



Assessing benefits

Return on investment soars for participation in standardization

by Henk J. de Vries

The number of companies and organizations investing in participating in the development of standards is enormous. But are the returns worth the expenditures? Calculating costs is relatively simple, but how can participants calculate the benefits?

Which option is best?

One of our students from the Rotterdam School of Management, Erasmus University, recently finished an internship in a Swiss company that developed an innovative new product in which the user benefit is achieved by replacing analogue technology with digital. In order to demonstrate its fitness for use, this product should be tested against an accepted standard. This is important because the product is intended to be used as part of a system, and if the product fails, the entire system will fail. Unfortunately, the available ISO standard for this product category can-

not be used because it assumes analogue technology. In this case, the company has four possible options:

Option #1

Do nothing and accept that sales of the product will be low because there is no standard to prove its fitness for use.

Option #2

Develop a company standard to specify the interface between the product and the system, as well as a method to test the product's quality. This is better than the

first option because it makes it possible to test the product, which could be expected to improve sales. However, a testing standard developed by the product's manufacturer would not be very credible to customers.

Option #3

A better option would be to develop a standard in a consortium, in cooperation with potential customers. This would enhance credibility and probably improve sales. However, some customers will still hesitate, mainly because of compatibility issues. The specifications laid down in the standard may make it impossible to combine the product with system elements offered by competing companies.

Option #4

A common standard supported by multiple suppliers offers the fewest disadvantages. In this case, developing an ISO standard is the most feasible option not only because this would entail extension of an existing standard, but also because the result would be a genuine International Standard, allowing any stakeholder to get involved in its development. Here, "stakeholders" includes not only suppliers and their customers, but also, for instance, organizations involved in testing and certification. The biggest winners in this scenario are users, who would be able to buy better products tested according to a commonly accepted and reliable standard. This, in turn, allows users to compare the offers among various suppliers. For the company, the advantage is that the market for innovative products will increase considerably. However, this market may have to be shared with other companies.

The difference for companies between the third and fourth options is like choosing between having a whole small cake, or a large slice of a big cake. Estimates show that, in this case, the biggest payoff comes from the fourth option. This difference can amount to several million Swiss francs (CHF).

The company cost of developing an International Standard amounts to about CHF 10 000, so the benefits far outweigh the expenditure. Moreover, cooperation with customers, competitors and other stakeholders positively contributes to the company's reputation, while the other options may have the opposite effect.

Calculating the benefits

How did we calculate the benefits? The cost part is easy. Participation in standardization is an investment of time and money. Time is needed for writing standards, reading documents, providing comments, meetings and travel, as well as long discussions – both internally and externally. Time is money – simply multiply the estimated time investment with salary figures. Money is also needed for travel, hotels and possibly for hosting meetings or providing test facilities.

Calculating the benefits, on the other hand, is more difficult. In this case, the benefits should come from increased sales, while in other cases, reduced production costs might be paramount. We compare three alternatives (company standardization, consortium standardization and international standardization) with the zero-option: doing nothing.

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To calculate the benefits, we need estimates of price and cost of the product and of the number of products to be sold per year. The benefits can be calculated by multiplying the difference between sale price and production cost per product with the total number of products. This should be calculated for the four scenarios. Of course, there are many uncertainties, such as the willingness of customers to buy the new product and the behaviour of competing firms.

So far, we have assumed that the standard the company wants to have will become available. In the case of a company standard, the company can manage this internally. But the consortium standard is more complicated because other organizations are involved. Now the choice is between teaming up only with other stakeholders with the same interest, or also involving competitors, which introduces greater uncertainty about the outcome of the process.

Calculating the benefits of the last option, developing an International Standard, are even more complicated. The



standards development process is open to representatives of any interested ISO member country. At the national level, the ISO member bodies organize a consensus-based process, open to all interested national stakeholders, to prepare the national position. At the international level, a working group with international experts drafts the standard and a supervising technical committee takes the essential decisions, including the voting process among participating member bodies. With this many stakeholders involved, the question is whether the company can expect to achieve its preferred outcome.

Gauging stakeholders

The first step is to make an inventory of these stakeholders. Who are they? Which ones are most important? The Rotterdam School of Management, Erasmus Univer-

sity, has developed a method for mapping stakeholders to determine a subset of core stakeholders. A particularly important question is whether the stakeholders have common or conflicting interests.

If everyone is in agreement, then perhaps participation is unnecessary: others will probably do the job and will come up with an acceptable standard. The other extreme would be that so many stakeholders have deviating interests that it makes no sense to participate – we can see in advance that it will be impossible to achieve the desired result.

The in-between situations are perhaps the most interesting: the outcome is not certain but participation by the company can make the difference. Maybe the company will have to convince others to join. And it will have to delegate competent people and take other steps to ensure that participation is indeed effective.



Our research revealed more than 100 factors that together determine the effectiveness of participation. Even if all possible measures are taken, the outcome of the process is not guaranteed. The company can, however, estimate the chances for success.

So there is a certain chance of achieving a desired outcome (with an estimation of the benefits) and a chance of failure (with an estimation of the losses). Based on this data, the company can make a decision.

In cooperation with Dutch industry, we have developed and applied a method to calculate the outcome, using these assumptions and also taking into account interest rates (costs precede benefits, and the required money might be put to use elsewhere). With the method, we are able to calculate costs and benefits on an annual basis. The number of years is limited because the standard may be revised again, and of course, the market situation may change. In short, everything is based on assumptions, so it is advisable to recalculate after a year or so to determine if it is still worth the effort to continue participation.

The cases we studied show more benefits from increased market share than from cheaper production. And there can be other good reasons for participation as well, such as the opportunity to come into contact with experts who share the

same technical interests and may represent potential business partners. These relationships can be extremely valuable, and can even be the main reasons to participate.

Participation is easier for big companies, but one of our cases shows how a company with less than 100 employees managed to influence a European standard. This has paved the way for the company to export to other European Union countries, resulting in a huge increase in sales.

Societal benefits

So far, this article has taken the view of a 'selfish' business position for a single company. An alternative is to defend the interests of a group of stakeholders, or a common national position. Then the same cost-benefit approach can be used, but costs and benefits are shared.

ISO tends to emphasize the common benefits for business and society. For example, a company's involvement may further technological development, ensure the smooth functioning of a business sector as a whole, provide consumers with the desired benefits or more generally, contribute to sustainability. Also in such cases it is possible to make calculations, but questions arise around whether a given company's contribution

to societal benefits outweighs the cost of participation.

In the majority of cases studied so far, the benefits at stake outweigh the cost of participation by a wide margin. However, whether these benefits are actually reaped is another issue. If not, then only the costs remain, plus the pleasant – or for some, frustrating – experience of being involved. ■

About the author



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His education and research focus on standardization from a business point of view. He is Vice-President of the European Academy for Standardization (EURAS) and Special Adviser to the International Federation of Standards Users (IFAN). His teaching activities include an executive course on achieving business goals by participation in international standardization. See <http://www.rsm.nl/hdevries>.