public policy related outcomes**. For example, through publications such as the Rose Book as well as more broadly driving the policy agenda in government. However, it is still early days for the full impact of this to be evident, and further work in this area is required. The monitoring data indicates a relatively low number of SROs being in place within organisations, suggesting more efforts needed to implement the Rose Book (SROs are recommended in the Rose Book).
- **7.20** Importantly, the feedback from both clients and stakeholders indicates that **GOTT is starting to influence the culture relating to KA management and exploitation in the public sector**. This is being achieved both through the 'ground-up' work with organisations (and associated signalling effect of successful projects) as well as getting 'top-down' buy in from senior leaders in the civil service (e.g. through policy). It was recognised that there are several factors that will influence GOTT's ability to deliver long-term impacts, in particular continued funding for GOTT and development of a long-term strategy.
- **7.21** In terms of the additionality of benefits, two thirds of client respondents (25/38) reported that the benefits achieved were partially additional. The results suggest that benefits were realised more quickly: just over half of client respondents (20/38) reported that the benefits would have taken longer to achieve in the absence of GOTT support. The results also indicate some scale and quality additionality, but only in a small minority of cases. Importantly, nearly a third of client respondents (12/38) perceived benefits to be fully additional, i.e. they considered that benefits would not have been realised at all without GOTT support.



7.22 Finally, taking into account the evaluation evidence presented in this report, we conclude that GOTT has made good progress against its objectives and strategy so far, and it has the potential to deliver on the expectations set out in the Mackintosh report. Client and stakeholder consultees thought that GOTT should continue to increase engagement in, and outcomes from, KA exploitation across the public sector.

Annex A: List of consultees

Table A-1: List of stakeholder consultee organisations

Organisation	No. of consultees
Cambridge Enterprise	1
Biotechnology and Biological Sciences Research Council	1
Department for Science, Innovation & Technology	1
HM Treasury	1
Innovate UK	1
Maxwell Centre (University of Cambridge)	1
Oxford University Innovation	2
Ploughshare Innovations	1
PraxisAuril	1
Science and Technology Facilities Council	1
Sundstrom Innovation	1
UCL Business Ltd	1
UCL Healthcare Biomagnetics Laboratory (University College London)	1
UK Atomic Energy Authority	1
UK Centre for Ecology and Hydrology	1
UK Innovation & Science Seed Fund	3
UK Research and Innovation	1
	Source: SQW

Table A-2: List of client consultee organisations

Organisation	No. of consultees
АРНА	2
British Geological Survey	2
Department for Energy Security and Net Zero	3
Department for Environment Food and Rural Affairs	1
Environment Agency	2



Organisation	No. of consultees
Geospatial Commission	3
Health and Safety Executive	2
Medicines and Healthcare products Regulatory Agency	1
Ministry of Defence	1
National Archives	2
National Cyber Security Centre	2
National Physical Laboratory	2
Natural History Museum	1
Ordnance Survey	1
Responsible Technology Adoption Unit (DSIT)	1
Royal Botanic Gardens Kew	2
Science and Technology Facilities Council	2
Science Museum Group	2
Tokamak Energy	1
UK Atomic Energy Authority	2
UK Health Security Agency	1
	Source: SQW

Annex B: Knowledge asset categories

Category	Detail
Information	• Information assets are a body of data, where the data has been put into context to give it meaning. Raw data and confidential information are not usually protected by Intellectual Property (IP) rights. However, databases can be protected by copyright when recognising creative activity in database form; there is also the substantial investment database right, which is recognition of the investment in the organisation and arrangement of the database itself.
Innovation	• Innovation includes new inventions, processes and ways of working, and can be made known to the public alongside protection with IP rights, such as patenting, or kept secret. Design rights protect the shape and appearance of a product, including the layout of integrated circuitry.
Creative	• Creative assets refer to things like written works (including software and source code), artwork, music and film (and performances in these), which may be protected by copyright or related rights.
Reputational	• Reputational assets refer to ways of distinguishing the goods and services of one entity from those of another, and include the reputation built up in a brand (including that of the government) as well as specific rights such as trade marks and coats of arms.
Knowhow	• Know-how refers to practical knowledge about how to do something, which can be hugely valuable. Know-how might encompass material which could go on to be protected by IP, such as a patentable invention before the patent application has been made.
	• It might be something related to, but not part of, an IP right, such as specialist knowledge required to operate a machine. Know-how might also be something entirely separate from IP rights, such as the competitive advantage inherent in having a more efficient business model than a competitor.
	• Knowhow can be treated in much the same way as other IP rights, usually protected by trade secrecy when forming part of a licence or collaboration agreement.
	• It can also be all information not in the public domain held in any form, including, without limitation, that comprised in or derived from drawings, data formulae, patterns, specifications, notes, samples, chemical compounds, biological materials, computer software, component lists, instructions, manuals, brochures, catalogues and process descriptions, and scientific approaches and methods
	Source: The Rose Book (2023

Table B-1: Knowledge asset categories and types

Source: The Rose Book (2023)

Annex C: Policy and the role of GOTT

C.1 This annex summarises the five barriers in the Getting Smart (2018) report, the three pillars identified in the Mackintosh (2021) report, and the objectives of GOTT. This is followed by Figure C-1 which shows how the barriers, pillars and the objectives of GOTT are linked. This was produced by the GOTT team for the purposes of this evaluation report.

