

# **SURVEY RESULTS SUMMARY**

## **Use of ROI in IT Spend Decisions**



## Survey: Use of ROI in IT Spend Decisions

Thank you for recently participating in a short survey on Return on Investment (ROI) use and assisting with my M.Sc. research.

The results in this summary are based on sixty-nine completed surveys with respondents coming from New Zealand, Australia, Canada and the United States. Respondents represented a cross section of the marketplace with over half (52%) from privately held organisations, 23% from publicly traded firms, 13% from government, and the remainder from non-profits and consultancies.

Decision-makers made up forty-one percent of the respondents with forty-two percent of the remainder spread almost equally between policy-makers and those responsible for decision deliverables, at 20% and 22% respectively.

Thank you also to those who provided feedback on the survey itself.

To avoid any potential influence on the responses I purposely refrained from disclosing my topic: "Are organisations using ROI for IT spend decisions just fooling themselves?"

Though only one component of my research, the survey findings confirm that ROI is used by many organisations and is seen by a solid majority as dependable. Actual ROI is only occasionally verified by 51% and over 60% found calculated ROI is either over- or understated compared to actual ROI. ROI also appears to be used by most in an isolated per-project basis rather than within a Benefits Realization (BR) model.

Note: Not all percentages reported on add precisely to 100% due to rounding.

Yours truly,

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## RESPONDENTS

Sixty-nine (69) surveys were completed by respondents from New Zealand, Australia, Canada and the United States. A further 32 survey responses were recorded but were incomplete. The statistics reviewed below are based on the completed surveys although notes are added for questions if the larger response showed a noticeably different result.

Respondents represented a cross section of the marketplace with over half (52%) from privately held organisations, 23% from publicly traded firms, 13% from government, and the remaining 12% roughly equivalent representations from non-profits (5%), member-owned organisations, educational institutions and consultancies.

**Table 1: Organisation Type**

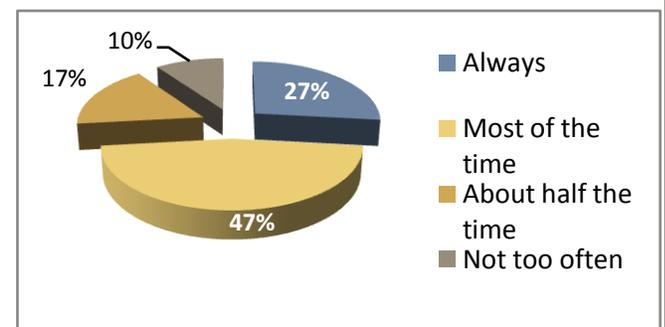
Response	Chart	Percentage
Privately Held		52%
Publicly Traded		23%
Government Department / Agency		13%
Not-for-profit / Volunteer Agency		5%
Other, please specify:		7%

Just under two-thirds (65%) of the surveys were completed by top-tier and next-level IT Management. 10% of respondents were CEOs or equivalent and 13% CFOs or equivalent. Consultants, non-IT managers, non-management IT professionals and educators rounded out the participants.

Decision-makers made up 41% of respondents with 42% split almost equivalently between policy-makers (20%) and those responsible for decision deliverables (22%). 9% of the surveys were completed by those who participate in preparing project deliverables and 8% by those with no specific role in the decision.

90% of respondents reported that their organisations use a justification methodology for IT spend decisions at least half the time, with 74% using justifications either always or the majority of the time. This clearly indicates that using an IT spend justification is integral to the IT spend process used by many organisations.

**Figure 1: Justification Methodology Use**



21% of respondent organisations have mandatory IT spend justification. The vast majority (52%) require it based on cost or value thresholds with 18% requiring it based on spend category. 9% make it optional.

64% of respondent organisations reported having a justification methodology in place for over 5 years. 18% reported the practice having been in place between 3 - 5 years, 16% between 1- 3 years and only 2% less than 1 year.

As shown in Table 2 the survey results strongly imply that the longer the organisation has used a justification methodology the more consistently it uses a justification process.

**Table 2: Justification Use Consistency vs. Justification Methodology Use Duration**

	Less than one year	One to three years	Three to five years	More than five years
Always	-	14%	-	47%
Most of the time	-	29%	67%	40%
About half the time	100%	43%	22%	8%
Not too often	-	14%	11%	4%

Justification use practices did not appear to be statistically different by type of organisation, which was the same with ROI use.

