

Crafting a Winning IT Investment Portfolio: Strategies to Achieve Capital Efficiency and Efficacy

Abstract:

Like personal investing, IT investments should be aligned with each line of business. Building an IT Portfolio Strategy is similar and must be informed by business needs. Business needs should determine the IT budget and funding allocation.

An IT Portfolio Strategy references the business's portfolio and the business's Finance Portfolio Strategy in order to align financially, from an investment perspective, and organizationally. IT Portfolio Strategy can assist business leaders and CFOs address three main challenges:

1. Capital Hurdles:
2. Funding Reallocation opportunities to shifting IT funding to meet business demands
3. Align IT funding with the company's Revenue Strategy

Weak IT portfolio management results in overspending on stable segments and underinvesting in higher-potential areas. This inefficiency ties up capital that could be used more effectively elsewhere.

The BCG 4-quadrant model is a useful starting point for determining IT investment allocation, with categories for each line of business (can be defined as product, geography...): Shooting Star, Cash-Cow, Pet, and Question-Mark.

The primary Questions that an IT Portfolio Strategy can help the CFO answer include:

1. IT Budget Size: The budget should reflect business needs, not historical costs or IT's perceived needs.
2. IT Funding Allocation: Align funding with business priorities, ensuring investments support business growth and compliance.

Additional considerations that an IT Portfolio Strategy can help address include:

- Identifying technology gaps hindering strategic goals.
- Assessing IT projects by both ROI and value contribution to the business.
- Eliminating overspending on underperforming tech projects.
- Ensuring IT portfolio balances innovation and risk management.
- Maximizing transformation opportunities by shifting from CapEx to OpEx.

What is an IT Portfolio and How Does a CFO Build the Strategy:

We are all familiar with portfolio planning in investing. In one's individual portfolio, the strategy is informed by one's age, objectives, immediate cash requirements and other factors. Typically, younger investors are encouraged to invest more in risk and growth etc. Building an IT Portfolio Strategy is no different and needs to be informed by the needs of the business. One key difference is that a company is composed of multiple products, lines of business, geographies, meaning that the portfolio allocation needs to serve multiple stakeholders and satisfy many more variables – but the principles remain. The business needs critically must determine the IT budget and where and how the IT funding gets allocated.

Why is this Important?

There are three business challenges that business leaders and CFOs are addressing:

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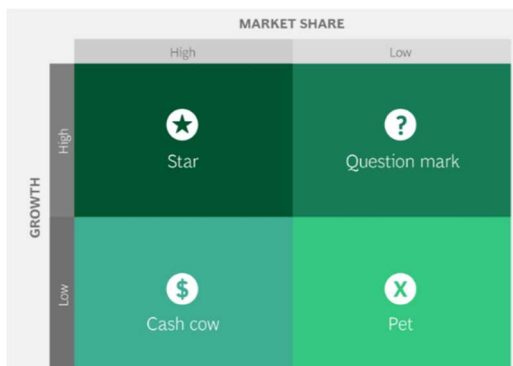
1. Capital now has 'real' hurdle rates that are burdened with tighter capital liquidity at higher costs (interest rates) than a few years ago
 - a. Business is more challenging and certain functions or lines of business require more funding/attention and this means being able to identify IT funding that can be freed up. These new investment demands can be for:
 - b. Research and new product development
 - c. Marketing
 - d. Vendor financing (depending on the industry as cutbacks to vendor financing are also taking place to free up capital)
 - e. Increasingly, to address the fragility in global supply-chains that is surfacing (it is important to note that it is not evident that companies are looking to re insource everything, or even major parts of the supply-chain, but risk mitigation efforts are surfacing that includes relocating some portions of the manufacturing process.
2. IT funding is not aligned with Line-of Business (LOB) revenue strategy:
 - a. I.e., over-allocating to IT applications/segments/functions while underfunding areas better positioned to generate better returns for the business
3. IT investments that fail to deliver planned business benefits because there was misplaced optimism or poorly constructed analyses regarding the investment returns. Returning to the personal investing analogy, this is akin to expecting a low-growth dividend equity to deliver stellar returns in a flat market.