Barriers: Getting Smart Report

- **Identification:** public sector organisations often do not know what KAs they hold or how much they might be worth
- **Insight:** public sector organisations often lack the technical, legal and commercial expertise to develop, protect and exploit their KAs
- **Infrastructure:** there is limited central support for public sector organisations looking to improve the management of their KAs
- **Incentives:** there are limited incentives for organisations and individuals in the public sector to invest in KA generation and exploitation
- **Investment:** the budgeting system does not always support the long term and necessarily speculative investment that is often required to generate value from KAs

The Three Pillars: the implementation strategy from the Mackintosh Report

Good practice

- "Many organisations in the public sector face a gap in their understanding of the knowledge assets they hold and how they should be treated. Therefore, this pillar aims to establish and share good practice for knowledge asset management.
- This includes the provision of new guidance, a draft of which is soft launched alongside this report, to show organisations how to identify, protect and exploit their knowledge assets.
- The guidance is based on some fundamental knowledge assets principles, which reiterate the expectation already established in Managing Public Money that organisations have a strategy for managing both their physical and intangible assets."

Incentives

• "The second pillar of this implementation strategy introduces incentives to encourage better management of public sector knowledge assets, as well as removing barriers to achieving this.

- This includes rewarding innovative organisations that are willing to take risks in order to pursue knowledge assets opportunities, while ensuring a focus on knowledge assets is embedded within organisational processes, reporting frameworks and among senior leadership.
- It also involves recognising, rewarding and assisting individual innovators, and providing the education and awareness-raising to embed behaviour change over the long-term.
- The new unit proposed under pillar three will be tasked with implementing and further developing these and future incentives."

Support

- "The aim of the third pillar of this implementation strategy is to provide greater levels of support to ensure public sector organisations can realise the full potential of their knowledge assets.
- A new unit The Government Office for Technology Transfer will be responsible for taking forward the strategy and providing guidance and specialist support to improve the management and exploitation of public sector knowledge assets.
- Better networks of knowledge asset professionals across government will allow sharing of • expertise and experience and support wider connections in business and beyond.
- A new investment fund will support departments and ALBs as they manage, develop and • exploit early-stage public sector knowledge assets and attract private investment."

The five objectives of GOTT

C.2 To increase engagement in, and outcomes from, KA exploitation across the public sector. GOTT will do this by the following:

Table C-1: GOTT objectives Objective	Through
Raising the profile of KA exploitation	 Pro-active marcomms x 2 Profiling success Creating excitement
Making it simpler to engage in KA exploitation (capability)	 Providing guidance and resources x 2 Identifying and tackling barriers and incentives through policy influence Sharing best practice

Table C 1. COTT abie atime

Objective	Through
	Building capability through a learning & development offering
Creating engaged and energised communities	 Developing and supporting KA community networks Encouraging engagement through outreach and through access to grant funding Developing a mixed portfolio of clients with whom we are working to include those who are more KA exploitation-active through to those at the start of their KA experience and representing the breadth of public sector activity e.g. deep tech, cultural, services and policy etc.
Delivering targeted interventions	 Support for IP and exploitation opportunities directly and through trusted partners Funding proof of concept and exploratory studies to add value to KA opportunities and to upskill applicants Supporting spin-out opportunities to achieve seed funding
Establishing GOTT's credibility in leading KA exploitation culture change within the public sector	Source: GOTT

Source: GOTT

Pilla	r 1 - Good Practice	Objectives				
Pillar 2 – Support Pillar 3 - Incentives		Raising the Profile of KA Exploitation	Simplifying Engagement	Enthusing Communities	Targeted Interventions	Establishing Credibility
e r s	Identification Gap	Pro-active marcomms Profiling success By sharing case studies PS colleagues learn the benefits of identifying and developing KAs. Though provision of grant funding to tease out and explore the potential in KA opportunities.	Providing guidance and resources	Developing and supporting KA community network. Sharing case studies and experience from GOTT and across PS to help clients understand KA identification – how to do and what a KA of value is.	Working with clients to help them identify KAs Working with clients who need to appreciate the value of the KAs they hold and realise their benefits.	Building and sharing a track record of assisting organisations to identify and celebrate their KAs. Providing advice and resources that allow clients to again confidence in KA management and in GOTT
Barrie	Insight Gap	Sharing case studies.	Providing guidance and resources Sharing best practice Building capability through KA skills development tailored for the government/public sector	Developing and supporting KA community network. Sharing case studies and experience from GOTT and across public sector to help clients understand KA management and exploitation (including commercialisation)	Providing direct advice and hands on support to clients through GOTTs expert TTSP team to assist them to develop, protect and exploit their KAs Working with clients to connect them with additional specialist technical, legal and commercial expertise Providing feedback on KA propositions via the KA grant fund panel review.	With guidance such as the Rose Book, GOTT aims to embed good practice in public sector KA management though provision of detailed and trusted guidance.

