CGMA® TOOLS

RISK QUESTIONS

a CGMA should ask relating to process innovation
Two of the world’s most prestigious accounting bodies, AICPA and CIMA, have formed a joint venture to establish the Chartered Global Management Accountant℠ (CGMA℠) designation to elevate and build recognition of the profession of management accounting. This international designation recognises the most talented and committed management accountants with the discipline and skill to drive strong business performance. CGMA designation holders are either CPAs with qualifying management accounting experience or associate or fellow members of the Chartered Institute of Management Accountants.
Innovation is widely regarded as an important driver of business value. Yet the drivers are many and can be affected by global events, regional occurrences, industry specific regulations or unique corporate/organisational challenges.

Process innovation is about doing things a better way; either through developing new processes and delivery methods or finding radically different ways of doing business. This can be as simple as redefining a key step within a manufacturing function, or as complex as a complete restructuring of the organisation. Technology is often the change trigger, an example being the game-changing effect of e-commerce upon book and music retail.

There is no doubt that innovation is exciting and has great potential for increasing competitive advantage – but as CGMAs we need to understand both sides of the story. What are the key risks that a new process brings to your organisation? How can YOU achieve the greatest efficiency benefit while at the same time ensuring that you have addressed the related risk factors? This paper sets out a framework for CGMAs to work through, identifying the key questions that will enable your organisation to establish a ‘risk appropriate’ level of innovation.

An organisation’s tolerance for risk, as defined by COSO, is:

‘...the acceptable level of variation in performance relative to the achievement of objectives.’

Setting tolerance levels in support of strategic objectives is:

‘...a precondition for determining risk response and related control activities.’

This includes focusing the objectives in the areas of operations, external financial reporting, external non-financial reporting, internal reporting and compliance.

How can we encourage the building of value through innovation, while managing the associated risk?

Although risk is a subjective area, heavily influenced by organisational risk appetite and culture, the following approach will help CGMAs map risk and identify broad risk response areas. A more specific response can then be developed using internal knowledge.

<table>
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<th>Risk category</th>
<th>Examples</th>
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| **Operational risks** relating to the activities carried out within an organisation. May include systems, people, products and processes. | • Business interruption during implementation  
• Human error                                    
• Process design failure                          |
| **Financial risks** can sometimes be outside an organisation’s control, but can often be influenced by its actions. | • The effect of exchange rate fluctuations on overseas operations  
• Having insufficient cash to meet obligations  |
| **Environmental risks** arising from changes in the political, economic, social and financial environment. Includes strategic risk. | • Game-changing competitor innovation  
• Natural disaster affecting supply chain  
• Poorly informed senior management decisions  |
| **Organisational risks** relating to the behaviour of individuals and groups within the business. | • Failure to consider the impact of process change upon staff |
| **Reputational risks** affecting the way in which the organisation is viewed by its stakeholders. | • Unforeseen operational issues leading to loss of customers and market share |
The first step is to identify the risks that can be addressed through innovation. One approach to this is through environmental analysis, which essentially asks the question “what’s going on?”, both now and in the future. The discussions that have been occurring within your organisation, whether as afterthoughts from a meeting, in the boardroom, or formalised as strategic teams, are already defining “what’s going on”. From this, innovative responses can be developed.

- What industry are we in?*
- What has changed in the industry we’re in?
- What has changed within our organisation/department/etc.?
- What are we doing to keep up with the change? Is our approach proactive or reactive?
- What are our competitors doing?
- How has what we’ve addressed thus far impacted outcomes?
- Which new products have we/our competitors developed or produced within the past year?
- What new processes have we/our competitors implemented or ceased within the past year?

It is essential that this scanning process is carried out on a regular basis, to monitor for new risks arising and changes to existing risks.

*What industry are we in?

On the face of it, the answer to this question may seem obvious. However, long-established firms have fallen victim to bankruptcy as a direct result of not understanding wider industry boundaries. The photographic materials company Kodak, developed one of the first digital cameras in 1975. Amid fears that the new technology would cannibalise sales of their core film products, the camera was never taken to market. Kodak missed out on an enormous business development opportunity through considering themselves to be in the narrow ‘photographic film’ industry, rather than a wider industry relating to image making and storytelling.

For the latest news and views on risk and innovation, visit the CGMA risk spotlight: http://www.cgma.org/Resources/Pages/risk-and-innovation.aspx
The next stage is to understand the potential impact of the risks related to our new process, and what is at stake should the risk arise. If the impact is significant, we need to ask the questions “what does this mean for us?” and “what must we do?”

- What are the effects if implementation succeeds, or fails?
- How will we react to failure? What is plan B?
- If we succeed, is the change sustainable? If it is a short-term fix, what is the long-term plan?
- How would the change impact our current business model, strategies, etc.?
- Do we need a NEW process, or can we adapt an existing one for a similarly robust result?
- Is the change best done internally or with a 3rd party? Which is more appropriate in terms of resources?
- Can parts of process, etc. be implemented? Or can it be implemented in phases?
- Are the controls intended for this change already in existence? Can we place reliance on something we already have?

We also need to consider the resource implications: “what will it cost?”

- What existing resources do we have? (time, people, tools)
- What are the costs and benefits of managing the new process?
- What is the ultimate cost in time, resources, and money? Is this viable?
- Can we control the associated risks without compromising quality/strategy/reputation?

Finally, consider organisational tolerance for this specific risk, and how success and failure will be measured.

There is more than one way of mapping risk; the CGMA tool ‘How to communicate risks using a heat map’ details one approach. In this example, we will map and prioritise the risk using a likelihood/consequences matrix and the ‘TARA’ (Transfer, Accept, Reduce, Abandon) risk response measures.