The net results are that weak (or non-existent) IT portfolio management means overspending in steady-state segments and underinvesting in higher-potential business segments. And capital that could be applied with greater efficacy to other parts of the business are tied up in IT. Extending the personal investing analogy equates to expecting one's portfolio to deliver consistently stellar, market-beating returns while not only just investing in Treasuries but spending heavily just analyzing market segments with no discernable risk-adjusted upside. Most IT project spend reviews fall in this category – a lot of questions and analysis that can't 'move the needle'.

Defining Corporate Portfolio Strategy:

An IT portfolio strategy follows a corporate portfolio strategy, as defined by McKinsey⁴ as 'at its core, is about being or becoming the natural owner of businesses and balancing investment opportunities against the supply of capital, given the predicted returns of current and potential investments'.

What is an IT Investment Allocation Methodology:



Model for illustrative purposes only. Any strategic model can be used. Some apply better to different businesses.

Just like in personal investing, there are categories to IT investment that are aligned to each line of business (however defined).

The BCG 4 quadrant model can illustrate the first steps in the process. The BCG model posits four categories where different lines can be categorized. One can think of these as initial investment categories to determine IT investment allocation. The analogy can be extended in that income focused investment allocations shouldn't require a lot of effort and the focus is only on maintaining the income yield within tolerable risk levels.

Future papers will extend the categories and analysis to include filters such as SWOT analysis, CapEx vs OpEx, market and competitive dynamics etc. These tools

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are critical in properly determining the IT investment needs, objectives, investment horizons for each investment, and IT project/investment risk-tolerances based on the business needs (and not technology risks or needs). This analysis is also required to determine what IT investment levels should be – and why industry benchmarks such as % of revenues can be so misleading as to jeopardize the business.

The strategic framework being used to illustrate the IT Investment Portfolio Allocation methodology has four categories, Shooting Star, Cash-Cow, Pet and Question-Mark. This framework has been around for a while and certainly more advanced models that better portray today's business environment have emerged, but this framework illustrates what Business/IT Alignment is.

Shooting Star (typically parts of the business that demonstrate promise and additional investment). This category also typically requires a lot of innovation and research. Oftentimes, the IT investment horizon is very short as the operation is in learning mode with the market and moving up the process maturity curve. Business innovations are defined and piloted. IT investments are intended to support the short, iterative nature of these pilots. Once the business model has been validated and the company commits long-term capital to the business is when long-term IT capital can be considered. Can be is the operative term for two reasons: (1) IT investments will not generate a return for economies of scale until volumes are at much higher levels than most consider (note: some ERP systems don't deliver overall returns from economies of scale until as much as \$5B in annual revenues² – and this controversial datapoint will also be a topic for a separate paper), (2) the timing by which some IT investments can be realistically deployed with productive user teams and a mature support model is far longer than when the business needs the capability -meaning that shorter, quicker, less fully automated solutions are needed at least as a stepping stone. IT Investing for the long-term horizon then has the added risk of whether the business will grow as planned to warrant the investment – in most cases investing for the short-medium horizon and taking a cautious 'prove it' approach for the long-term is warranted.

By stark contrast, cash cow businesses generally only require IT investments to comply with regulatory and other compliance. Investments in these types of operations are generally extremely hard to cost-justify with a medium-term investment horizon³. It is important to note that many 'cash-cows' businesses are not recognized for the 'dogs' they are becoming. This is where an objective, in-depth market analysis can identify realistic horizons for the cash-generating business.

The new label 'pet' was formerly derogatorily referred to as a 'dog' business – a term for a business or operation that is usually being prettied up for sale. IT investments in this type of business is best limited to regulatory and other compliance and funding to very quickly enhance the sale prospects or value. The investment horizon is generally short with no risk beyond any value enhancement.

The 'question-mark' business is just that. The long-term viability is in question. Again, the IT investment funding is limited to compliance and risk mitigation. There may be some 'high-risk' funding for various proofs of concept to determine the feasibility of an approach to inject new life or extend the life of the value of the operation. The IT investment horizon is short – at least until any proof of concept efforts bears success to warrant revisiting the amount of funding or the horizon for funding. The potential for loss of IT investments in this category is very high.