Figure C-1: Link between the five barriers, the three pillars identified in the Mackintosh report, and the objectives of GOTT

Pilla	r 1 - Good Practice	Objectives				Objective			
	r 2 – Support r 3 - Incentives	Raising the Profile of KA Exploitation	Simplifying Engagement	Enthusing Communities	Targeted Interventions	Establishing Credibility			
	Infrastructure Gap	By recruiting SROs and promoting models of good KA Exploitation we can help clients build maturity and capability. Through networks and events, share best practice in KA management.	Sharing best practice By highlighting models of best practice we help clients build KA maturity Building knowledge through KA skills development tailored for the government/public sector	Offering direct access to peers and GOTT through KA Network.	Support for IP and exploitation opportunities - directly from GOTT's internal TTSP experts and through trusted partners Skills development programmes directed to KA management and exploitation	Leading KA exploitation culture change within the public sector Providing advice and resources that allow clients to again confidence in KA management and in GOTT			
	Incentives Gap	Working with HMT to ensure KA management is reflected in relevant public sector facing documents	Identifying and tackling barriers and incentives through policy influence	Ensuring that as incentives are put in place, they are aligned with the development of engaged communities of practice across the public sector.	Working with clients to think creatively about org. incentives and rewards to innovators.	Producing relevant guidance on local incentives mechanisms, tailored to the needs and agenda of the client organisations and staff,			
	Investment Gap				Funding proof of concept and exploratory studies. Supporting spin-out opportunities to achieve seed funding Skills development programmes to build investible propositions.	Building a reputation as effective funders and facilitators able to introduce projects to other prospective funders. Providing advice and resources that allow clients to again confidence in KA management and in GOTT.			

Source: GOTT]

Annex D: Client typology

D.1 This Annex provides further detail on the client typology introduced in Section 3.

Figure D-1: Typology – client characteristics

	Categories	Comment / reason for inclusion
Type of organisation	 Central government department Arms length body Public sector research establishment (PSRE) Other 	 Certain types of organisation within government are more willing / able to engage with KA management and exploitation than others The ability for GOTT to affect change will therefore vary considerably by organisation type
Location	UK Regions and Nations	 GOTT's potential client base is diverse in terms of location. The evaluation seeks to understand the geographical distribution of GOTT activities
Policy domain/Sector*	Defence, health, culture etc	 GOTT's client base is also diverse in terms of policy domain This may influence the type of KA or route to exploitation
R&D budget	Allocation/spend (£)	Can provide 'ballpark' estimate for the level of KAs that could be generated for a given R&D spend, although high budgets does not necessarily mean more (or greater value) KAs exploited
Staff from specific professions/functions	 Government Science & Engineering Government Analysis Function Government Digital and Data Knowledge and Information Management Other (?) 	The number of staff by type of profession/function may indicate potential for work on identifying, managing and exploiting KAs

Source: SQW, GOTT

Figure D-2	: Typology -	- Maturity	of KA	management
I Igal C D L	· · · · · · · · · · · · · · · · · · ·	1. Incon Icy		managomene

Measure (weighting)	Description / comment	Categories
KA Management strategy (5)	Client has within its corporate documentation, a unique and detailed strategy and supporting information for taking KA-related work forward across the organisation and policies in place that support this	
KA register (6)	Client has an ordered system for identifying, logging, and tracking their own KAs (including key information on KA protection and exploitation status)	
Senior Responsible officer (5)	Client has named person within the organisation who has clear senior responsibility for the organisation's KA Management Strategy and shows active engagement	
Active KA Network members (1)	Client has at least one person who engages inside and outside the client body to share information through GOTT's KA Network	
KA Manager/Officer (4)	Client has at least one named operational individual with some level of official responsibility, on a permanent basis, for KAs	Yes / No / in progress
Innovation function (7)	Client has one or more functions/teams which support KA identification, management, and exploitation for its organisation (internal or external to the organisation, or a mix of the two)]
Active in external KA networks (1)	Engages actively with KA networks outside of GOTT to inform KA management and exploitation]
Identification of new KA (8)	Client has proactively identified a KA that has been generated within its organisation or through commissioned work	
Successful exploitation (10)	Client has had commercial or another form of exploitation success	

