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Corporate University Xchange

Portfolio Management

Juggling the Prioritization of
Learning Programs

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“Juggling the Prioritization of Learning Programs”

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“Taken as a whole...human capital is an unavoidable cost of business. When considered as a collection of smaller investments, though, there are clearly choices to be made. If managers can gain some sense of return on these different options, then they can ensure that money is being put to the best use. This may not mean putting a dollar value on the different choices, but perhaps understanding their effect on key non-financial indicators such as customer or employee retention.” - CFO Magazine 2003



Nearly every financial executive would prefer a return on investment (ROI) analysis for every dollar of internal investment. However, it is clear from the quote above that financial leaders are cognizant of the fact that trying to determine an ROI for learning may be a fool’s errand for a host of reasons, not the least of which is the absence of any direct causal connection between learning and business results. Learning expenditures are, as stated above, an “unavoidable cost”. Given that premise, the issue becomes which of your programs will most likely have the greatest effect on key, non-financial indicators in return for the amount of “unavoidable” capital that must be invested.

Maximizing a return on a given amount of capital is hardly a new idea. Pension fund managers and mutual fund companies engage in that endeavor on a daily basis. These companies assess all of the investment options available, including everything from the most conservative investments (cash funds) to minimally risky investments (high grade bonds) to moderately risky investments (marketable securities) to very risky investments (illiquid private equities).

The mix is constantly monitored to assess which securities should be bought and sold to maximize the return. While individual investors can elect to adopt an aggressive and risky strategy - a blended strategy or a conservative and safe strategy - the professional managers they employ must allocate assets across the entire spectrum so that the likelihood of consistent proper returns, *in line with investment objectives*, are achieved.

In the same manner, a learning executive faced with an excess of programs to be developed and a finite amount of capital must allocate that capital in a manner that maximizes the likely return. This paper provides one approach to a maximization strategy. Fundamentally, the approach requires five critical processes (Figure 1):

1. Analyze Current Position and Investment Objectives
2. Evaluate Business Risks and Opportunities
3. Quantify Anticipated Business Benefits (the “return“ in investment terminology)
4. Quantify the Resource Impacts (the “risks” in investment terminology)
5. Allocate Capital across the Risk/Return Spectrum

Analyze the Position of Your Company and its Investment Objective

In portfolio theory, no one size fits all. The composition of a portfolio for someone who has already generated substantial wealth may focus more on preservation of capital than maximum returns. Similarly, someone with less money who is young may realize that the only way to wealth from a modest investment base is to increase the risk profile of his investments, which should, in an efficient market, increase his potential return. Finally, some investors want to allocate a portfolio evenly across all risk/return spectrums. The main point is that each of these investors has a different investment objective.

In the case of a learning organization, you have to determine the learning objective for your company given current conditions of the company and the industry. Common examples are: rate and direction of change in the relevant market share of your company, rate and direction of changes in the size of your market, demographics of your employees, location of your company on the innovation to commoditization curve,



merger and acquisition probability, regulatory environment, etc. Some of these conditions may dictate a riskier approach while others would dictate a more conservative approach.

Evaluate the Business Risks and Opportunities of Program Options Based on the Position

Next, you need to determine the risks and opportunities associated with the position and determine what training programs will mitigate those risks and exploit the opportunities. For example, if your company is in an industry that is migrating from an innovation market to a commoditization market, the risk may be that salespeople lose deals to competitors that are more effective solution sellers (think Xerox). If your company is in a long-standing commodity market with an older workforce, then the risk may be that operating knowledge will evaporate with retirement. If your company is in an industry that has recently endured a crisis, then the risk may be that your firm will violate new compliance requirements or standards forcing further sanctions (think Marsh McLennan in the Spitzer era). If your company is a dominant competitor to the market leader in a rapidly changing market, your opportunity is to develop innovative thinking, which can catapult your firm to the market leader (think Google).

In sum, by understanding the position of your company and evaluating the risks and opportunities that confront it, you will be better able to determine the learning program options that can best improve business results, and you can better objectify the relative value of those benefits.

