

# Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
1	<p>Bradley, G (2006) Benefit Realisation Management, Gower 2<sup>nd</sup> Edition, 2010</p> <p>All page numbers refer to the second edition.</p> <p>Cross references made to the OGC Official Product – Bradley, G. (2010) Fundamentals of Benefits Realisation, London: TSO in the Govt. Bodies review.</p>	<p><b>Normative or descriptive</b> – normative, with illustrative case study examples.</p> <p><b>Applied at which level</b> – project and program, with chapter on application to Portfolio management.</p> <p>Note that 'benefit realisation is closely linked to business change and is generally dependent on more than one project, and so it should be managed at the programme level' p171.</p> <p><b>Overview/Summary</b></p> <p>Includes a chapter on measures (P131-147) which follows the chapter on Benefits. Definitions of metric and various terms related to measures are provided (Pxviii-xix). See also OGC summary.</p> <p>Metric is raw data from which measure is derived, while one benefit may have more than one measure. (Pxviii-xix and P133).</p> <p>Argues strongly that the majority of the benefits should be tracked (p191) because 'all benefits are key benefits'.</p>	<p><b>When does measurement occur?</b></p> <p>Process of:</p> <p>Phase 2 Identify benefits and changes – identify measures p268</p> <p>Phase 3 Define initiatives– identify further measures including baselines, targets and timescales p270</p> <p>Phase 4 Optimise Initiatives - track and report benefits p274</p> <p>Phase 5 – Manage initiatives – benefit tracking reports p276</p> <p>Phase 6 – Manage performance – continue tracking and reporting p276</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Benefits Dependency Map: <i>End benefits are the latest benefits, which are usually a decomposition of the objective (P114). Other benefits in the maps have causal relationships between them but are coloured light green. (P117 for example).</i></p> <p>Intermediate benefits – “Benefits which will occur between the implementation of early changes and the realization of the end benefits.” pxviii.</p> <p><b>Stakeholders</b></p> <p>Key stakeholders are generally within the organisation, although examples of external stakeholder are given(p18), of whom a special category is customers.</p> <p>Benefit owners are not always the beneficiaries (P25).</p>	<p><b>Who measures the benefits?</b></p> <p>Programme structure diagram is a useful summary (P172).</p> <p>Key role for the Benefits Facilitation, sitting outside programmes.</p> <p>Business Unit Managers will be Benefit Owners (p172). They are usually different from Measure Owners, who, again, may be different from Measure Monitors. (p147)</p> <p>Identification of measures – in a workshop with benefit owners, p140.</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Speculative benefits is one of the categories used (P179), but no references to emergent or unplanned benefits in the index.</p> <p><b>Measurement post-project?</b></p> <p>Phase 6 manages the transition to BAU, and includes tracking and reporting benefits</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Cross-sector</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Initially 5 'value types' of benefits were identified</p> <ul style="list-style-type: none"> <li>- Definite financial</li> <li>- Expected financial</li> <li>- Logical financial</li> <li>- Qualitative</li> <li>- Intangible.</li> </ul> <p>This was then developed into a table of benefit value types (P112/P113) reflecting the prominence of non-financial benefits in practice.</p> <p>However, also cross-reference to Hubbard, that intangibles are a myth (P112).</p> <p>Benefits should be valued and ranked (P16-126).</p> <p>Benefit Profiles include benefit details, dependencies and tracking information. They are used in Business Cases and benefits Realization Plans (P126).</p> <p>Argues that giving financial values to non-financial benefits is dangerous (P120) and there is a whole chapter on this (P313-321).</p> <p>At the portfolio level, comparison of value is hard, especially because of the range of benefits involved (p286).</p>
2	CiJ Consultancy and Advisory	<b>Normative or descriptive</b> – normative	<b>When does measurement occur?</b> Refers to taking baselines	<b>Who measures the benefits?</b> Not addressed	<b>To whom is the guidance (project type, sector) directed?</b>	<b>What types of measure – quantitative / qualitative</b>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>Services – range of benefits and measures for infrastructure investment in the education sector.</p> <p>From NZ Government on-line Benefits Library</p> <p>New Source</p>	<p><b>Applied at which level</b> – project and program</p> <p><b>Overview/Summary</b></p> <p>6 page document with tables for sample benefit types, measurement method and benefit calculation/metrics. Separate tables are included for: construction benefits and social benefits (schools as local hub for the community).</p>	<p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Not distinguished.</p>	<p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Not addressed</p> <p><b>Measurement post-project?</b></p> <p>Not addressed</p>	<p><b>directed?</b></p> <p>Infrastructure investments in education sector.</p>	<p><b>are used?</b></p> <p>Both e.g. number of defects and survey results.</p>
3	Curley, M. (2004) <i>Managing Information Technology for Business Value</i> , Intel Press	<p><b>Normative or descriptive</b> – Both, includes case studies and examples.</p> <p><b>Applied at which level</b> – IT projects and programs</p> <p><b>Overview/Summary</b></p> <p>Based on experience at Intel (note the publisher) and their clients – examples quoted include: Deutsche Bank and Westminster City Council.</p>	<p><b>When does measurement occur?</b></p> <p>Focus on post-implementation – p76 – “<i>Contrary to current practice, there is likely to be more value in measuring ROI during and after implementation than in estimating ROI prior to investment approval.</i>”</p> <p>“<i>Post-implementation ROI tracking is a key characteristic of a benefits realization culture. In fact, the key to optimizing IT business value is to expand the value-generation focus from achieving project “end” states to intentionally cultivating and continuously extracting concrete business value from all IT investments.</i>” p76</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Both – note recommendation of conversion ratios for valuing productivity savings. p98</p>	<p><b>Who measures the benefits?</b></p> <p>Refers to a <b>Business Value Program Office (BVPO)</b> – “<i>The BVPO should manage any templates and tools associated with IT business value and be the developer and steward of the process for measuring and creating business value.</i>” p223</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>No references noted and not in index.</p> <p><b>Measurement post-project?</b></p> <p>Yes - p76 “<i>Benefits Realization or Post-Implementation ROI Tracking</i>” – and p91 “<i>To be most accurate, ROI must be monitored during the months or sometimes years that it takes to recover project costs.</i>”</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>IT Managers</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Focus on financial metrics – “<i>The benefits – realization approach includes adopting core business practices, including basic ROI measures</i>” p9 – and p76 “<i>Benefits Realization or Post-Implementation ROI Tracking</i>”</p> <p>But also emphasises – “<i>To manage for business value, an organisation must first create an awareness of the intangibles and then figure out a way to translate these benefits into quantitative terms.</i>” p90</p> <p>He refers to Intel's use of a ‘Business Value Index’ p98-113 encompassing business value (project impact on business strategy), IT efficiency (use of existing infrastructure) and financial attractiveness (cost-benefit ratio and NPV).</p>
4	Davies, H.D. & Davies, A.J. (2011) <i>Value Management – Translating Aspirations into Performance</i> , Gower.	<p><b>Normative or descriptive</b> – Mainly normative, with a case study of JANET, research and education network, and other examples in the text.</p> <p><b>Applied at which level</b> – Reference to P3M. Definitions in the glossary of terms (p255+)</p> <p>Projects - tend to focus on outputs Programmes - focus on benefits,</p>	<p><b>When does measurement occur?</b></p> <p>Focus on value management in a P3M context. Value Chains and Value modeling using systems dynamics methods eg in Ch. 5 and 6. Business cases should include baseline measures.</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Distinction between lead and lag indicators – but this is about causality. ‘lead indicators, also called performance drivers,...must happen first in order to cause lag indicators, which are measures of outcome, that is</p>	<p><b>Who measures the benefits?</b></p> <p>Very little on this. Stakeholders and benefit owners are used synonymously (P72) Beneficiaries own changes in drivers <b>Are measures added over the project? Emergent benefits?</b></p> <p>No but there is a major emphasis on unintended consequences of performance targets, p97.</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Generic. All change initiatives</p>	<p><b>What types of measure – quantitative / qualitative are used</b></p> <p>Definition of measure is something that quantifies performance (P74). Use of the Balanced Scorecard.</p> <p>Qualitative analysis as a prelude to quantitative performance management.</p>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?  <ul style="list-style-type: none"> <li>Normative &amp; descriptive guidance on how to measure benefits</li> <li>Applied at project, program, portfolio level?</li> </ul>	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		<p>enabled by deliverables</p> <p>Portfolio - managed as coherent whole to optimise overall value</p> <p><b>Overview/Summary</b> Sets out the role of measures and benefits in value management</p>	<p>benefits (P74).</p> <p>Qualitative approaches are used to link deliverables, drivers and benefits in the form of stories to identify cause and effect relationships, which are then quantified, using techniques such as the Balanced Scorecard (P74)</p>	<p><b>Measurement post-project?</b> Benefit and value tracking over time, (p160-163) but not specific on how long</p>		
5	<p>Deloitte (sponsor) APM/CIM A Joint All-Ireland study on change leadership and benefits realisation, May 2012</p> <p><a href="https://www.apm.org.uk/sites/default/files/open/ie_c_cima-apm%20report.pdf">https://www.apm.org.uk/sites/default/files/open/ie_c_cima-apm%20report.pdf</a></p>	<p><b>Normative or descriptive</b> – Descriptive.</p> <p><b>Applied at which level</b></p> <p>Respondents had a variety of roles, with finance professionals being the most common. More project managers than programme or portfolio managers.</p> <p><b>Overview/Summary</b></p> <p>Survey of benefits management practices, but does not indicate how many respondents there were – all results are percentages.</p> <p>Some questions directly related to measures. For example,</p> <p>Our survey reveals that the identifying the most appropriate measurable benefits is the a positive factor in 77% of respondents organisations. This is no surprise with such a strong focus on cost reduction in the current economic climate. The integration of benefits management with the approach to project management was cited as the least positive factor by 43% of respondents. P8.</p> <p>Identifying and capturing robust metrics for the identified benefits e.g. KPIs, scored highly – 73% felt this was a positive factor.</p>	<p><b>When does measurement occur?</b></p> <p>Not asked</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Not asked</p>	<p><b>Who measures the benefits?</b></p> <p>Interestingly, 31% of all respondents describe themselves as a sponsor or SRO. This level of response emphasises the importance of benefits realisation to the leadership of change. In many organisations, the sponsor or SRO is accountable for the realisation of benefits from their project/programme.</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Not asked.</p> <p><b>Measurement post-project?</b></p> <p>69% of respondents indicated that post-implementation reviews were undertaken. However (p10)</p> <p>'58% of respondents indicated that the post implementation review only provides value some of the time or never in relation to benefits. Merely 4% of respondents claimed that it provided value all of the time. This suggests the need for a fundamental re-evaluation of how organisations approach post implementation reviews with the focus on a more effective form of assurance for post-</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Joint APM/CIMA study – included finance professionals.</p> <p>Diverse range of sectors included in the survey (P5)</p>	<p><b>What types of measure – quantitative / qualitative are used</b></p> <p>P9 – 'Our survey suggests that there is still divergence in approaches to benefits realisation between project, programme, change professionals and finance professionals. Recognising strong finance representation, it is no surprise that a standard set of KPIs, ROI analysis and NPV are the three most commonly used approaches. A significant number of respondents have not considered using benefit maps (69%) or benefit profiling (57%), suggesting that there is much to learn from cross sharing of knowledge between project and programme professionals and finance professionals. It is worth noting that merely 22% currently use a software application to support management information on benefits suggesting a need for more automated use of information'.</p>



### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
				implementation benefits realisation'		
6	<p>EMPC (2009) <i>Project Portfolio Management A View from the management trenches</i>. Wiley</p> <p>Note this book was 'sponsored' by the PMI – its logo appears on the cover.</p> <p>Benefits content in this book authored by S Jenner</p>	<p><b>Normative or descriptive</b> – Normative</p> <p><b>Applied at which level</b> – Portfolio</p> <p><b>Overview/Summary</b></p> <p>Book based on accumulated experience of the team of practitioner authors (mostly US private sector) – no specific organisational examples quoted in relation to benefits management. First half of the book is written in the form of a novel.</p>	<p><b>When does measurement occur?</b></p> <p>At start - <i>“Above all - be clear about the benefits you are buying and the measures that will be used to assess realization, and bring all this together in a Benefits Realization Plan for each project.”</i> p99</p> <p>After deployment – <i>“Benefits need to be <u>actively</u> managed – to ensure that forecast benefits are realized (especially important where those benefits are dependent on business change) and to capture benefits that were not anticipated at the Business Case stage.”</i> p97</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Not distinguished.</p>	<p><b>Who measures the benefits?</b></p> <p>Validation with stakeholders - <i>“Benefits should be validated wherever possible to ensure they are realizable – by agreeing them with the recipients and those who will be responsible for delivering the business changes on which benefits realization is dependent.”</i> p97</p> <p><i>“Optimism bias is a reality – benefits tend to be <u>OVER</u> stated and are often little more than unsubstantiated assumptions. Such claims must be robustly scrutinised and challenged.”</i> p97</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Yes - <i>“Value Management Office charged with capturing emergent benefits and disseminating learning's and best practice.”</i> p96</p> <p><b>Measurement post-project?</b></p> <p>Yes – p100 <i>“We manage benefits from an enterprise rather than a project basis. This facilitates a continued focus on benefits after project closure and achieving synergies across the portfolio.”</i></p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Portfolio Managers, cross-sector (primarily private sector)</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Recommends 'Strategic Contribution Analysis' – linking benefits to measures of strategic success p92</p> <p>Prioritization criteria (inc measures) – p149-150 – include financial / non-financial measures; quantitative / qualitative measures such as Strongly or Directly Supports, Moderately Supports or Does Not Support.</p>
7	<p>Evans, D &amp; Cesaro, A. (eds) (2014) <i>Boosting Business Benefits</i>, Benefits Institute – <b>note no index or glossary</b>. A short collection of 7 papers. Benefits Institute is the training arm of an Australian Consulting practice – also see next</p>	<p><b>Normative or descriptive</b> – both (includes case studies)</p> <p><b>Applied at which level</b> – project and program primarily</p> <p><b>Overview/Summary</b></p> <p>A short collection of 7 papers on the application of BRM/BM including:</p> <p>Chapter 1 – ASIC</p> <p>Chapter 2 – Applying the Fujitsu Results</p>	<p><b>When does measurement occur?</b></p> <p>General recognition of: at start for the Business Case and after implementation. But also p15 <i>“Benefits management processes are iterative and should be integrated with all stages of the initiative's lifecycle, beginning with the identification of high level benefits in the concept or first-pass business case, detailed benefits quantification for the second-pass business case...through to a detailed post implementation review to assess benefits achieved”</i></p> <p><b>Focus on outcome and/or intermediate benefits?</b></p>	<p><b>Who measures the benefits?</b></p> <p>BCM role chapter refers to BCM role in <i>“assessing progress towards realising benefits”</i> <b>p61</b></p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Yes – template included p110 for Emergent Benefits.</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>PPM community, cross sector</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>P13-14 ASIC benefits categories:</p> <ul style="list-style-type: none"> <li>Financial – <b>Measurable in dollar terms:</b> revenue increase; cost savings; cost avoidance</li> <li>Quantifiable – <b>measurable</b> e.g. efficiency savings</li> <li>Recognisable – but <b>not measurable directly</b> e.g. risk reduction</li> <li>Intangible – <b>non-measurable</b> e.g. compliance</li> </ul>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?  <ul style="list-style-type: none"> <li>Normative &amp; descriptive guidance on how to measure benefits</li> <li>Applied at project, program, portfolio level?</li> </ul>	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	entry.	Chain to a Corporate Merger (anonymised) – see entry re IT Paradox, J Thorp Chapter 5 – Anonymised example of the Business Change Manager role Chapter 7 – Case study: Financial Trading Exchange  And templates – benefit profile and BRP.	Nothing noted re intermediate benefits.	<b>Measurement post-project?</b>  Yes – e.g. “ <i>At ASIC, benefits realisation is being monitored post project completion by assigning responsibility for benefits realisation at the Senior Executive level...In addition, on-going reporting continues to a higher level governance board (programme or portfolio)</i> ” p17  And chapter on 'Why Project Managers can't manage benefits' sees benefits measurement/tracking etc. as a program activity because “ <i>benefits are usually realised after the project has been completed</i> ” p75 – and therefore they argue project managers “ <i>should never be asked to</i> ” manage benefits because “ <i>it's not their job</i> ” – contrast with Jed Simms's view below.  BRP template “ <i>it will be the responsibility of a business representative to execute and to report against, probably well after the project has closed</i> ” p100		with WOG strategies  Templates Benefit Profile distinguishes between financial and non-financial p95.
8	<a href="#">Australian Benefits Institute Benefits Measures List</a>  <a href="#">From NZ Government on-line Benefits Library</a>  <a href="#">New Source – RELATED TO ABOVE ENTRY</a>	<b>Normative or descriptive</b> – Normative  <b>Applied at which level</b> – project and program  <b>Overview/Summary</b> 3 page table with columns for benefits, measures and KPIs for example:  Benefit = Staff satisfaction Measures = Survey responses and Staff turnover, p1	<b>When does measurement occur?</b> Not addressed  <b>Focus on outcome and/or intermediate benefits?</b> Not addressed	<b>Who measures the benefits?</b>  Not addressed  <b>Are measures added over the project? Emergent benefits?</b>  Not addressed  <b>Measurement post-project?</b> Not addressed	<b>To whom is the guidance (project type, sector) directed?</b>  Benefit management community	<b>What types of measure – quantitative / qualitative are used?</b>  Both e.g. number of complaints and survey responses.
9	Gartner – Gartner research is for clients only but the following summaries were accessed on-line without subscription	<b>Normative or descriptive</b> –  <b>Applied at which level</b> – IT  <b>Overview/Summary</b> No mention of measurement	<b>When does measurement occur?</b> Conceptualises benefits realization lifecycle as comprising 3 phases: Planning, Executing, Harvesting  <b>Focus on outcome and/or intermediate benefits?</b>  Not distinguished.	<b>Who measures the benefits?</b>  Not addressed  <b>Are measures added over the project? Emergent benefits?</b>	<b>To whom is the guidance (project type, sector) directed?</b>  Senior IT management	<b>What types of measure – quantitative / qualitative are used?</b>  Not addressed