Source: SQW, GOTT

Figure D-3: Typology – type and maturity of proje	
	iect

	Categories	Comment / reason for inclusion
Route to KA exploitation	 Spinouts Consulting offering Licensing Joint ventures Open source access to the KA Cross public sector 	 GOTT's Strategic plan highlights that there are multiple pathways to exploitation of KAs This is particularly relevant to exploitation of public sector KAs where typical exploitation methods (e.g. through licensing or spinouts) could limit broader social and economic benefits
Value created by KAs	Social valueEconomic valueFinancial value	 These categories are not mutually exclusive and KA exploitation may deliver all three The type of value that exploitation is seeking to create will determine route
Partners/stakeholders	 Public sector Private sector (including companies, VC/Angels, etc) Academia 	Need to work with with partners from public and private sectors as well as academia to maximise impact
Stage	 Identification Protection (if appropriate) Development Exploitation 	 The Mackintosh report states these four steps of KA management GOTT aims to support clients through these steps
КА туре	• E.g. Defence, data, health etc.	 The evaluation of the KAGF classified supported projects by KA type A similar method of classification would be possible for all GOTT projects

Source: SQW, GOTT

Annex E: Client survey results

Background

Table E-1: How important is the management, development and exploitation of

Response	Count	%
Very important	16	70%
Fairly important	5	22%
Slightly important	2	9%
Not important at all	0	0%
Total	23	100%

Source: SQW analysis of GOTT client survey

Awareness of GOTT and its activities

Table E-2: What is your level of awareness of GOTT? Please select from the following statements. (n=23)

Response	Count	%
I had not previously heard of GOTT until this survey (a)	0	0%
I have heard of GOTT, but was not aware of the type of support it provides (b)	1	4%
I am aware of GOTT and have some understanding of the support GOTT provides but have not accessed any (c)	0	0%
I have engaged with GOTT directly (e.g. at events or meetings, receiving advice on KA opportunities, and/or working with GOTT on policy-related activities) or indirectly (e.g. reading material produced by GOTT or accessing the GOTT website) (d)	22	96%
Total	23	100%

Source: SQW analysis of GOTT client survey

Table E-3: In what ways have you engaged with GOTT? Please select all that apply. (n=22)*

Response	Count	%
Attended introductory meeting with members of GOTT (in person or online)	18	82%
Received support/advice in conversations with members of GOTT	17	77%
Submitted enquiry to and/or application to the grant fund	17	77%

Response	Count	%
Accessed GOTT's published guidance e.g. Rose Book, Managing Public Money concerning KAs, etc.	14	64%
Interacted with GOTT's Gov.UK pages	13	59%
Received site visitors from GOTT	12	55%
Attended GOTT in-person event (such as workshops, GOTT Conference etc.)	11	50%
Provided input/support to GOTT or other GOTT clients	10	45%
Read or engaged with GOTT social media activity (e.g. LinkedIn)	9	41%
Been involved with/ member of the KA Network	8	36%
Been involved in cross-government working supported or facilitated by GOTT	6	27%
Attended a GOTT online teach-in, talk or webinar	5	23%
Accessed specialist expertise specifically through GOTT's TTSP	5	23%
Encountered GOTT at Civil Service Live or other event organised by someone other than GOTT	2	9%

Source: SQW analysis of GOTT client survey

* Asked if client had direct or indirect engagement with GOTT (i.e. answered 'd' to question from Table D-2)

Table E-4: What was your first point of engagement with this programme? (n=22)*

Response	Count	%
Engaged with the Knowledge Assets Team pre-GOTT formation as well as GOTT post-formation	3	14%
Engaged with GOTT in 2022	9	41%
Engaged with GOTT in 2023	10	45%
Total	22	100%

Source: SQW analysis of GOTT client survey

* Asked if client had direct or indirect engagement with GOTT (i.e. answered 'd' to question from Table D-2)

Table E-5: How did you find out about the support available from GOTT? Please select all that apply. (n=22)*

Response	Yes	%
Word of mouth	12	50%
Directly approached by GOTT	10	45%
Website	7	32%
Event/ Conference - organised by GOTT	5	23%

Response	Yes	%
Event/Conference - not organised by GOTT	2	9%
GOTT's Annual Snapshot Report	2	9%
Social media	1	5%

Source: SQW analysis of GOTT client survey

* Asked if client had direct or indirect engagement with GOTT (i.e. answered 'd' to question from Table D-2)

Key barriers to KA exploitation

Table E-6: Before engaging with GOTT, what were the key issues/barriers in relation toKAs for your organisation? Please select all that apply. (n=22)*

Response	Yes	%
Lacked the headcount/budget to effectively manage our KAs	16	73%
The nature of the public sector budgeting cycle means that it was difficult for our organisation to commit to the long-term investment required	13	59%
There was limited central support available across government to improve the management of our KAs	10	45%
There was a lack of external incentive in the face of competing pressures to invest in KA generation, management and exploitation	8	36%
There was a lack of buy-in at senior levels in the organisation to invest in KA generation, management and exploitation	5	23%
Difficulty in identifying potential KAs, and their value, in the first place	5	23%
Lacked the skills and expertise (e.g. technical, legal or commercial) to effectively manage our KAs	4	18%
There was a lack of individual buy-in to invest in KA generation, management and exploitation	4	18%
None - there are no barriers	1 analysis of COTT	5%