Quantify Anticipated Business Benefit of the Program Options Using a Six Step Process

Map all program options to a set of business drivers

After you have established the program options based on your company's position, investment objective and opportunities, you must understand the business drivers underlying the learning program options. These drivers range from legal requirements to strategic transformation. Each of these drivers has relative importance in comparison with the others. For example, if failure to provide mandatory compliance training could result in a cessation of business, the mandatory compliance has a pretty strong business driver: survival. Therefore, it should be



Figure 2. Follow a six step process to determine the business benefits of each program

scored fairly high. Similarly, training that facilitates the implementation of long-term strategic imperatives is also critical. Conversely, soft skills training that supports the business, but has no clearly defined business driver, would be scored low. Areas of training like Six Sigma or technical skills can be more directly linked to performance improvement and financial results, and therefore are probably scored somewhere in the middle. The

Driver	Rating
Compliance Mandated to Continue Operations	10
Basic Operational Improvement (Six Sigma, Project Management)	6
Targeted Business Metric Improvement (Negotiation, Sales, Customer Service)	8
Strategic Imperative (Merger related team building)	9
Current Year Tactical Initiative (Inventory Control Process)	5
Organizational Support Training (Soft Skills, Diversity, Discrimination)	2

Figure 3. The benefits of business drivers and the importance of each

important point is that you should group all of your programs by business driver and then score the value of each driver. Figure 3 outlines a hypothetical set of drivers and weights. (For purposes of this article, all ratings will use a 1-10 scale, but as you read the article you may decide on a different scoring approach.)

Group economic benefits in a systematic financial framework

While there may not be a direct casual connection between the program result and the financial performance of the company, every training activity has a goal of improving some aspect of the “bottom line”. For example, courses in effective negotiating can often mean higher margin on deals and improved cash flow through superior payment terms. Safety training is done to protect employees as a matter of principle, but also to reduce worker’s compensation insurance costs and productivity losses from hiring replacement workers/paying overtime until injured employee returns to work, etc. In other words, you should develop a framework that answers the question, “why am I being asked to do this and how will success manifest itself in metrics and financial statements?” Then, rate both the metric and the financial statement impact.

The best way to accomplish this is to think in terms of traditional financial statements; statement of net income (P&L), balance sheet, and statement of cash flows in both absolute and contingent terms. For example, in absolute terms, negotiation training should increase revenue per unit and gross margins (absolute impact). Conversely,

discrimination training may not reduce an expense, but it should reduce the probability of a legal expense (contingent impact).

Figure 4 is one way to approach this quantification of benefits. As you can see, by using a simple blue, orange, and green color-coding system to measure the importance of the desired training outcome on a metric and financial statement basis, it is easy to provide a relative ranking for economic impact each of the programs. In this example, blue is an important and potentially big benefit, orange is a benefit that is important but not substantial, while green indicates a benefit may or may not manifest itself. The final quantification of the benefits of any program is an informal summation of the scope and level of benefit across metrics and financial statements. While there is some subjectivity, this process is designed to prompt both you and the business unit leader to objectify and quantify the value of the program.

Program Rating	Objective	Metric	P&L Impact	Balance Sheet Impact (1)	Cash Flow Impact (1)	Other Impact	Score
Six Sigma	Process and quality improvement	Error rates, Customer sat/retention	Short term-revenue protection, long term revenue growth Operating cost reduction				8
Innovation in Chaos	Increase new product pipeline	Number of funded product development projects	Not Quantifiable	Intellectual property-capitalized R&D value		Long term revenue protection from patents increase share price	6
Safety Training	Fewer lost time accidents	# of lost time accidents	Insurance cost reduction				3
Discrimination Training-Respect at Work	Reduce complaints	Cost per employee trained/ # of reported issues	Contingent costs (litigation costs reduced)				2
Effective Negotiating	Improve value of transactions	Gross margin on negotiated sales	Increase revenue per unit on negotiated sales	Increase deferred revenues	Accelerate payments on deals		7

Figure 4. Systematic framework for grouping economic benefits

blue – important and potentially big benefit; orange – important, but not substantial; green - benefit may or may not manifest itself

Estimate the training impact

Impact

You will recall that, at the beginning of this article, we said that it is important to understand the position of your company in its industry and the risks and opportunities confronting it so that you will be better able to objectify the relative value of the business benefits associated with program options.

For example, if your industry is closer to commoditization than innovation, market knowledge about your products, competitive positioning, etc. is more ubiquitous. Therefore, it is likely that a program on effective negotiating will be less impactful than, say, a course on Six Sigma. Conversely, if you are in an innovative market in which knowledge is less diffused, then effective negotiating skills could have a big

Impact	Rating
Knowledge is the sole limiting factor to success	10
Knowledge is the primary limiting factor to success	7
Knowledge is one of a set of independent variables that are a limited factor to success	5
Knowledge is one of a set of interrelated variables that are a limited factor to success	2

Figure 5. Determine the contribution that learning will have to creating success

impact on the gross margin of negotiated transactions. The important point is that you should develop a scale of impact that is suited to your company. Figure 5 shows a simple version of such a scale.