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>Executive Summary: Benefits Realization: The Gift That Keeps On Giving (1.9.2011)</p> <p>Executive Summary: Show me the money: Advanced practices in Benefits Realization (1.12.2005)</p>			<p>Not addressed</p> <p><b>Measurement post-project?</b></p> <p>Not addressed</p>		
10	<p>IT Capability Maturity Framework (IT-CMF)</p> <p>Innovation Value Institute, Maynooth University, Dublin, Ireland</p>	<p><b>Normative or descriptive</b> – both (includes case studies)</p> <p><b>Applied at which level</b> – project, program and portfolio levels</p> <p><b>Overview/Summary</b></p> <p><b>BAR Principle #2 states that:</b></p> <p><b>Benefits come from change</b> - benefits do not come from technology in and of itself, but rather from the change that technology both shapes and enables - change that must be both led and managed.</p> <p>The IT Capability Maturity Framework (IT-CMF) provides the basis for a holistic evaluation of IT organizational performance, together with management best practices for organizational improvement. The IT-CMF contains 4 macro capabilities, one of which is <b>Managing IT for Business Value</b>, within this capability, there are 3 Critical capabilities:  <b>Benefits Assessment and Realization (BAR);</b>  <b>Portfolio Management (PM);</b> and  <b>Total Cost of Ownership (TCO).</b></p>	<p><b>BAR Principles # 3, 4 and 5 state that:</b></p> <p><b>Benefits must be outcome related</b> - benefits will be clearly stated, in terms of the expected outcomes (or their contribution to those outcomes) and measurable.</p> <p><b>Relevant metrics</b> - appropriate and consistent metrics, will be defined and monitored for benefits/outcomes, the change initiatives or assets contributing to those benefits/outcomes, and any assumptions related to the achievement of the benefits/outcomes.</p> <p><b>Full Life Cycle</b> - benefits will be actively managed through the full life cycle of an investment decision</p> <p><b>BAR's 14 Capability Building Blocks (CBBs)</b> cover the full life cycle an investment decision (from initial concept/idea through to the eventual retirement of the resulting assets), For each CBB within the BAR critical capability, <b>Maturity levels (L1 – L5)</b> and associated <b>Practices, Outcomes, and Metrics are defined. The CBBs are listed under the 5 categories below:</b></p> <ul style="list-style-type: none"> <li><b>Leadership:</b> <ul style="list-style-type: none"> <li>Common Purpose</li> <li>Value Culture.</li> </ul> </li> <li><b>Governance:</b> <ul style="list-style-type: none"> <li>Full Life Cycle</li> <li>Business Case (Role)</li> <li>Roles and Responsibilities</li> <li>Relevant Metrics</li> </ul> </li> <li><b>Benefits Process</b> <ul style="list-style-type: none"> <li>Benefits Planning</li> <li>Benefits Enablement</li> <li>Benefits Harvesting</li> <li>Benefits Review</li> </ul> </li> <li><b>Management of Change</b></li> </ul>	<p><b>BAR Principles #1 and 6 state that:</b></p> <p><b>Value mind-set/culture</b> - organizations will move beyond a culture of delivery – “build it and they will come” – to a culture of value, one that focuses on <b>creating and sustaining value from an enterprise's investments in IT-enabled change, including the operation and use of the new or changed assets resulting from that investment.</b></p> <p><b>Accountability</b> - there will be clear accountability for the realization of benefits (include consequences, roles and responsibilities)</p> <p><b>Who measures the benefits?</b></p> <p><b>In Governance/Responsibility and Accountability/L4 there is a practice to:</b>  Define clear IT and business roles and responsibilities (RACI) related to benefits realization and optimization from individual IT-enabled change investments and resulting assets across the full lifecycle of an investment decision. Align the reward/incentive system with the roles and responsibilities to recognize and reward desired</p>	<p><b>BAR Principle #7 states that:</b></p> <p><b>One size does not fit all (categorization)</b> - BAR practices will recognise that there are different categories of investments and assets, and organizational contexts that will require different approaches (in terms of scalability and adaptation).</p> <p><b>In Governance/Responsibility and Accountability/L4 there is a practice to:</b>  Define <b>clear IT and business roles and responsibilities</b> (RACI) related to benefits realization and optimization from individual IT-enabled change investments and resulting assets <b>across the full lifecycle of an investment decision.</b> Align the reward/incentive system with the roles and responsibilities to recognize and reward desired behaviour.</p> <p><b>These roles and responsibilities would be assigned, aligned, scaled</b></p>	ALL

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		<p><b>Benefits Assessment and Realization (BAR)</b> ensures that the potential value of business changes enabled by IT investments is understood and fulfilment is governed, including the cultural and behavioural change needed to create and to sustain this IT value, throughout the full life cycle.</p> <p>BAR enables the delivery of value by defining expected business outcomes before a program of change is approved. It then provides active management across the life cycle of that investment decision, ensuring that business benefits are identified, planned, measured and monitored. Those benefits are thus optimized through dynamic adjustment of the portfolio as needed. In this way, the value of all such investments can be maximized.</p> <p>BAR encompasses 14 <b>Capability Building Blocks (CBBs)</b> which are divided into the following 5 categories: <b>Leadership;</b> <b>Governance;</b> <b>Benefits Process;</b> <b>Management of Change;</b> and <b>Organizational Learning;</b></p> <p>The <b>Portfolio Management</b> Critical Capability (PM) is intended to ensure there is an appropriate level of monitoring of the programs and projects in the portfolio that have an IT component, such that they are executed within their parameters.</p> <p>The <b>Total Cost of Ownership</b> Critical</p>	<ul style="list-style-type: none"> <li>○ Behavioural Change</li> <li>○ Stakeholder Engagement</li> <li>○ Communication</li> <li>• Organizational Learning <ul style="list-style-type: none"> <li>○ Practice evolution, Innovation and Sharing</li> </ul> </li> </ul> <p>BAR is <b>integrated with a number of other related Critical Capabilities</b>, the major ones being:</p> <ul style="list-style-type: none"> <li>• Strategic Planning;</li> <li>• Total Cost of Ownership;</li> <li>• Portfolio Management;</li> <li>• Program and Project Management; and</li> <li>• Portfolio Planning and Prioritization.</li> </ul> <p><b>In Leadership/Value Culture/L2 there is a practice to: Define what constitutes value</b> (using some combination of “triple bottom line” [economic/financial – profit, social – people, and ecological/environmental – planet] and Porritt’s “five capitals model” [Financial, Social, Human, Natural, &amp; Manufactured Capital – in public sector might include Political]), and how it will be measured. <b>This establishes the foundation for outcome measurement.</b></p> <p><b>In Governance/Full Life Cycle/L4 there is a practice to:</b> Extend the governance framework to <b>include benefits planning, enablement and harvesting across the full life cycle of an investment decision</b>, integrating investment and asset management, with investments and resulting assets being managed as one or more portfolios. <b>This (and supporting management practices) ensures that outcomes are defined, developed, selected and measured across the full life cycle of an investment decision.</b></p> <p><b>In Governance/Responsibility and Accountability/L4 there is a practice to:</b> Define clear IT and business <b>roles and responsibilities</b> (RACI) related to benefits realization and optimization from individual IT-enabled change investments and resulting assets across the full lifecycle of an investment decision. Align the reward/incentive system with the roles and</p>	<p>behaviour.</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p><b>In Governance/Business Case (role)/L5 there is a practice to:</b> Review, update, and re-evaluate business cases dynamically, throughout the full investment cycle, according to changing business conditions</p> <p><b>Measurement post-project?</b></p> <p><b>In Benefits Process/Benefits Harvesting/L2 there are practices to:</b> Establish a post-implementation harvesting team for all IT-enabled change initiatives above a defined threshold. Link personal objectives to achievement of committed project/program benefits. Give business accountability and ownership of evolving work practices and continued benefits harvesting. <b>At L5 there is a practice to</b> Integrate formal benefits harvesting into the organization's financial governance.</p>	<p><b>and adapted within the context of Principle #7, i.e. consistent with the different categories of investments and assets, and organizational contexts</b></p>	



### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?  <ul style="list-style-type: none"> <li>Normative &amp; descriptive guidance on how to measure benefits</li> <li>Applied at project, program, portfolio level?</li> </ul>	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		<p>Capability (TCO) tracks, compares, and controls direct and indirect costs associated with IT assets (infrastructure and systems) in order to maximise value. Accurate understanding of current and future TCO over the full IT asset lifecycle leads to more informed budgeting and portfolio management decisions.</p> <p><b>This review is limited to the BAR Critical Capability</b></p>	<p>responsibilities to recognize and reward desired behaviour.</p> <p><b>In Governance/Relevant Metrics/L4 there is a practice to:</b>  Use more sophisticated <b>lag indicators</b> of alignment, financial and non-financial value and risk. Consistently apply and manage <b>lead indicators</b> for enabling changes for all investments. (Lead indicators may include the status of delivery of changed capabilities, adoption of those capabilities, and "meaningful use" of those capabilities, as well as the behavioural and cultural changes required in order for benefits to be realized).</p> <p><b>In Governance/Relevant Metrics/L5 the above practice is further refined to:</b>  Consistently apply and manage robust lead and lag indicators across the full life cycle of individual investments, <b>including resulting services, and for all portfolios</b>. ("Lead" indicators include the on-going operation and "meaningful use" of resulting services to ensure that benefits continue to be realized). Regularly review the relevance and effectiveness of metrics and revise as necessary.</p> <p><b>In Benefits Process/Benefits Planning/L3 there is a practice to:</b>  Identify benefits at the end outcome level, with basic mapping of benefits.  <b>At L4 practices are further extended to:</b>  Establish <b>relevant metrics, targets, and KPIs</b> for most intermediate and strategic outcomes within benefits maps.  Establish the <b>relationship and interactions</b> between benefits and the changes necessary in the business, technology, processes, the organization, and stakeholders to achieve the benefits.</p> <p><b>In Benefits Process/Benefits Enablement/L4 there are practices to:</b>  Review the progress of most projects during execution against outcome targets in the benefits plan.  Allow <b>changes to project scope</b> only after</p>			



### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?  <ul style="list-style-type: none"> <li>Normative &amp; descriptive guidance on how to measure benefits</li> <li>Applied at project, program, portfolio level?</li> </ul>	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
			<p>considering the impact on benefits. Follow an adaptive project lifecycle responding to any changes impacting on benefits.</p> <p><b>In Benefits Process/Benefits Harvesting/L2 there are practices to:</b>  Assign <b>accountability</b> for the harvesting of targeted benefits to business areas.  Review benefits harvesting at various points after go-live.  <b>At L3 practices are further extended to:</b>  Assign accountability to <b>named business individuals</b> for the harvesting of targeted benefits.  Bake targeted benefits into business unit budgets.  <b>At L4 practices are further extended to:</b>  Establish a post-implementation harvesting team for all IT-enabled change initiatives above a defined threshold.  Link personal objectives to achievement of committed project/program benefits.  Give <b>business accountability and ownership</b> of evolving work practices and continued benefits harvesting.  <b>At L5 there is a practice to</b>  <b>Integrate</b> formal benefits harvesting into the organization's financial governance.</p>			
11	Jenner, S. (2010) <i>Transforming Government and Public Services – Realising Benefits through Project Portfolio Management</i> , Gower	<p><b>Normative or descriptive</b> – Both – based on CJS IT case study with other examples from US VMM, D&amp;VM, Victoria's ILM – see Govt body literature review.</p> <p><b>Applied at which level</b> – Focus on Portfolio level inc consistent benefits and measures across the portfolio. p40</p> <p><b>Overview/Summary</b>  Book based on experience in managing the CJS IT Portfolio, which won the 2007 Civil Service award. The focus is on Portfolio Management rather than Benefits management – but Chapter 6 'Active Value Management' addresses benefits management at the portfolio level and includes examples from CJS IT as well as DFPNI.</p>	<p><b>When does measurement occur?</b></p> <p>Focus on at start (forecasting) for the Business Case and then advocates “<i>Active value management</i>” which, “<i>is not just about passive reporting of benefits, but the dynamic seeking out of value – exploiting and leveraging investments and knowledge to create additional value. This is more than semantics and represents a significant shift from the traditional approach to benefits management which takes a project or programme centric view and tracks benefits against business case forecast.</i>” p111</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Not distinguished.</p>	<p><b>Who measures the benefits?</b></p> <p>Not addressed.</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Yes - Benefits management includes ensuring “<i>emergent benefits are captured and disseminated, and capability and capacity created is leveraged to create additional value.</i>” pxi</p> <p><b>Measurement post-project?</b></p> <p>Yes - “<i>The focus of the benefits management regime is on value creation with continual learning and further exploitation of capability beyond project closure.</i>” p148</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Public servants</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Both in Multi-criteria analysis p88.</p> <p>“<i>Measures of attractiveness will depend on the purpose of the investment i.e. NPV for cashable efficiency savings, but for other investment objectives develop appropriate measures of value for example, use Strategic Contribution Analysis to understand the logic behind performance-enhancing benefits, the scale of the anticipated impact and confidence that they will be realised.</i>” p86-87</p>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
12	Jenner, S. (2011) <i>Realising Benefits from Government ICT Investment – a fool's errand?</i> Academic Publishing	<p><b>Normative or descriptive</b> – Both – based on CJS IT case study with other examples.</p> <p><b>Applied at which level</b> – Projects, programs and portfolio - Benefits eligibility framework – “<i>The set of rules about what benefits can and can't be claimed, how they should be quantified and valued. It provides: a methodologically sound approach to measuring and valuing benefits realisation</i>” p153</p> <p><b>Overview/Summary</b> Book based on experience in managing the CJS IT Portfolio – as such it's essentially an extended Case Study with examples from programs in the Courts, YJB and Corrections, as well as the portfolio-level benefits management approach developed by CJIT which won the 2007 Civil Service Financial Management award, augmented by examples from other organisations such as:</p> <ul style="list-style-type: none"> <li>Measuring Social Value in the Queensland IJIS program</li> <li>Victorian Investment Management Standard</li> <li>DWP Tell Us Once Program.</li> </ul>	<p><b>When does measurement occur?</b></p> <p>Across the BM cycle:</p> <p><b>Benefits profile</b> – “A single repository for the key information related to each material benefit – ...<u>and the measures that will be used to track realisation</u>”. p154</p> <p><b>Benefits realisation plan</b> – “A document that supports the full business case. <b>It includes the benefits profiles and:</b> How the key benefits will be tracked and reported – including the data sources to be used, who will collect the data, how often <b>and what measures and indicators will be used.</b>” p154-155</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Both - “<i>The key point to note is that benefits are usually dependent on change and this requires <u>active</u> management. In other words projects can be completed to schedule and budget, but the benefits are usually only realised when some change in working practices occurs i.e. when we combine investments in ICT systems with business process changes and 'people' changes – ranging from training to use the system, to re-skilling and redeploying staff to other value-adding activities.</i>” p10</p> <p>Benefits categorisation includes 'direct' and 'enabled' – “<i>Direct benefits are those that are directly realised as a result of a project or programme. In contrast, enabled benefits refer to those where realisation of the benefit is dependent on business change to exploit the capability the investment has created.</i>” p8</p> <p>“<i>a combination of outcome measures and lead or proxy indicators may be used, particularly where there is an extended cause and effect chain.</i>” p115</p>	<p><b>Who measures the benefits?</b></p> <p>Validation with stakeholders - “<i>a benefit is something that is of value to someone – and this value can vary from stakeholder to stakeholder. Value is a relative not an absolute concept...It is consequently a fundamental principle of effective benefits management that the value of a benefit should be determined by the recipient.</i>” p9</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Yes - Benefits Management, “<i>we go beyond realising forecast benefits to capture benefits as they emerge and create value by exploiting capability and capacity on an on-going basis.</i>” p154</p> <p><b>Measurement post-project?</b></p> <p>Yes “<i>Benefits Management is therefore a process that runs throughout the project life cycle – from investment justification and preparation of the business case, through project implementation, <u>and beyond project closure to business as usual.</u></i>” p10</p> <p>“<i>Consideration will also need to be given to the question of how long benefits should be tracked and measured. A red flag that indicates an organisation is on the wrong path is when people ask, “how long do we have to track benefits for?” This indicates the focus is on tracking against forecast rather than trying to understand how value is being created. The answer in practice is that no hard and fast answer can be given that will apply to all circumstances, but in general, tracking and measurement should continue until</i></p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Public Sector IT managers</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Distinguishes between the following types of benefit:</p> <ul style="list-style-type: none"> <li>Tangible or Intangible.</li> <li>Direct or Enabled.</li> <li>Financial or Economic (i.e. those with an attributed monetary value).</li> </ul> <p>P8.</p> <ul style="list-style-type: none"> <li>Cashable or non-cashable</li> <li>Planned or emergent</li> </ul> <p>Benefits Measurement Taxonomy – p48-49 including: quantitative financial or economic; quantitative non-financial; and qualitative measures.</p> <p>Also specifically includes intangible benefits – p159: “<i>Benefits that are difficult to quantify and measure reliably such as improved staff morale and decision-making. In such cases proxy indicators of such benefits can be developed.</i>”</p>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
				<i>benefits have been realised and the value to be derived from tracking no longer outweighs the implied costs of measurement.” p114</i>		
13	<p>Kerzner, H Benefits Realization and Value Management (2016) IIL.com</p> <p>New Source – also see next entry.</p>	<p><b>Normative or descriptive</b> – normative</p> <p><b>Applied at which level</b> – project and program</p> <p><b>Overview/Summary</b></p> <p>Paper argues:</p> <p>1. That we used the triple constraint (time, cost, scope) because our approaches to measurement were not advanced enough to measure value. But p2 “<i>Today, metric measurement techniques are maturing to the point where we believe that we can measure just about anything</i>” – therefore it's time to measure benefits.</p> <p>2. Project managers are now business managers making business decisions.</p>	<p><b>When does measurement occur?</b></p> <p>Defines 3 phases in the investment life cycle, p5:</p> <ol style="list-style-type: none"> <li>1. Benefits and value are defined</li> <li>2. Benefits and value are created</li> <li>3. Benefits and value are measured</li> </ol> <p>“<i>Business Outcomes, Benefits and Value should be identified in measurable terms up front</i>” p18-19</p> <p>p8 – “<i>companies are now creating value metrics that can be measured throughout the project rather than just at the end</i>”</p> <p>Also says p11:</p> <p>Internal benefits – are measured incrementally Financial benefits – are measured incrementally and at the end Future benefits – are measured at the end Customer-related benefits - measured incrementally.</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p><b>Both</b> – “<i>there can also be dependencies between the benefits where one benefit is dependent on the outcome of another.</i>” p1</p>	<p><b>Who measures the benefits?</b> Nothing noted</p> <p><b>Are measures added over the project? Emergent benefits?</b> Nothing noted</p> <p><b>Measurement post-project?</b> Refers to – benefits are measured during the project and value at the end, p5.</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>PPM Cross-sector</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>“<i>Metrics for tracking benefits and value</i>” will be included in the Business Case, p4</p> <p>The Business Case will include a Benefits Realisation Plan which will classify benefits as tangible or intangible, and describe how they will be measured p4 &amp; p8 – the BRP will include “<i>the metrics that will be used to track the benefits and accompanying value.</i>”</p> <p>Measuring Benefits and Value – p4 “<i>Performance results will be reported both quantitatively and qualitatively</i>”</p> <p>Refers to tangible and intangible benefits p1, but also says p2 – “<i>Project or business <b>value can be quantified whereas benefits are usually explained qualitatively.</b> When we say that the ROI should improve, we are discussing benefits. But when we say that the ROI should improve by 20%, we are discussing value</i>”</p> <p>Identifies 4 categories of benefits and value and sample metrics for each, p10:</p> <p>1. Financial – ROI, operating margin</p>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?  <ul style="list-style-type: none"> <li>Normative &amp; descriptive guidance on how to measure benefits</li> <li>Applied at project, program, portfolio level?</li> </ul>	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
						2. Future/strategic – surveys on image  3. Internal – time, cost, scope, efficiency  4. Customer-related - quality
14	Kerzner, H & Saladis, F (2009) <i>Value-Driven Project Management</i> , Wiley/IIL  New Source	<p><b>Normative or descriptive</b> – Normative with some case studies/examples</p> <p><b>Applied at which level</b> – Project</p> <p><b>Overview/Summary</b>  As above, the book is based on 2 main arguments:</p> <p>1. That we used the triple constraint (time, cost, scope) because our approaches to measurement were not advanced enough. But this is no longer the case – projects are expected to deliver business value; and therefore...</p> <p>2. Project managers are now business managers making business decisions.</p> <p>pvii</p>	<p><b>When does measurement occur?</b>  Across the project life cycle – see distinction between CSFs and KPIs below and in final column.</p> <p><b>Focus on outcome and/or intermediate benefits?</b>  Nothing noted – expect note ref to CSFs (measured at the end) and KPIs (tracked throughout the project) in final column.</p>	<p><b>Who measures the benefits?</b>  Role of PMO emphasised – p191  <i>“Without an established project management office (PMO)...metrics may not be established”</i></p> <p><b>Are measures added over the project? Emergent benefits?</b>  Yes – <i>“Metrics can change over the duration of the project”</i> p186</p> <p><b>Measurement post-project?</b>  Nothing noted.</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Project Managers, cross-sector</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>As above - see 4 types of business value: Internal, financial, future, and customer-related. p131</p> <p>Also refers to Business Values as including p68-69:</p> <p><b>Foundation Values</b> – required to maintain BAU (Internal and financial values above)</p> <p><b>Strategic or Innovation Values</b> – required for future survivability (Future and Customer Values above).</p> <p>P189 <i>“when value becomes part of the success criteria, and when there are multiple forms of value, the CSF and KPI can change from project to project”</i></p> <p>P229 KPIs should relate to business value drivers</p> <p>CSF = <i>“focus on the value in deliverables or end results”</i> p184. CSF are identified at the end of the project.</p> <p>KPI = <i>“focus on the value in the processes used to achieve the end results”</i> p184. KPIs are tracked throughout the project.</p>



### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
15	Letavec, C., 2014. Strategic Benefits Realization: Optimizing Value through programs, portfolios and organizational change management. J Ross Publishing, FL, USA.	<p><b>Normative or descriptive</b></p> <p>Normative</p> <p><b>Applied at which level</b></p> <p>His BRM process is based on the PMI Standard for <u>Program</u> Management. So he takes a program centric view of BRM. There are also chapters on BRM at the Portfolio level and in project-based organisations.</p> <p>At the portfolio level emphasis is placed on an agreed set of portfolio KPI's p178. Portfolio reporting and review are covered.</p> <p>Piloting of BRM in project based organisations includes agreeing 'benefits scope', including measurement p201.</p> <p><b>Overview/Summary</b></p> <p>The book provides guidance for benefits realization in a program context.</p>	<p>The Benefits Realization Management process is seen as consisting of the following phases (based on the PMI Standard for Program Management):</p> <ul style="list-style-type: none"> <li>• Benefits identification</li> <li>• Benefits analysis and planning</li> <li>• Benefits Delivering</li> <li>• Benefits transition</li> <li>• Benefits Sustainment.</li> </ul> <p>In 'benefits identification' the programme management team will reach consensus with relevant stakeholders on benefits to be included, based partly on qualitative analysis and partly on quantification P61. Baselines, potential for improvement and validation are undertaken. P61-65</p> <p>As part of 'benefits analysis and planning' advocates the use of Measurement Plans, as part of the benefits realization plan, including an identified 'measurement owner'. (P76-77).</p> <p>Over the rest of the stages, tracking of measures and reporting takes place.</p> <p>Intermediate and end benefits are explained in terms of dependency p6</p> <p>Links must be made between measures and what is valued by stakeholders p257. It is noted that stakeholders change over the benefits life-cycle. (P50).</p>	<p>Ch. 10 covers primary BRM roles.</p> <p>Benefit Owners support the realization of a particular benefit within a program p114. Many individuals may play this role over the life of a program.p113.</p> <p>SRO's are responsible for benefits realization on a program level.</p> <p>The other key roles at the program level are Program Manager and Business Change Manager. The Business Change Manager may facilitate identification and quantification of program benefits, engaging the business stakeholder community p126.</p> <p>Emergent benefits are seen as opportunities in later stages to optimise benefits realization p7.</p>	<p>Generic guidance.</p> <p>Not-for-profit business forum case study, but in context of the role of the PMO.</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Types of measures are quantitative, qualitative, financial, non-financial, direct, indirect, leading, lagging (P75).</p> <p>Good measures require data to be available, ideally existing in the organisation, and be reliable (accurate, timely, correct granularity, worth its cost) p77-78</p> <p>Intangible benefits are to be noted with any supporting information p8.</p> <p>The developed metric set need not be extensive or complex p257.</p>
16	Matharu, J. & Green, M (2015) <i>Practical Benefits Realisation Management</i> , Benefits Management Publishing.  Note - Mike Green is a Visiting Fellow at Henley.	<p><b>Normative or descriptive</b> – normative with a few short anonymised examples.</p> <p><b>Applied at which level</b> – focus is on change and change initiatives.</p> <p><b>Overview/Summary</b> Practical guide to “<i>application of the benefits management process</i>” page v</p>	<p><b>When does measurement occur?</b></p> <p>P73 Measures are identified in the 'definition and analysis' phase (p9 phases = benefit identification; benefit definition and analysis; benefit planning; and benefit realisation); and then tracked in the benefits realisation phase p87</p> <p>Priority elements for the benefit profile include – benefit measure, p39</p> <p>Benefits Realisation Plan includes “<i>Measurement Approach – Details the frequency, duration and any other aspects for the measurement</i>” p71</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Both – refers to benefit chains (p15) with both intermediate and end benefits shown on the benefit map (p127) with:</p>	<p><b>Who measures the benefits?</b></p> <p><b>Benefits Realisation Manager</b> – “<i>Managing the benefits realisation process including all tracking and reporting.</i>” p10</p> <p><b>Data Manager</b> – “<i>Owner and provider of data for benefit measures</i>” p10</p> <p>Benefits and measures should be signed off with the benefit owner p75.</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Yes – p94: “<i>If there are no emergent benefits identified from a change it is most probably because the benefits management process is not working</i>”</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Project, program and change managers, page v</p>	<p>Not specified – although the focus is on quantitative measures e.g. Case study of a reduction in month end Accounts receivable p77</p> <p>“<i>Measure 1: Reduction in time between invoice trigger and invoice issue to the client</i>”</p> <p>“<i>Measure 2: Reduction in time between invoice trigger and cash receipt</i>”</p> <p>“<i>Measure 3: Month end accounts receivable</i>”</p>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?  <ul style="list-style-type: none"> <li>Normative &amp; descriptive guidance on how to measure benefits</li> <li>Applied at project, program, portfolio level?</li> </ul>	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
			<p><b>End Benefits</b> - <i>"The 'end benefit' contributes to the objective and requires the delivery of 'intermediate benefits' before it can be realised"</i> p15; and <i>"Benefit that contributes directly to an objective"</i> p211</p> <p><b>Intermediate Benefits</b> <i>"Benefits that need to be realized before an end benefit can be realised"</i> p211</p>	<p><i>as it should."</i></p> <p>Emergent benefits should be identified at benefit reviews p89 – and <i>"identify the measure and confirm the benefit owner"</i> (p95)</p> <p><b>Measurement post-project?</b></p> <p>Yes – the Benefits Realisation Plan includes <i>"How benefits realisation will be maintained after programme closure"</i> p69</p>		
17	Melton, T., Iles-Smith, P., Yates, J., 2008. Project Benefits Management: linking your project to the business. Elsevier, Oxford	<p><b>Normative or descriptive</b> – Normative, with illustrative case studies</p> <p><b>Applied at which level</b> – Project, also some focus on portfolio (P166)</p> <p><b>Overview/Summary</b></p> <p><b>Method for undertaking benefits management, based upon a 'Simple benefits Hierarchy (from Melton, 2007) P13, of</b></p> <ul style="list-style-type: none"> <li>- benefit criteria</li> <li>- benefits business case</li> <li>- benefit enablers</li> <li>- project objectives and success factors</li> <li>- benefits realization</li> </ul> <p><b>benefit measure checklist P80</b></p>	<p><b>When does measurement occur?</b></p> <p>Benefits measurement is a developing process, from the early stage alignment of an idea and a business benefit, to the definition of</p> <ul style="list-style-type: none"> <li>Qualitative benefits metrics</li> <li>Quantitative benefits scoring</li> <li>Quantitative benefits metrics, with baseline and target.</li> </ul> <p>Benefits scoring might be undertaken using the Balanced Scorecard</p> <ul style="list-style-type: none"> <li>- financial</li> <li>-customer</li> <li>-learning and growing</li> <li>-internal business processes (P43)</li> </ul> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>These terms are not used</p>	<p><b>Who measures the benefits?</b></p> <p>Key roles are project sponsor, project champion and end user (P48-49)</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>No addition of measures in the main guidance sections</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Produced with the Institution of Chemical Engineers - written from the perspective of engineering projects in the process industries, but generic enough to apply widely Pix</p> <p>There are a number of case studies, mainly from manufacturing, but also organisational change and disaster planning</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Qualitative benefits are an initial step, leading on to quantification - benefits are 'scored' P44-45.</p> <p>There are 4 types of financial benefit</p> <ul style="list-style-type: none"> <li>- sustainable financial benefits</li> <li>- one-off financial savings</li> <li>- financial cost avoidance</li> <li>- Increase in sales performance P47</li> </ul> <p>Cost-benefit analysis used (P57-58).</p> <p>'Hard' and 'soft' benefits (P170 gives an example)</p>
18	Moorhouse – The Benefits of Organisational Change, 2009 (sponsored by the	<p><b>Normative or descriptive</b> – Descriptive</p> <p><b>Applied at which level</b> – Project and program</p>	<p><b>When does measurement occur?</b></p> <p>Not addressed</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p>	<p><b>Who measures the benefits?</b></p> <p>Not addressed</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Cross sector</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Not addressed</p>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	Financial Times)	<p><b>Overview/Summary</b></p> <p>Survey of organisational performance realising benefits from change. Use of benefits profiles and key benefit indicators were found to be rare – in less than 10% of organisations were they 'normally used'. p24.</p> <p>Findings include: P30 – “<i>Mature BRM associated with improved benefit delivery</i>” but “<i>The BRM toolkit is drastically underused</i>” – see also NAO entry in Govt lit review which reports similar findings.</p>	Not addressed – term not found in word search.	<p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Not addressed – term not found in word search.</p> <p><b>Measurement post-project?</b> Not addressed</p>		
19	Payne, M., 2007. Benefits Management: Releasing project value into the business. Project Manager Today, Hook.	<p><b>Normative or descriptive</b> – Normative, with case study examples</p> <p><b>Applied at which level</b></p> <p>Project, with multi-project also considered</p> <p><b>Overview/Summary</b></p> <p>Presents a BM method in Part 1 and shows how to apply it in Part 2.</p> <p>Chapters on 'benefits and beneficiaries' and 'measures, targets and financials'.</p> <p>This method involves the eventual translation of benefits into financial values.</p>	<p><b>When does measurement occur?</b></p> <p>There are 5 project stages, Start-up, feasibility, define, implement, operate. After preparatory work beforehand, Detailed Financial Impact of Benefits occurs in 'Define', after which benefits are tracked (p124)</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>The order presented is, Metrics for</p> <ul style="list-style-type: none"> <li>- outcomes (changes on the ground)</li> <li>- benefits (operational performance)</li> <li>- financial performance (p60)</li> </ul> <p>There are 4 types of measures – direct, partial, surrogate and transferred benefits p62.</p> <p>Stakeholders</p> <p>The method involved workshops with internal stakeholders at the different project stages. P137.</p>	<p><b>Who measures the benefits?</b></p> <p>Benefits coordinators are appointed at the watershed between benefits definition and realisation (p89). There are country and regional benefits coordinators, and they will undertake tracking (p91).</p>	Generic, but two examples are used in Part 2 – a supply chain project and a global MIS implementation project	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Benefits and outcomes are initially described in qualitative terms, Measures quantify this, to derive a financial value for the project and to enable tracking (p55).</p> <p>Does not recognise 'intangible' benefits.</p> <p>Suggests that a minimum number of benefits should be tracked to meet the objectives of the exercise (p101). Criteria are type, appropriateness, doability, cost and intrusiveness (p103)</p>
20	Jed Simms - Capability Management: Research into the management of project benefits in 27 of Australia's top 110 Organisations. Findings Report 2004-2006  Note Jed Simms was Executive Chair (ex Boston Consulting Group) and Alex Chapman,	<p><b>Normative or descriptive</b> – normative and descriptive of current practices.</p> <p><b>Applied at which level</b> – projects and programs</p> <p><b>Overview/Summary</b></p> <p>Anonymised survey results from research into the management of project benefits in 27 of Australia's top 110 Organisations.</p> <p>“Effective benefits management requires that you</p> <ul style="list-style-type: none"> <li>• track the project-delivery activities required to deliver each desired</li> </ul>	<p><b>When does measurement occur?</b></p> <p>During and after the project – <b>note 'The Choice' (additional source)</b> states “<i>Benefits and value can usually be delivered throughout the duration of the investment</i>” p40</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>Not distinguished – focus is on Desired Business Outcomes, Benefits and Value – they would argue intermediate benefits are not DBO's.</p>	<p><b>Who measures the benefits?</b></p> <p>No specific roles and documentation identified. But – the argument that the business is responsible for benefits realisation is seen as being used (incorrectly) “<i>to leave the project team off the benefits hook</i>” p6. Focus is on the accountability of the Sponsor.</p> <p><b>Are measures added over the project? Emergent benefits?</b></p> <p>Not addressed.</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Senior management in Australian companies specifically.</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Argues that benefits, value and outcomes are used interchangeably but they should be separated: “<i>One or more business outcomes deliver benefits; and benefits have a value that is determined by its value-drivers.</i>” p15. They refer to this as the Deep Smarts Benefits Equation™ p16</p>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	CEO (ex Cranfield) – this research report also refers to the book 'Solving the Benefits Puzzle' – see next 3 entries below – <b>these 4 entries should be read together.</b>	<ul style="list-style-type: none"> <li><i>business outcome</i></li> <li><i>track the delivery of the business outcomes to enable/realise each of the benefits</i></li> <li><i>when the benefits are realised, quantify the benefit's value using consistent value-drivers and assumptions" p16</i></li> </ul>		<p><b>Measurement post-project?</b> Argues <b>the project should be scoped to deliver the benefits. p3 – this "enables effective post-project benefits measurement"</b>.</p> <p><b>Note this is a fundamentally different approach to the standard – put 'projects into a program' approach to benefits realisation e.g. see MSP and Benefits Institute entry below.</b></p> <p><i>"Taking action to realise post-project benefits is necessary and good – but when that leads to the main project abdicating any responsibility for or focus on benefits delivery, then it is bad" p7</i></p> <p><i>And "Ascribing all benefits as 'post-project' is an oversimplification" p9</i></p> <p><i>"Organisations urgently need a complete process that tracks and measures the full delivery of the Sponsor's promised outcomes and benefits (including after the project's completion)" p13</i></p>		<p>Key focus of the paper is to argue for an approach that – <i>"separates out and manages the three key (and different) elements – outcomes, benefits and value (dollars)." P2</i></p> <p>But in practice <i>"Benefits are tracked through KPIs, even if they don't fit"</i></p> <p>Reasons for failure include - <i>"dollars realisation as a proxy for benefits realization" p3; "Project Sponsors will continue to 'get away' with sloppy benefits claims as long as they know that no one will be measuring it (or even looking for it) when the project is complete."</i> p12</p>
21	Simms, Jed. Solving the Benefits Puzzle	<p><b>Normative or descriptive – normative</b></p> <p><b>Applied at which level – project and program</b></p> <p><b>Overview/Summary</b> Written as a novel.</p>	<p><b>When does measurement occur?</b> See entry above</p> <p><b>Focus on outcome and/or intermediate benefits?</b></p> <p>No reference to 'intermediate'. See entry above.</p>	<p><b>Who measures the benefits?</b> Argues that talk about benefits owners and benefit managers is not needed – all is required is an acceptance that the sponsor has accountability and can then delegate responsibility to specific managers. Loc 74 of 1037</p> <p><b>Are measures added over the project? Emergent benefits?</b> No reference to 'emergent'</p> <p><b>Measurement post-project?</b> See entry above</p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Project sponsors and managers – cross-sector</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Both - Value = the quantification of a benefit.</p> <p>6 types of benefit are identified: financial and 5 non-financial types: customer, competitive, capability, productivity and risk-reduction. (Section 11, Loc 589 or 1037)</p>
22	Simms, Jed and Chapman, Alex (their branding includes – Totally Optimized Projects™). The Capital Crime	<p><b>Normative or descriptive – normative</b></p> <p><b>Applied at which level – project, program and portfolio</b></p> <p><b>Overview/Summary</b></p>	<p><b>When does measurement occur?</b> See entry above.</p> <p><b>Focus on outcome and/or intermediate benefits?</b> Intermediate benefits not mentioned – but as noted above, the authors would argue that it is DBOs that matter and there is a chain – Desired Business Outcomes</p>	<p><b>Who measures the benefits?</b> See entry above</p> <p><b>Are measures added over the project? Emergent benefits?</b></p>	<p><b>To whom is the guidance (project type, sector) directed?</b></p> <p>Senior management, cross-sector</p>	<p><b>What types of measure – quantitative / qualitative are used?</b></p> <p>Business Outcomes, Benefits and Value – All 3</p>



### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publicati on number (cited in the report as CPR1- 24)	Source details	What is the 'state of the art' in measuring benefits?  <ul style="list-style-type: none"> <li>Normative &amp; descriptive guidance on how to measure benefits</li> <li>Applied at project, program, portfolio level?</li> </ul>	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?  a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits  b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		Written as a novel.	– Benefits – Value.	Not mentioned.  <b>Measurement post-project?</b> Not addressed		should be measured, p20. Value can be measured in both quantitative and qualitative terms (although these specific terms are not used).
23	Thiry, M. 2015  Program Management	<b>Normative or descriptive</b>  Normative  <b>Applied at which level</b>  Program. Recognises project and portfolio levels, but not specific on the relationship between them and programs in terms of benefits (P24-25  <b>Overview/Summary</b>  Guidance on program management, which it suggests is 'universally perceived as a strategy execution method and a means to deliver sustainable change' P3  Little detail on benefits measures, though	<b>When does measurement occur?</b>  Program Life-cycle of Definition, Deployment, Closure p 136. Identify measures of success is in definition stage p149. BBS used in blueprint and then Business case p157-170. Benefits realization plan produced p191. Benefits realization and appraisal occur at end of deployment p136, p241. Value realization appraisal occurs in closure. P141, p254.  Contrast between technical and functional specification for program product. Thiry is in favour of functional approach, which involves high stakeholder engagement and in which technical aspects, eg cost/benefit ratio, are delayed until end of development and ideally into the development (?) stage p112.  <b>Focus on outcome and/or intermediate benefits?</b>  In the 'benefits map/benefits breakdown structure concept' p113, benefits are distinct from outcomes in the 'business value' domain. No sub-categories of benefits  <b>Links to specific stakeholders</b>  Benefits management as complementary to stakeholder management – 'only a good stakeholder process will enable the identification and realization of significant benefits' p110	<b>Who measures the benefits?</b>  The roles of program actors are defined (P117), but this is quite strategic – management of benefits, rather than measurement.  In deployment (transition to next cycle) the program manager should 'measure benefits and capabilities realization against blueprint' P131.  <b>Are measures added over the project? Emergent benefits?</b>  Not mentioned. Uncertainty and ambiguity are key themes (P20-25) but not discussed in relation to benefits.  <b>Measurement post-program?</b> Not addressed	<b>To whom is the guidance (project type, sector) directed?</b>  Generic guidance - few examples and none in-depth.	Division into financial and non-financial benefitsP110-111.  FiNancial benefits are cost reduction, cost avoidance or revenue uplift. More detailed sub-categories provided. Must be given monetary value.  Non-financial benefits must be tangible and measurable P111.
24	Thorp, J., 1998. The Information Paradox, first ed. Fujitsu Consulting Inc., Toronto.  Thorp, J., 2003. The Information Paradox, revised ed. Fujitsu Consulting Inc., Toronto.	<b>Normative or Descriptive</b> - normative and descriptive  <b>Applied at which level</b> - project, program and portfolio  <b>Overview/Summary</b>  The overarching premise of the <b>Benefits Realization Approach</b> , introduced in the book, is that realising benefits, and creating and sustaining value, from investments in	The third fundament of the Benefits Realisation Approach, <b>full cycle governance</b> , is key to identifying where metrics must be developed, defined and selected. Full cycle governance extends the boundaries of benefits realization management, reaching beyond the traditional design-develop-test-deliver cycle of conventional IT projects. It defines the requirement for proactive management of benefits throughout the full cycle of project, program and portfolio management. It includes all phases of investment decision making, project management, delivery, implementation, monitoring and continuous adjustment. In contrast to traditional project management cycles, it reaches from "concept to cash"	<b>Note: Given the Information Paradox definitions of Project and Program, the responses below relate to Program – not Project.</b>  <b>Who measures the benefits?</b>  <b>Investment Decision Board (IDB)</b> – a management structure primarily accountable to manage an organization's portfolio of investment programs, and in doing so manage the level of overall funding to provide	A massive amount of work - costly work - is required to treat all programs the same way, at the most intensive level of analysis. Such an approach is both unhelpful to making good decisions and very frustrating for all involved.  The alternative is to find a way to address programs differently according to the degrees of freedom of	The key word in the description of Measurement is "Relevant". Many organisations measure a large number of things, but those few key metrics, that are relevant to creating and sustaining value, are lost in the "noise". The essential point about measurement is that, by definition, it involves quantification in some form. Again, the <b>Results Chain</b> is the integrating technique in this approach. A simple rule is that each outcome in a Results Chain must be described in a way that forces measurement, using a phrase containing relatively precise language. The acronym <b>MEDIC</b> represents the following:

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		<p>technology is not a technology challenge. It is a business challenge around <b>managing investments in IT-enabled business change</b>. Change that involves all parts of the business system. Including changes to the business itself, business processes, people's work and skills, the organisation structure, and the enabling technology.</p> <p>The <b>benefits mindset</b> underlying the Benefits Realization Approach is based on the following premises:</p> <ul style="list-style-type: none"> <li>• <b>Benefits do not just happen.</b> They don't just automatically appear when a new technology is delivered. A benefits stream flows and evolves over time as people learn to use it.</li> <li>• <b>Benefits rarely happen according to plan.</b> A forecast of benefits to support the business case for an investment is just an early estimate. It is unlikely to turn out as expected, much like corporate earnings forecasts. You have to keep checking, just as you would with a financial investment that fluctuates in value on the securities market.</li> <li>• <b>Benefits realization is a continuous process</b> of envisioning results, implementing, checking intermediate results and dynamically adjusting the path leading from investments to business results. Benefits realization is a process that can and must be managed, just like any other business process.</li> </ul> <p>There are six cornerstones of the Benefits Realisation Approach, including <b>three fundamentals</b>:</p> <ol style="list-style-type: none"> <li>1. Shift from stand-alone IT project management to business <b>program management</b>.</li> <li>2. Shift from free-for-all competition among projects to disciplined <b>portfolio management</b>.</li> </ol>	<p>rather than from "design to delivery."</p> <p>The <b>Four "Ares"</b> provide the four underlying questions that provide the framework for assessing value.</p> <ul style="list-style-type: none"> <li>• Are #1: Are we doing the right things?</li> <li>• Are #2: Are we doing them the right way?</li> <li>• Are #3: Are we getting them done well?</li> <li>• Are #4: Are we getting the benefits?</li> </ul> <p>The Four "Ares" are applied along the dimensions of <b>alignment, business worth and risk</b> to evaluate, compare, select, and manage investments through their full life-cycle. These questions would be addressed in the value case (see below), and asked at each stage gate review (see below).</p> <p>The second edition (2003) provided revised definitions of project, program, and portfolio management in terms of their relationship to business and enterprise value.</p> <p>A <b>Project</b> is a structured set of activities concerned with delivering a defined <b>capability</b> based on an agreed schedule and budget. The capability in and of itself has no value. It is only when the capability is used as the result of a comprehensive program of change that value is realised.</p> <p>A <b>Program</b> is a structured grouping of projects to produce clearly identified <b>business value</b>. The business value of one program will align in varying degrees to strategic objectives, may be dependent on other programs, or may potentially conflict with other programs. In order to optimize value across all programs, they must be optimised as a portfolio of programs.</p> <p>A <b>Portfolio</b> is a suite of business programs managed to optimize overall <b>enterprise value</b>. The portfolio must be continually reviewed and managed to ensure that it is balanced to reflect strategic priorities, and that risks are mitigated and synergies exploited across programs.</p> <p>The second edition also included a new Afterword which further extended the approach to encompass strategy, architecture and operations management, and extended the thinking and practices beyond Benefits Realization to the broader subject of Enterprise Value Management.</p> <p>The revised edition also points out the need to "<i>anchor</i></p>	<p>the necessary balance between company-wide and specific line-of-business needs.</p> <p><b>Value Management Office (VMO)</b> - the secretariat for the Investment Decision Board (IDB) in managing investment portfolios.</p> <p><b>Business Sponsor</b> - For each program, a business sponsor is needed who must be unambiguously accountable for targeted benefits, and thus for the overall program.</p> <p><b>At what point are they assessed?</b></p> <p>As programs advance through their life cycles, knowledge is gained, which is used to update and enrich the value case. During this process of discovery and development, programs pass through a series of decision points referred to as <b>stage gates</b>. At each gate, programs can be assessed, continued without change, modified, delayed or even cancelled. Examples of when modification may be required include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• expected contributions to benefits are not materialising as expected;</li> <li>• benefits are not contributing to desired outcomes as expected;</li> <li>• unexpected benefits have emerged – <b>emergent benefits</b> - which make a significant contribution to desired outcomes, or contribute to new desirable outcomes.</li> </ul> <p><b>Are measures added over the project?</b></p> <p>Modifications as described above may require additional metrics.</p> <p><b>Measurement post-program?</b></p>	<p>management to make meaningful business decisions, and the nature of the programs in question.</p> <p>Effective portfolio management <b>categorizes</b> programs according to the types of decision that the portfolio managers can make and the nature of the investment. Programs vary in the <b>degree of discretion</b> an organization has in undertaking the program, the program's <b>relative value</b> (where value is a function of alignment, benefits, costs and risks), and the <b>relative difficulty</b> of realizing that value (both delivering he necessary capabilities, and adopting and using them such the value is realised).</p> <p>The book includes an example of Program Categorisation, which includes;</p> <ul style="list-style-type: none"> <li>• Mandatory <ul style="list-style-type: none"> <li>◦ Legal Req't</li> <li>◦ Parent Co. Req't</li> </ul> </li> <li>• Sustain</li> <li>• Development</li> <li>• Growth</li> <li>• Infrastructure</li> <li>• Business Opportunity</li> </ul> <p>In the case of legally mandated programs, it doesn't make sense to treat programs that are legally required the same way as a pure business opportunity. Why attempt to measure benefits for the legally mandated program? The benefit is well known to start with: the company remains in business and the officers stay out of jail!</p> <p>In the case of Sustain, the</p>	<ul style="list-style-type: none"> <li>• <b>M</b>: a level of service <b>Maintained</b>;</li> <li>• <b>E</b>: a function <b>Eliminated</b>;</li> <li>• <b>D</b>: turnaround time <b>Decreased</b>;</li> <li>• <b>I</b>: revenue <b>Increased</b>;</li> <li>• <b>C</b>: a certain capability <b>Created</b>.</li> </ul>

### Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		<p>3. Shift from traditional project management cycles to <b>full cycle governance</b>.</p> <p>...and <b>three necessary conditions</b>:</p> <ol style="list-style-type: none"> <li>1. <b>Activist accountability</b> in order to identify business sponsors with active, continuous ownership of investment programs.</li> <li>2. <b>Relevant measurement</b> systems to measure the things that count in the benefits realization process.</li> <li>3. <b>Proactive management of change</b> to give people ownership stakes in programs.</li> </ol>	<p><i>the benefits realisation approach to an explicit, clear, and focused business strategy. Without a clearly articulated and understood strategy, it is difficult to align investment decisions with strategic direction. It is difficult, if not impossible, to decide what you will do, and also what you will not do. And there is a very high risk of selecting the wrong things to do."</i></p> <p>The Benefits Realisation Approach recognises that It is also difficult, or impossible to come up with <b>relevant metrics</b> without a clear understanding of the expected outcomes. Metrics must clearly link the contribution of investments to outcomes, and themselves be linked to clear lines of <b>accountability</b>. In order to ensure that this is the case, the approach includes a modelling technique, the <b>Results Chain</b>, developed by DMR (now Fujitsu Consulting), which is used to help organisations to prepare a comprehensive and accurate model of their benefits realization process.</p> <p>Using a workshop approach, they can either define, refine or clarify investment outcomes (<b>both intermediate / enabling and end outcomes</b>), initiatives, contributions, and assumptions.</p> <p>This approach supports, <b>at every stage of the investment cycle</b>, the design of an effective measurement system, from the outset, when you create the Results Chain program model, through the planning stage and throughout program implementation.</p> <p>The criteria for designing effective measurement systems are:</p> <ul style="list-style-type: none"> <li>• Make sure measures exist</li> <li>• Measure the right things</li> <li>• Measure things the right way</li> <li>• Make sure measurement systems guide decisions and action</li> </ul> <p>This approach helps organizations deal effectively with measurement issues in four important ways:</p> <ul style="list-style-type: none"> <li>• Identify the <b>outcomes</b> you need to measure, and when you need to measure them.</li> <li>• Show the reasoning about the <b>linkages</b> relating programs and projects to outcomes, making it easier to understand and manage what's going on.</li> <li>• Make measurement come alive by tying <b>accountability</b> to measured results.</li> </ul>	<p>Traditional one-off business cases included forecasts of end benefits only for the sake of justifying project work. They also assumed -- in a drastic over simplification of reality -- that benefits can be switched on (like a tap or pipeline) once the project has been completed.</p> <p>The reality is that the new technologies alone are simply a cost. Benefits and value are only realised when work units begin to use their technologies and get better as time goes on. However, we also need to recognise that, as individuals and work groups learn new ways of doing things, and more importantly unlearn old ways of doing things, their performance often dips. As a result, the benefits also flow in over time, in what is referred to as a <b>benefits stream</b>. That stream does not always flow at a constant rate and, consequently, it needs to be measured and tracked systematically.</p> <p>Effective benefits realization requires forecasting and delivering the flow of benefits associated with the delivery of key organizational capabilities and the associated intermediate outcomes over time. The end-results forecast is used to judge how good a program proposal is while it is being designed. The real tools for continuing benefits management, however, are the time-based profiles of expected intermediate outcomes. These intermediate levels are sometimes referred to as benefit plateaux.</p> <p>The plateaux will likely correlate to <b>intermediate outcomes</b>. They may also be a combination of a number of intermediate outcomes and partial realization of the final outcome. Plateaux move us away from the all-or-nothing thinking about benefits, and enable us to show how benefits</p>	<p>benefit is also obvious - it is to continue as a going concern. The real business decision is not whether to undertake the program or not, but rather to select the optimum maintenance policies that maximize the return on the original investment.</p> <p>However, in the case of new business opportunities, a full analysis of the prospective programs is required.</p> <p><b>To whom is the guidance directed?</b></p> <p>Boards, executives, and senior business management, including the CIO, across all sectors.</p>	

Appendix 3 Consultants/Practitioners Body Benefits Measurement Literature Search

Publication number (cited in the report as CPR1-24)	Source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"><li>Normative &amp; descriptive guidance on how to measure benefits</li><li>Applied at project, program, portfolio level?</li></ul>	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? <ul style="list-style-type: none"><li>a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits</li><li>b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?</li></ul>	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is?  i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
			<ul style="list-style-type: none"><li>Complement, extend and seamlessly <b>integrate</b> measurement systems with widely used performance measurement approaches, e.g. the balanced scorecard.</li></ul> <p><b>Value Case</b> - replacing conventional business cases to support the selection and management of programs. They are used as an on-going operational tool to support full cycle governance. They form a consistent basis for assessing program value using the four “ares” and allow a fair comparison of the <b>relative value</b> of programs.</p>	<p>will be incrementally realized over time -- incrementally, in a measurable way.</p> <p>The program can only be considered successfully ended when all intermediate and end outcomes (which may have been modified over time as knowledge is gained and the context changes) have been realized. Even then, there should be on-going regular reviews of the resulting assets and services to ensure and assure that they continue to deliver benefits and contribute to business value.</p>		





*Measures for benefits realization.*

BREESE, Richard <<http://orcid.org/0000-0003-1283-0354>>, JENNER, Stephen, SERRA, Carlos, THORP, John, BADEMI, Amgad and CHARLTON, Michael

Available from the Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/18957/>

### **Copyright and re-use policy**

Please visit <http://shura.shu.ac.uk/18957/> and <http://shura.shu.ac.uk/information.html> for further details about copyright and re-use permissions.