Source: SQW analysis of GOTT client survey

* Asked if client had direct or indirect engagement with GOTT (i.e. answered 'd' to question from Table D-2)

Table E-7: What would you consider to be the key issues/barriers in relation to KAs for your organisation? Please select all that apply. (n=1)*

Response	Yes	%
Identifying potential KAs, and their value, in the first place is difficult	0	0%
Lack the skills and expertise (e.g. technical, legal or commercial) to effectively manage our knowledge assets	0	0%



Response	Yes	%
There is limited central support available across government to improve the management of our KAs	0	0%
There is no incentive at an individual or organisational level to invest in KA generation, management and exploitation	0	0%
The nature of the public sector budgeting cycle means that it was difficult for our organisation to commit to the long-term investment required	1	100%
None - there are no barriers	0	0%

Source: SQW analysis of GOTT client survey * Asked if client did not have direct or indirect engagement with GOTT (i.e. answered 'a – c'to question from Table D-2)

Experience and benefits of GOTT support

Table E-8: Please can you rate the effectiveness of the support received from GOTT so far. (n=22)*

	Count of ratings	Count of N/a	Average rating
In-person visits to your site with GOTT staff	14	8	9.3
Support/advice in conversations with members of GOTT	21	1	9.1
GOTT at Civil Service Live or other event organised by someone other than GOTT	3	19	9.0
Meeting with members of GOTT (in person or online)	21	1	9.0
Specialist expertise specifically through GOTT's TTSP	9	13	8.4
Enquiry to and/or application to the grant fund	20	2	8.3
KA Network	8	14	8.3
GOTT in-person event (such as workshops, GOTT Conference etc.)	11	11	8.3
GOTT's published guidance e.g. Rose Book, Managing Public Money concerning KAs, Guide to IP and Confidentiality, etc.	16	6	8.3
GOTT's Gov.UK pages	15	7	7.7
Been involved in cross-government working supported or facilitated by GOTT	7	15	7.7
GOTT social media activity (e.g. LinkedIn)	10	12	7.3
GOTT online teach-in, talk or webinar	7	15	7.2

Source: SQW analysis of GOTT client survey

* Asked if client had direct or indirect engagement with GOTT (i.e. answered 'd' to question from Table D-2)

result of do i i suppor	Achieved	Partly achieved / in progress	Likely to achieve in future	Not achieved and not likely to achieve in future	N/a OR Not sure	Missing
Increased confidence in GOTT to deliver support on KAs within my organisation	15 (68%)	3 (14%)	3 (14%)	0 (0%)	1 (5%)	0 (0%)
Increased enthusiasm for the wider KA agenda	16 (73%)	2 (9%)	2 (9%)	0 (0%)	2 (9%)	0 (0%)
Increased profile and/or traction on KAs within my organisation	10 (45%)	5 (23%)	6 (27%)	0 (0%)	1 (5%)	0 (0%)
Developed and implemented a clear strategy for the development, management, and exploitation of KAs	6 (27%)	8 (36%)	4 (18%)	0 (0%)	4 (18%)	0 (0%)
Appointed a Senior Responsible Owner (SRO) with clear senior responsibility for my organisation's KA Management Strategy	9 (41%)	4 (18%)	2 (9%)	0 (0%)	7 (32%)	0 (0%)
Increased knowledge and awareness of the KAs held in my organisation	7 (32%)	11 (50%)	2 (9%)	2 (9%)	0 (0%)	0 (0%)
Better appreciation of the value of the KAs held in my organisation	8 (36%)	10 (45%)	1 (5%)	1 (5%)	2 (9%)	0 (0%)
Improved capability/maturity as an organisation to develop, protect and exploit KAs	4 (18%)	13 (59%)	0 (0%)	1 (5%)	4 (18%)	0 (0%)

Table E-9: Which of the following benefits have you achieved or expect to achieve as a result of GOTT support? (n=22)*

	Achieved	Partly achieved / in progress	Likely to achieve in future	Not achieved and not likely to achieve in future	N/a OR Not sure	Missing
Increased KA management support capability e.g. Tech Transfer Office/Innovation Office with practical skills in KA management and commercialisation	3 (14%)	6 (27%)	4 (18%)	1 (5%)	7 (32%)	1 (5%)
Developed KA(s) to better understand inherent value through KA grant fund	6 (27%)	10 (45%)	0 (0%)	0 (0%)	4 (18%)	2 (9%)
Increased investment in KA(s) development (£) through new internal or external funding	6 (27%)	7 (32%)	4 (18%)	0 (0%)	4 (18%)	1 (5%)
Increased exploitation of KAs through commercialisation e.g. licensing, spin-outs, joint ventures, etc.	2 (9%)	7 (32%)	7 (32%)	0 (0%)	4 (18%)	2 (9%)
Increased non- commercial transfer of KAs within public sector, and/or open sourcing of KAs	0 (0%)	5 (23%)	3 (14%)	1 (5%)	12 (55%)	1 (5%)