Measurability

Quite simply, if the training is designed to improve a regularly published business result and improvement occurs after training programs take place, then the inference of business impact from training is substantial even in the absence of causal connection. Conversely, if training is just

Degree of Available Measurement	Rating
Impact will manifest itself in a readily available and regularly published metric	10
Impact can be quantified based on availability of data that is not regularly published	7
Anecdotal evidence by employees	4
There is just an underlying belief that learning will be beneficial	2

Figure 6. What is the level of causal connection between learning and business success

something that everyone believes should be done, then it is difficult to ever determine the value of the training. Therefore, training that moves regularly published metrics has a greater business benefit than training that is just thought to be the right thing to do. In assessing the business benefit, you should take this into account. An example of a measurability rating scale is set forth in Figure 6.

Measure the reach of the training to the organization

As with any business, leverage and networking are important. If knowledge can be diffused informally, then the cost of training one employee can impart benefits to many in the organization and therefore increase the cumulative value of the program to the company in the absence of additional training cost. Teaching senior executives who then implement lessons learned informally spreads the knowledge across the entire organization. Training an individual contributor, on the other hand, may provide value to one person and not others. Therefore, one way to look at training investments is to value the reach of the knowledge across the organization based on the audience served. A quantification technique could be to utilize our 1-10 scale for the level of employee targeted for the training and then to factor that score by the percentage of the employee population that is trained (Figure 7). Obviously, certain programs targeted for individual learners must reach a greater number of individual contributors to generate the same relative value.

Level	Gross Rating	% Reached	Net Rating
Executive	10	50%	5.0
Manager of Managers	8	80%	6.4
Manager of Other	6	30%	1.8
First Line Supervisor	4	70%	2.8
Individual Contributors	2	10%	0.2

Figure 7. Amplifying the benefits of training through senior executives involvement maximizes its impact

Analyze the impact of inactivity

The perceived need for training begs one important question: what happens if the training is *not* provided? This inactivity impact measure allows you to factor into account the possibility (or in today’s world, the reality) that budgets are stretched too thin. While the list and rating of inactivity impacts are unique to each company,

Impact	Rating
Revenue loss-Current Year	10
Additional costs-Current Year	8
Workforce disruption	6
Nothing this year, but probably has profit/loss repercussions next year	4
Nothing this year or next year-we can catch up next year	2

Figure 8. Determine if the learning program is essential to short-term business results

Figure 8 sets forth a sample of potential impacts from inactivity and the rating for each (Figure 8).

Combine the results of all benefit measurements into a single benefit index or set of indices

Once you have completed the analysis of business benefits for each program option, you can see a holistic picture of the business benefit to the organization from any single program relative to all your programs in the form of a numerical result. Based on individual characteristics of your company, you can:

- Combine the measurements into a single index
- Elect to omit certain measurements
- Add other measurements

In doing so, you will arrive at your benefit index or, if you like, a series of indices that uses some – but not all – of the measurements. You may also want to stack rank the programs on a given index that is very important to the organization. For example, perhaps your organization feels that only programs for which business impact can be clearly measured in the statement of net income should be

Variable	Result	Rating	Weight	Adjusted Rating
Business Driver	Operational Improvement	6	1.0	6.0
Business Result	Rev/Cost	8	1.2	9.6
Impact	Independent Variable	5	0.4	2.0
Measurability	Quantifiable Published	10	1.0	10.0
Reach	First Line Supervisor	4	0.7	2.8
Impact of Inactivity	Repercussions Next year	2	.2	0.4
Total		35		30.8

Figure 9. Determine a summary score for the business benefits of a Six Sigma program

deployed. You may simply want to prioritize among the sum of those two measurement values while ignoring all others

The foregoing is not meant to be an exhaustive list of considerations, but rather is designed to illustrate a framework for analyzing the relative value of competing programs. There may be other quantifiable aspects that are unique to your company. However, in all events you should quantify:

- Business Drivers
- Anticipated Business Results
- Relative Impact of Training on Delivering Business Results
- Level of Measurability
- Reach
- Impact of Inactivity