## ROI

### Use

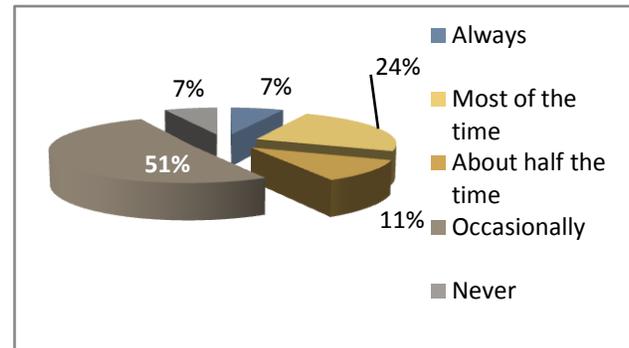
10% of respondents reported not using ROI for justification at all, which compares to 55% who indicated that ROI was the predominant or preferred justification technique in place. Just over one-third, or 35%, noted that ROI is viewed as an adequate tool for justification though neither the predominant nor preferred tool.

The distribution of justification metrics used differs slightly when we compare the complete surveys with the survey responses including the incomplete responses. ROI was identified as being used by 90% of those that completed surveys whereas 82% of respondents overall registered use of ROI.

Respondent noted that other popular options for justification included Payback Period (44%), Economic Value Add (30%) and Internal Rate of Return (28%). 46% of those using ROI also use at least one justification metric in addition to ROI. Other metrics cited as in use include Net Present Value and Net Promoter Score.

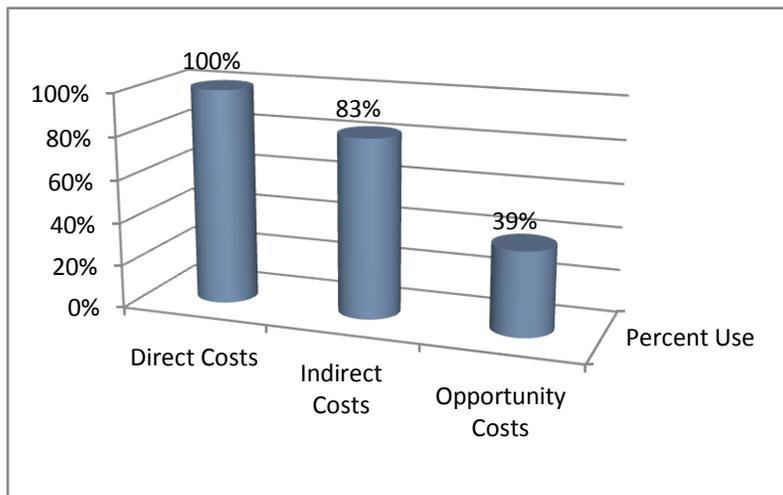
Figure 2 shows that despite ROI's popularity and use, only 7% *always* verify the calculated ROI after the IT spend. At the other end of the spectrum 7% *never* verify the estimated ROI. Of the majority that do verify ROI at all, 11% do so about half the time, 24% verify most of the time, and the largest group at 51% *only occasionally* verify actual ROI.

**Figure 2: Verification of ROI**



38% of the respondents reported that the actual ROI turned out *pretty close* to the calculated value. This compares to 45% found the calculated value somewhat to significantly *overstated* upon verification. Only 16% found the estimated ROI *understated*, comprised of 14% somewhat understated and 2% significantly understated.

**Figure 3: ROI Cost Composition**



100% of respondents noted that direct costs are included in the calculated ROI. A large majority, 83%, said that indirect costs are also included however only 39% reported that opportunity costs are considered. No correlation to type of

organisation, location, length of justification use, or any other variable could be found for those using opportunity costs.

## Dependability

Though ROI is reportedly used by 90% of respondents only 78% said calculated ROI is seen as dependable. Respondents noted that ROI is regarded as unreliable for a variety of reasons. Tables 3 and 4 contain the ranked responses around questions related to ROI dependability and how to make it more dependable, respectively. Other reasons noted for non-dependability included not allowing for gut feel and the difficulty in adequately quantifying benefits.

**Table 3: Reasons ROI is not dependable**

<b><i>Reasons ROI is not dependable:</i></b>
1. Susceptible to bias (i.e., manipulation) 80%
2. Lack of consistency in use 60%
3. Numbers fabricated 60%
4. Inherently misses costs 50%
5. Inherently misses benefits 20%

**Table 4: How to increase ROI dependability**

<b><i>ROI would be more dependable if:</i></b>
1. It was easier to verify 33%
2. Results weren't as easy to manipulate 22%
3. The calculation was more robust 22%
4. The calculation was less complicated 11%
5. ROI was used more consistently 11%

Table 3 shows that a majority of respondents indicated that when ROI is viewed as not dependable, this is due to its susceptibility to bias. A sizeable majority (60%) also indicated that ROI was not dependable due to lack of consistent use and or fabricated numbers. More than twice as many respondents felt that calculated ROI missed costs compared to those that felt the ROI missed benefits.