Source: SQW analysis of GOTT client survey

* Asked if client had direct or indirect engagement with GOTT (i.e. answered 'd' to question from Table D-2)

Table E-10: Which of the following commercialisation routes do you expect to follow? Select all that apply. (n=16)*

Response	Count	%
Joint venture	5	31%
Licensing	12	75%
Spinout	12	75%

Source: SQW analysis of GOTT client survey

* Asked if achieved/partly achieved/likely to achieve increased exploitation of KAs through commercialisation

Table E-11: Overall, what do you think would have happened to the benefits achieved to date without GOTT support? Please select the option that you think is most likely. (n=20)*

(1-20)		
Response	Count	%
None of the benefits would have happened	6	30%
The benefits would have happened anyway, but at a smaller scale	3	15%
The benefits would have happened anyway, but they would have been of lower quality	2	10%
The benefits would have happened anyway, but they would have taken longer to achieve	8	40%
The benefits would have happened anyway, over the same time period and at the same scale and quality	1	5%
Total	20	100%

Source: SQW analysis of GOTT client survey * Asked if achieved/partly achieved at least one benefit

Annex F: ADA customer relationship management tool

Introduction

- **F.1** Quantitative data creation and analysis was out of scope for the study. However, during the course of the project, the evaluation team identified actual and potential data sources that could be used to deliver additional insights into the effectiveness of GOTT's activity. This annex describes the main existing data source identified (the 'ADA' CRM tool). It then offers suggestions for extending this data, and proposes potential analytical approaches that could be used to understand the connections between GOTT's activities and outcomes. This section draws primarily on information provided by GOTT, including:
 - a show-and-tell of ADA by the Analysis and Impact team on 8 March 2024
 - a data dictionary outlining the 1,150 fields that ADA comprises
 - a document explaining aspects of the data dictionary, prepared by GOTT
 - a diagram of ADA's data schema.
- **F.2** However, due to understandable data sharing restrictions, members of the project team were not able to interact directly with the ADA tool, nor to interact with the dashboards and visualisations associated with it.

The All-GOTT Data Asset ('ADA')

F.3 ADA is GOTT's bespoke customer relationship management (CRM) tool. Although still in development, it is used to record GOTT's interactions with customers in some detail. This section briefly describes the purpose of CRM tools for readers that are not familiar with them, and then outlines the structure and usage of the ADA tool.

Customer Relationship Management tools

F.4 Customer relationship management (CRM) is a comprehensive approach to managing an organisation's interactions with current and potential customers. It uses data analysis of customers' history with the organisation to improve business relationships, specifically focusing on customer retention and ultimately driving demand growth. In a commercial context, this is typically expressed in sales data, while in the context of GOTT, the end goal is to promote the set of outcomes described in Section 2. CRM systems compile various types of data to provide a detailed picture of each customer. This data is gathered from active sources, such as human-created records which might include detailed notes on customer interactions, purchase history, and personal information provided by the customers themselves.



- **F.5** Additionally, CRM tools often integrate data from passive sources to enrich the customer profiles. These passive sources include website usage, phone call records, email interactions, and social media activities. By aggregating this information, CRM systems can help businesses understand how customers use their services and how they interact with different aspects of the business. This is crucial for tailoring user experiences and making strategic adjustments in marketing or product offerings.
- **F.6** The purpose of using CRM tools extends beyond just data collection. The data compiled in CRMs can be used to identify patterns and trends in customer behaviour. For example, they can highlight customers who have had limited interaction with the business, which might indicate a need for re-engagement. CRM tools also help in spotting potential new customers or leads, assessing the demand for products or services, and guiding overall business development. Through the identification of new sectors and recognition of gaps in services or products, organisations can strategically innovate and align their development efforts to meet the emerging needs of their customer base. CRM tools are therefore integral in shaping business strategies and enhancing customer interactions.

Implementation

- **F.7** ADA is a custom-built CRM tool developed internally by GOTT. This tool was created to address the limitations of using multiple Excel spreadsheets for data storage by centralising information within a relational database managed with Microsoft Dataverse. Unlike generic CRM systems, ADA is tailored specifically for GOTT's operational requirements, featuring structured data storage that differs from the unstructured format of a typical data lake.
- **F.8** The architecture of ADA is cloud-based, supporting remote data management and integration with other Microsoft tools, including PowerBI. This integration enhances the analytical capabilities of ADA, allowing for data analysis within the framework of Microsoft's software ecosystem. The main interface for ADA is built on Microsoft Power Platform, which facilitates data creation, interaction and modification. This platform allows users to actively engage with the system by adding or amending records when new activity has been conducted.
- **F.9** The user interface of ADA organises its features into five main views accessible from the landing gallery: Organisations, People, Activity, TTSP Projects, and Grant Fund. These categories are designed to help users efficiently locate and focus on relevant data. Additionally, PowerBI dashboards have been developed to provide specific, read-only views of the data, making it accessible in a visually digestible format without allowing direct manipulation of the data itself.