What are the Primary CFO Questions at This Stage:

1. How much should the IT budget be?
2. Where should IT funding be directed?

The IT budget should be what the business needs, not what historic costs have been and nor a build-up from existing fixed costs. Just like under-performing assets should be sold so the capital can be redeployed to more promising opportunities, many business cases have been made to exit certain technologies, platforms

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etc. in order to move to platforms that are less costly to support even with an increase in manual steps to business operations. There are a couple of traps in defining the budget (1) business needs and (2) cross-functional. The first question is whether the business can justify the needs, or if there is a strategic question about the business model (more manual processes) or the overall classification of the business. Finally, capital efficacy is key – meaning that there may be an ROI but that the capital is better allocated to other parts of the business given that capital is finite.

An undesirable effect of weak, inattentive, or laissez faire custodianship of a corporation's IT portfolio management results in overspending on stable segments and underinvesting in higher-potential areas. This strategy ties up capital that could be used more effectively elsewhere.

Earlier, the comment was made that industry benchmarks are misleading as was the case where an executive (well known with ads on CNBC) was forced to sell to a competitor upon the realization that the relatively low IT spending meant the competitive leap-frogged them in what was a shooting-star, high growth business where customers rewarded innovative service capabilities.

The best IT budgets are based on bottoms-up what the business needs calculations – and reiterating not on bottoms up what IT believes is needed.

Let's use this hypothetical to start to answer the where should IT funding be directed. Let's assume that 30% of the total company's revenues is derived from 3 lines of business and that it is established that one qualifies as a cash-cow, one is a 'pet' (dog) and one is a question mark. The fourth line of business is a shooting star that currently only contributes 10% of revenues (but has valid growth projections to be as much as 50% in a few years).

The cash-cow business likely only requires compliance and support, and that any investment has a long-term horizon before returns can be realistically assumed. Note that most platform initiatives have a minimum investment horizon of 3-5 years before there is any potential start yielding a return¹; in the current market it is most likely that the company has better uses for this capital. For illustration purposes, let's assume that regulatory and support for this line of business is only 10% of the total IT budget.

Likewise, the pet and the question-mark business have the same regulatory and support requirements of 10% each. In addition, the pet business is being shopped around and requires additional expertise to best showcase the technology behind the business, work with the lawyers etc. to not disclose IP or competitive information prior to a sale completion and possibly some funding to clean up some portions to improve the odds of a sale or improve the (perceived) value of the business (in IT this is derogatorily known as putting 'lipstick on a pig'). In this very hypothetical case one could venture an estimate of 15-20% of the IT budget.

In the question-mark business, there will be justified IT demands for proof of concepts and anything to support the business's quest to determine how to convert the question-mark into (ideally) a shooting star, but the outcomes include a solid cash-cow or a candidate for sale or platform for competitive acquisition, etc. Until the path is defined and validated and approved by the board, one could again hypothetically justify 15-20% of the IT funding to this line of business.

This leaves 50-60% of the IT funding for the shooting star and/or to be deployed to business capitalization, yielding a potentially sizable, net IT savings. The critical success factor in providing IT funding to the shooting-star is in aligning the timing of the IT investment to the needs of the business. Overcommitting before the business model is validated is most likely a losing play. And as mentioned earlier, most IT investments in platforms aren't in position to support the business until it is too late. Note this is contrary to most vendor promises and marketing positions.

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¹As measured by benefits over costs for that year. Up to this point the investment incurs more costs over benefits.

²One of the reasons for the revenue threshold is that comprehensive platforms have a lot of integration and automate/standardize to a very detailed level, resulting in many different business and IT specializations just to administer the day to day tasks, irrespective of volumes. Depending upon the migration, real-world examples of needing 4x the core business and IT staffs is not unheard of.

³ Note: BCG has updated their model and identified that the share of profits generated by cash-cow businesses is lower and that the life-cycle for a cash-cow business is shorter than when the model was first developed. <https://www.bcg.com/publications/2014/growth-share-matrix-bcg-classics-revisited>

⁴ <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/the-new-dynamics-of-managing-the-corporate-portfolio>