Of the minority of respondents reporting that ROI is not used, 41% noted that it had never been used. The remainder cited others reasons behind ROI falling from use including, each in similar proportions: (i) *difficult to calculate without manipulation*, (ii) *too hard to measure*, (iii) *accuracy was demonstrated as not dependable*, and (iv) *ROI didn't meet expectations*. 3% replied that they *didn't know/couldn't say* why ROI was not in use.

## BENEFITS REALIZATION

Benefits Realization (BR) is an approach to IT spend management which is focused on *evaluating, selecting and managing IT investments over their full economic life cycle* (ISACA 2011). Introduced widely in The Information Paradox (Thorpe 1998) BR concepts and practices have continued to evolve and its principles have been adapted into ISACA's Val IT™ governance framework (ref. <http://www.isaca.org/Knowledge-Center/Val-IT-IT-Value-Delivery-/Pages/Val-IT1.aspx>).

A cornerstone of BR is managing IT projects as an investment portfolio similar to the mature practice used for more traditional financial investments. This doesn't necessarily imply that justification measures become inconsequential with BR. Rather, the justification is interleaved with realizable benefits to enable management of a constantly replenished list of projects rather than justification of projects in isolation. The main rationale of those who adopt project portfolio management (PPM) is *to ensure resources are focused on the right projects* (Daniel 2011).

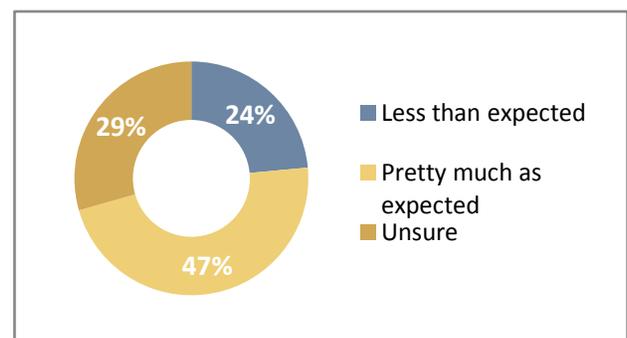
PPM interest and advocacy has been growing (EPMC 2009, PMI 2008, Morris & Pinto 2007). Adoption in the marketplace, however, seems to be sluggish due to real or perceived barriers and the current economic pressures (CE 2009a, CE 2009b, Daniel 2011). Low adoption rate of PPM appears to be supported by the survey results, in which 72% noted they had not heard of BR and, similarly, 72% indicated their organisation did not use BR.

The survey did not assume or portray an explicit or implicit relationship between ROI and the BR approach. From the survey results it appears that ROI is widely used and viewed as dependable but that this is not within a BR framework.

Figure 4 shows that almost half (49%) of the organisations that use BR have seen results *pretty much as expected*. Slightly more (29%) are *unsure* of the results than those whose results have been *less than expected* (24%).

Respondents reported a variety of reasons behind not having adopted BR at their organisation. 50% noted that it had *never*

**Figure 4: BR Results**



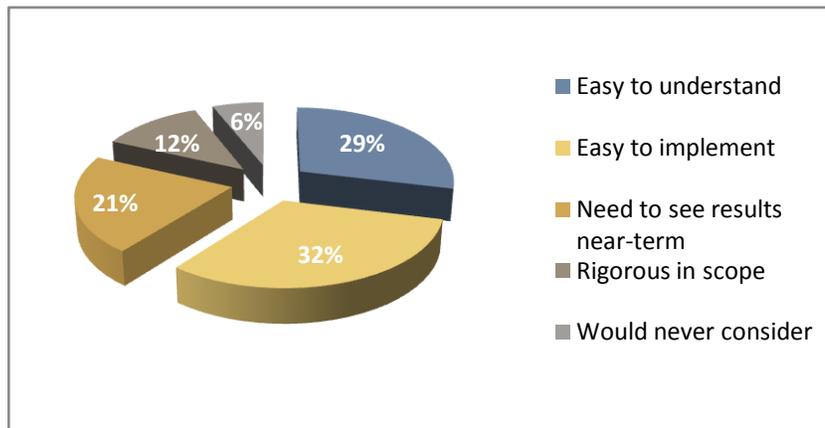
been considered. 11% said it was *too complex to understand*, 18% *too complex to implement*, 5% *too simplistic*, 11% *not rigorous enough*, and 5% *too rigorous*.