Variable	Result	Rating	Weight	Adjusted Rating
Business Driver	Organizational Support	2	1.0	2.0
Business Result	Reduced Turnover	2	1.2	2.4
Impact	Work Environment	3	0.4	1.2
Measurability	Qualitative/Anecdote	1	1.0	1.0
Reach	Company-wide	7	0.7	4.9
Impact of Inactivity	Repercussions to talent pipeline over course of 3-5 years	5	.2	1.0
Total		20		12.5

Figure 10. Determine a summary score for the business benefits of Respect at Work

Finally, given the preference of your organization, you

may want to weight each of these measurements to reflect either importance, confidence in the assessment of benefit, or both. For example, if your organization is partial to allocating the results of training to the improvement of core business metrics, you may want to weight the level of measurability higher. If your company values employee development, then the reach of the training may be more important using a weighting scheme. Therefore, the summation of the quantification of business impacts for a Six Sigma as it relates to a Respect at Work course may be as listed in Figure 9. Thus, on the business impact scale, the Six Sigma training has achieved a composite business impact index of 30.8 while Respect at Work had a composite index of 12.5, as shown in Figure 10.

Quantify the Business Risks

Because it is often difficult to draw a causal connection between training and business impact, developing the business impact index is the more difficult portion of portfolio management. Having done this, you can now turn to the easier quantification, which is the resource impact (i.e. risk) index. The resource impact index is easier because it generally involves factors within the control of the learning organization and factors that are more readily calculable or estimable. Once again, each of these impacts will be shown on a 1-10 scale for the purposes of illustration.

Calculate budget concentration

One of the fundamental notions of investment philosophy is that the investment in any asset or class of assets should be limited to a percentage of the total available investment capital. Similarly, the analysis of any program should take into account the percentage of the total training budget that is consumed by the program. This percentage can be reflected as a function of the total budget or the discretionary portion of the budget. Obviously, the greater the percentage of a budget allocated to any one program, the greater the risk of putting too many eggs in one basket. One simple method to quantify this risk to a rating is to multiply the percentage of budget allocated to the program by a factor of ten such that using 10% of the budget yields a rating 1 (low risk) and using 50% of the budget for a given program yields a rating of 5 (moderate risk). While using 50% of a budget for a single program may seem more than a moderate risk, remember that this is a relative calculation of all programs such that 5 will, in fact, be a substantial contributor to risk as compared to other programs.

Assess asset availability

Next, you should determine the availability of assets required to develop the program. In this assessment, you may analyze availability for each of the component parts of design and delivery or you may simply average all of the components into a single Asset Availability Rating (AAR), once again on a scale of 1-10. If the course is an existing course, the risk rating would be low (1). If it were a new course with limited internal expertise and complicated design requirements, then the risk would be about 9. The assets to be analyzed would generally be:

- Subject Matter Expertise
- Instructional Designer Capability
- Development Capability
- Delivery Capability

Evaluate the track record

Anyone who has invested in a mutual fund has looked at the one, three, five and ten year average performance for the fund. Similarly, for training programs, you should look at the history of the program. Has there been a correlation between the intended business impact and the level of training? If so, the risk is low (1). Conversely, if it is a brand new program, the risk is high (10). Additionally, if it is a program that has only recently been delivered but there seems to be improvement in the intended business metrics, then it would be considered only somewhat risky (5). Set forth in Figure 11 is one framework that could be utilized to value the risk inherent with the track record of a program.

Determine the success probability

Program Experience	Impact	Risk Rating
New Program	None	10
Minimal Experience (1 yr)	No ascertainable metric improvement yet, but anecdotal support	8
Minimal Experience (1yr)	Some ascertainable metric improvement	6
Reasonable Experience (3 yr)	Consistent, but modest Metric Improvement	4
Reasonable Experience (3 yr)	Consistent and meaningful metric improvement	2
Deep Experience (5 Yrs)	Consistent and meaningful Metric improvement	0

Figure 11. Analyze the track record of the program

validation to the business assessment of the impact of learning. One simple way to accomplish this is to establish the learning organization's confidence level of success in terms of 0% to 100%. This number should be subtracted from 100% and then multiplied by 10 to determine the risk of success. For example, if the learning organization believes that the likelihood that training will achieve its objective (and therefore the intended business impact) is 70%, then the level of risk is 3 $((100\% - 70\%) * 10)$.