Structure and content

F.10 The ADA database comprises twenty linked tabular datasets that collectively contain around 1,150 fields. The majority of these are functional elements (such as system metadata, unique identifiers, value lookups, links to other tables and so on), or are unused or in development,



leaving around 100 fields for substantive information describing GOTT's activity and customers. These fields collectively describe five main categories of object:

- **Organisations.** These tables record the organisations with whom GOTT has interacted, with fields describing features such as name, address, organisation type (e.g. ministerial department, executive agency, academic institution), relationship type (client, non-client public body, delivery partner, commercial supplier, or DPS supplier), URL and so on. A notes field captures details not covered above, such as when two organisations merge.
- **People.** These tables record the individuals with whom GOTT has interacted, with fields describing names, contact details, role information, links to organisations and so on. A notes field is used to capture further details related to that person.
- Activity. The unit of 'activity' in ADA is a 'meeting', although in fact this comprises a range of types of contact with customer organisations: emails, phone calls, face-to-face meetings and so on. Meetings are coded for their 'reason', which could be introductions, check-in, guidance to client, advice to GOTT, communications, events, grant funds, policy, pilot fact finding or pilot intervention. Free text fields are used to record topics and GOTT officials' notes, and each activity can be linked to other tables (e.g. people, organisations and so on).
- **TTSP Projects**. Each TTSP project is described with dates, project stage (identify, exploit, archive etc.), text descriptions and other data. A separate table, describing TTSP project progress, records GOTT project 'interventions' (check-in, feedback review, advice etc.).
- **Knowledge Asset Grant Fund**. This data records information about KAGF applications: dates, amounts, status and so on.

F.11 Parts of ADA currently in development will extend the database so it covers the following:

- **Dynamic Purchasing System (DPS).** These tables will support the operation of GOTT's DPS, a flexible procurement method for contracting specialist suppliers that can help support exploitation of KAs through IP, commercialisation, legal services and so on. Data will include supplier details, bids, mini-competitions (proposed, launched, and completed), supplier bids and contract awards, milestone monitoring, and financial status. Optionally, this function might also include supplier performance monitoring (depending on workstream capacity).
- **KA Grant Fund (KAGF) Operations.** Following successful onboarding of TTSP project records, the management of KAGF applications and awards are to be brought into ADA to consolidate the KA portfolio data, allow increased cross-GOTT collaboration, and to identify potential operational efficiencies through greater use of automation. Data will include KAGF application and award details, project reporting, and financial monitoring. Records will be linked to their respective organisations, client contacts, KA records, and other relevant data tables to provide for rich insights.



Usage and utility

- **F.12** Not including its administrators, ADA's users fall into two groups: data creators and data consumers, with many falling into both categories for different purposes. Data creators add records as appropriate (typically when new interactions occur, or when new projects or funding applications are received) via the Power Platform interface. Data consumers can access the data via a suite of bespoke dashboards implemented in PowerBI, typically to gain insight into recent activity, identify required actions, analyse trends, and inform strategy.
- **F.13** ADA represents a significant capability for GOTT to manage interactions and data systematically. It is designed with a logical and coherent structure, and has the potential to be a model for similar future implementations across other departments. The tool is still in the early stages of its deployment, and there are opportunities for further refinement and expansion to fully capitalise on its capabilities. The tool does not currently explicitly align to GOTT's Key Performance Indicators (KPIs), though efforts are underway to integrate these metrics into the system. This alignment will be important for ensuring that ADA not only supports but actively drives the achievement of strategic objectives, thereby enhancing its value and effectiveness within GOTT. The next section presents some recommendations for approaches that might add further value to ADA.

Opportunities for further development of ADA

F.14 Following discussions with GOTT and analysis of the requirements, the project team has identified a number of potential ways in which ADA could be developed to deliver additional insights into GOTT's activities and the way they drive outcomes and impacts. This section covers some potential enhancements. However, due to restrictions outlined earlier, the project team has not interacted with the tool directly, so these should be considered avenues for investigation, rather than recommendations. The options outlined below must be considered in the context of availability of resource within GOTT. The individuals who have developed ADA also have other responsibilities within GOTT (i.e. there is no full time ADA team).

Potential additional data sources

F.15 The table below presents some potential sources of data that might add value to ADA's administrators and users.

Potential Data Source	Example Metrics	Potential Insights
CRM Dashboard Usage Data	Engagement levels with the tool, frequency, and type of usage	Evaluate tool effectiveness; identify training needs; enhance user interface design based on user interaction patterns
Internal Passive Data Collection	Email interactions with different domains, GOTT website usage patterns, including page visits and duration	Broader insights into stakeholder preferences and behaviours; tailor communications strategies; improve customer interactions
Integration with External Data	Combining ADA data with external commercial, corporate or patent data, or economic indicators	Customer segmentation / clustering; predictive models of customer behaviour; strategic planning support
Integration of Media Data	Analysis of sentiment and trends from media and social media platforms	Enhanced understanding of GOTT awareness and perception; proactive customer service; targeted communications

Table F-1: Potential additional data sources

Source: SQW

Potential capability enhancements

F.16 The table below suggests some potential enhancements to ADA's capabilities, the requirements for their implementation, and their potential benefits.