Two additional themes respondents identified as to why their organisation would not adopt BR were: (i) we're too small, and, (ii) decision-makers not interested.

Figure 5 shows the criteria that respondents said would be required for BR adoption at their organisation. Notably, the most frequently identified criterion was *easy to implement*.

**Figure 5: BR Adoption Criteria**

*Easy to understand* was a close second. When considered together, over 60% of the responses relate to BR being 'easier' in some respect. 6% responded that BR would never be considered, presumably regardless of how easy it would be to use or implement, how rigorous it was or how immediate the results were seen.



Two additional criteria were identified as influential for BR adoption: (i) executive buy-in and, (ii) business leadership being responsible for realizing benefits.

Two respondents identified that their organisations had stopped using BR with *inconsistent use* and *difficult to verify* as top cited reasons. One respondent specifically added that BR was not rigorous enough but did not elaborate.

## CONCLUSION

The relatively low sample size of this survey arguably constrains how globally the results might be extrapolated. Nonetheless, the findings appear to support some very basic conclusions:

Return on Investment (ROI) is used regularly and widely as part of the IT spend justification process across a variety of organisation types, and particularly by those with more mature decision-making methodologies. Calculated ROI is seen as dependable by a solid majority even though it is:

- Seen as subject to bias and manipulation.
- Often missing opportunity costs and overstating benefits.
- Verified against actual ROI with varying degrees of consistency with most only occasionally doing so. Calculated ROI is more likely to be overstated or understated than 'pretty close' to the actual when measured (and the estimate is more often found to be overstated than understated).
- Used alongside one or more additional justification metrics approximately half the time.

The findings suggest that the variation between calculated and actual ROI has not been significant or consistent enough to cause organisations to question how dependable ROI is, and therefore the merit of using ROI. Naturally, those that have found calculated ROI to be regularly understated would not be as concerned as those who have found overstated ROI estimates. Investigation of whether there are tipping points that would change their position on ROI and - if so - what these would be is an area for further research.

It seems clear that Benefits Realization (BR) suffers from low awareness and adoption, even amongst those with mature IT spend justification methodologies. The prevailing perception is that BR needs to be easier to understand and implement before it would be considered. That said, there appears to be a small number of organisations in the marketplace that would never see themselves as BR adopters. The survey did not touch on Project Portfolio Management (PPM) adoption and this is another area for further research both in relation to use of justification methodologies and ROI specifically. In addition, it would be interesting to understand if PPM practices align with the broader BR framework and simply aren't recognized as such and if not, what obstacles exist in stepping from PPM to BR.

## SURVEY COMMENTS

Thank you to everyone who provided feedback on the survey and on the topic. I have included the topical comments below.

- Benefits realization has been adopted by our organisation but we do not think of BR in terms of the formal definition, nor do we call it BR. All our IT spend is verified by a business case first and benefits that are expected to be achieved either hard or soft, are accounted for in the business case. These days, in our organisation, much IT spend is necessary to update, improve or replace existing systems. In many cases the benefit that is realised is avoidance of potential problems or failure and it can be argued that as systems mature new benefits are ever harder to achieve.
- The biggest problem with all quantitative methods is that unless there is a solid internal audit review - the weighting of numbers and the numbers themselves can be made to fit a case. There are many assumptions made in estimating costs and benefits, and tracking and updating these through a benefits realisation programme is a big undertaking.
- In our experience, calculating a precise ROI is difficult due to other quantitative and qualitative variables involved in the calculations. i.e., we recently implemented a CRM platform and were unable to quantify the outcome with certainty given other variables such as a new banking system, revamped sales and services processes, general economic conditions, etc.
- The university not used to putting dollar value on, say, a better registration process for students. Often benefits are never sufficiently quantified to be able to determine whether the project resulted in the benefit needed. Nevertheless I have found the results chain useful in putting the IT aspect of a project in the larger context of the business and the results they're after.
- ROI as a concept is well understood in my organisation, but there have been issues getting accurate data for use in the calculation.
- Monitoring and evaluation of ROI/BR are still imprecise processes.
- Some spend in our sector is mandated by government or sector changes that require spend as a cost of doing business and often as little direct benefit to our organisation or customers. In this case it is obviously a cost of doing business rather than seeking a ROI.

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