If you refer back to the section on estimating the impact of training, you will see that the voice of the business should determine the level of impact that learning will have in driving the intended business result. Similarly, the learning function should analyze what it believes the probability of success of the learning program will be as an isolated impact variable based on the experience and expertise of the learning function. In essence, this provides a nice counterbalance or

Build a single risk index

Finally, build the single risk index in a similar manner to the single business benefit index. Applying the risk analysis to the hypothetical Six Sigma program, a possible outcome is that your company plans to apply 25% of the budget to this program since it should ultimately drive bottom line results and the assets required to deliver the program are readily available. Because Six

Variable	Value	Risk Rating
Budget Concentration	25% of Budget	2.5
Asset Availability	All readily Available (detail calculated separately)	2.0
Track Record	Minimal Experience/Some Evidence of Success	6.0
Success Probability	70% Confidence	3.0
Total		14.5

Figure 12. Determine a summary score for the requirements of a given program

Sigma is a well-documented and often-delivered program, your company has some experience delivering the program, there is some evidence of success, and you have 70% confidence that the program will be successful, the risk rating would ultimately be calculated as outlined in Figure 12.

Create the Composite Picture

Once a single index has been built for the business benefit and the risk impact, a composite picture of all programs can be developed to determine which of the programs offer the highest potential benefit given the business risks as calculated by the learning organizations. Generally, one would expect that programs would fall along an axis in which the business benefit is commensurate with the risk.

In Figure 13 below, the programs are plotted based on the benefit/risk calculation then weighted by the percentage of the budget required for each program. This provides an easily understood composite picture of all programs that can serve as the starting point for a prioritization or budget discussion.

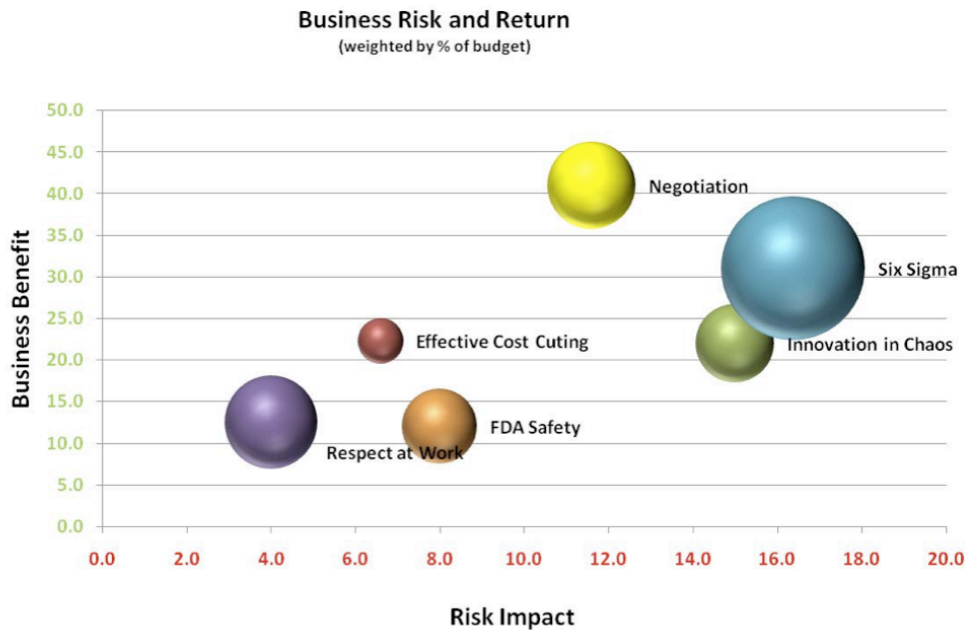


Figure 13. Develop a composite analysis based on the risk, business benefit, and relative allocation of budget

Summary

By adopting the approach described in this article, you can help your organization better analyze the return on the “unavoidable capital investment” in training. Among other things, benefits include the ability to:

- Maximize value of learning investments while minimizing risk
- Improve communication and alignment between learning and business leaders
- Encourage business leaders to think "team," not "me," and to take responsibility for program selection
- Allow your learning organization to schedule resources more efficiently
- Reduce the number of redundant offerings and make it easier to eliminate marginal programs

The foregoing provides an easy to use framework for prioritizing your programs in an economic climate where resources are scarce and demands are abundant. If your company is an ROI driven company, then of course full ROI analysis can also be implemented within this framework. However, our research has shown that most business executives adopt the position discussed at the beginning of this article: specifically, that there is an unavoidable cost in human capital development and that the goal is to maximize benefit for that cost rather than try to calculate ROI. This is because any such ROI calculation is often filled with assumptions due to the absence of clear causative impact of learning. By using the methodology discussed in this article, you will help alleviate these challenges while still using an evidence-based approach to allocate your resources in the optimal manner.