Enhancement	High-level Requirements	Benefits Linked to GOTT's Outcomes
Machine Learning Models	Data science expertise, clean data, machine learning tools	Enhance predictive capabilities to identify trends and optimise KA strategy
Advanced Reporting Tools	Customisable dashboard software, user training	Enable tailored, deep-dive analyses that directly support monitoring KPIs.
Integration with External APIs	Secure API connections, data integration plans	Access external data for a richer analysis environment, enhancing the scope and accuracy of impact assessments
Automated Data Cleaning Tools	Data quality software, data handling rules	Ensure consistent data quality

Table F-2: Potential enhancements



F-5

Predictive AnalyticsHistorical data, predictive models, analytics expertiseAnticipate future trends and needs in KA and fund management, facilitating proactive strategiesNatural Language Processing (NLP)NLP tools, training data, computational resourcesImprove the analysis of unstructured data from logs and notes, enhancing understanding of interactions and customer sentiment to drive public sector engagement.	Enhancement	High-level Requirements	Benefits Linked to GOTT's Outcomes
Processing (NLP)computational resourcesunstructured data from logs and notes, enhancing understanding of interactions and customer sentiment to drive public sector	Predictive Analytics		in KA and fund management,
	0 0		unstructured data from logs and notes, enhancing understanding of interactions and customer sentiment to drive public sector

Source: SQW

Insight into outcomes

F.17 GOTT is currently developing ADA so that KPI data can be more-easily recorded and extracted, so we do not cover recommendations along these lines here. However, the project team understands that there is potential value in enabling GOTT to track its performance against *outcomes*, which are less easy to measure directly. The table below presents GOTT's twelve identified outcomes, and some potential data sources (including those already present within ADA) and analytical tools that could be used to gain insight into the extent of their performance against those outcomes.

Outcome	Potential Data Sources	Potential Analytical Methods
Increased confidence in GOTT to deliver support on KAs within organisations	activity logs, TTSP project outcomes, organisation interactions	Sentiment analysis, success rate analysis
Increased enthusiasm for the wider KA agenda	Activity logs, media, public communications	Trend analysis, sentiment analysis
Increased profile and / or traction on KAs within organisations	KAGF data, TTSP projects, organisations	Network analysis, impact assessment
Increased knowledge and awareness amongst public sector organisations of the KAs they hold and their value	KAGF applications, TTSP projects, feedback	Educational outreach effectiveness, pre-post surveys
Greater capability / maturity of public sector organisations and individuals to identify, protect and exploit their KAs	Training logs, TTSP Project interventions, Organisations	Capability maturity modelling, skills assessment
More organisations developing dedicated KA management support capability	Organisations, Activity logs	Growth trend analysis, logistic regression on influencing factors

Table F-3: Data sources and analytical methods for GOTT outcomes

Outcome	Potential Data Sources	Potential Analytical Methods
Greater central support for public sector organisations on management of their KAs	Activity logs, TTSP Project interventions, Central policy documents	Usage and adoption rates, feedback analysis
Better incentives for public sector organisations to pursue KA opportunities	KAGF data, Policy documents, Organisations	Incentive effectiveness analysis, comparative studies
Increased investment in public sector KAs through KAGF and UKI2S	KAGF funding data, Investment records	Financial trend analysis, ROI analysis
Increased exploitation of KAs through commercialisation e.g., licensing, spin- outs, joint ventures	Licensing records, Commercial partnerships, TTSP Projects	Market analysis, profitability assessment
Increased non-commercial transfer of KAs within public sector, and open sourcing of KAs	Project sharing platforms, Open source contributions	Data flow analysis, engagement metrics
Increased influence on wider government priorities (e.g., data commercialisation and an innovative public sector)	Policy changes, Strategic meetings, Public sector innovations	Influence mapping, policy impact assessment

Source: SQW

Annex G: GOTT publications

G.1 A list of publications by GOTT is provided below.

Table G-1: GOTT publications			
Title of publication	Date published		
Rose Book	• 20 April 2021 – 'Draft Guidance' first published		
	• 20 December 2021 – final version of Knowledge asset management in government (the Rose Book) published		
	• 27 March 2024 – updated guidance and annex documents published		
Managing intellectual property and confidentiality	• 17 April 2023		
Knowledge Assets Management	• 24 August 2023 – first published		
Strategy (KAMS) checklist	• 27 March 2024 – updated guidance and annex documents published		
Senior Responsible Owners (SRO) checklist	• 7 August 2023		
Public Sector Spinouts Study	• 16 April 2024		
Intellectual Property Policy checklist	• 26 April 2024		
	Source: GOT		

SQW

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