Risk significance can be judged by the materiality of a risk, should it arise. The most significant risks are those capable of undermining the strategy, long-term viability or reputation of the organisation. The key is to identify material risks in the context of your business.
TARA risk response measures:

**Transfer:** Can we transfer all or part of the risk elsewhere? The usual ‘transfer’ of risk is to take out an insurance policy, but risk can also be shared with other parties, for example by outsourcing or setting up joint ventures.

**Accept:** Sometimes there is no option but to accept the risk, particularly if the cost of managing or controlling the risk outweighs the benefit. However, if a risk has been identified, contingency plans must still be made. Business continuity plans are a good example of this.

**Reduce:** Can we reduce the risk? Examples of risk reduction techniques include the development of internal control systems covering all financial and non-financial activities. The COSO framework states that internal controls consist of five integrated elements:

1. Control environment: management attitude and philosophy regarding controls
2. Control procedures and activities: the actual policies in place
3. Risk assessment: identifying controllable and uncontrollable risks
4. Information: should be timely, accurate, understandable and relevant
5. Monitoring: in order to ensure the system is working efficiently

Remember that the answers to your questions may be found externally as well as internally. Ask your front line staff what customers are saying to them, and check your company’s facebook, twitter and other social media accounts. Consider emerging problem-solving trends such as crowdsourcing to understand new ideas that may help you. In looking outside the organisation, you’ll be able to better address and reduce your risks.

**Abandon:** In extreme cases, the only option may be to leave the area of operations where the risk has arisen, by closing down or divesting operations. From an innovation angle, this could mean choosing to discontinue development of a particular product, process or service.

The risk response can also be formulated using a more visual approach, integrating risk questions and TARA responses with a process map, as below. This incremental and iterative approach ensures that all facets of the risk are considered.
Risk Process Map #1

Identified Risk
“What’s going on?”

Consider:
- Internal environment
- External environment
- Organisational strategy

Accept the risk, but monitor for changes

Does the risk have significant impact?

Yes

Operational Effects
A CGMA should also ask...
“What does that mean for us?”

Consider:
- Existing processes
- Available resources
- Impact on strategy

Is the risk manageable?

Yes

Continue on next page

No

Consider abandoning the risk

No
RESOURCE IMPLICATIONS
A CGMA should also ask... “What will it cost?”

Consider:
- Development costs
- Operational costs
- Staff costs

PRACTICAL CONSIDERATIONS
A CGMA should also ask... “What must we do?”

Consider:
- Risk tolerance
- Risk measurement
- Risk response options

Consider how to transfer or reduce the risk

Do the costs of managing the risk outweigh the benefits?
- No
- Yes

Consider the best way to reduce the risk
- No
- Strengthening controls
- Alternative courses of action
- Abandoning risk
- Yes

Are the controls strong and reliable enough to justify the costs?
- No
- Yes

Consider reducing costs by transferring the risk

Implement new process, monitoring the risk environment
This process map leads to a go/no go decision; however it is important to recognise that risk management does not stop once a decision has been made. Even if a choice has been made to accept the risk, it is essential to scan for new risks and changes to existing risks and their controls, on a regular basis.

The following example uses the fictitious case of Badger Ltd. to illustrate how the process map may be used in practice.

Badger Ltd. are a well established manufacturer of widgets, and have historically performed well within an extremely competitive market with over 20 national competitors producing broadly similar products. They are currently the market leader, with a strong reputation for quality and customer service.

Badger’s main competitor, Fox, has recently implemented a new manufacturing technology on their Widget2 production line, which has enabled them to make significant efficiency savings and eliminate waste. As a result Fox have been able to reduce the sales price of the Widget2 (a product also supplied by Badger) by 30%.

Badger’s senior management team are concerned about the potential long-term impact of this new technology upon their market share, and have asked the management accountant, a CGMA designation holder, to report upon this risk. The management accountant uses the process mapping tool to identify the key questions the management team must address, as detailed below. This enables the management team to consider all risk areas before making their final decision.
IDENTIFIED RISK
“What’s going on?”

What has changed in the industry we’re in?
Our main competitor is using a new manufacturing technology that is more efficient than ours and is reducing our profit margins substantially.

Does the risk have significant impact?
Financial impact: HIGH
Timescale: IMMEDIATE

Yes

WHAT ARE THE OPERATIONAL EFFECTS
“What does that mean for us?”

Which processes must we change in order to compete?
What scale of implementation is needed?
What is the cost of implementing and maintaining new technology?

Consider abandoning the risk by discontinuing production of Widget2

Is the risk manageable?

No

Yes

Accept the risk, but monitor for changes

No

Continue on next page
WHAT ARE THE PRACTICAL CONSIDERATIONS?

“What does this mean for us?”
“What must we do?”

What is our tolerance of this specific risk?
How do we measure this risk?
What existing resources are in place?
Can we transfer the risk?
Can we reduce the risk?

WHAT ARE THE RESOURCE IMPLICATIONS?

“What will it cost?”

What are the development costs?
What are the machine related costs?
How long will it take to make the required change?
What are the staffing implications?
What are the training costs?
What is the cost of NOT managing the risk?

Consider the best way to reduce the risk

Do the costs of managing the risk outweigh the benefits?

Yes
Consider reducing costs by transferring the risk
No
Consider the best way to reduce the risk

Are the controls strong and reliable enough to justify the costs?

Yes
Begin detailed scoping and planning for implementation of new technology
No
Consider ways to improve and strengthen controls
At the mid-point of the process map, the senior management team must focus upon how they might transfer or reduce the risk. Having considered all options, the management team feel that outsourcing production of the Widget2 is likely to compromise quality. Attention is therefore switched to reducing the risk, and it is decided that Badger must implement similar, or better, manufacturing processes than Fox to improve efficiency, maintain competitive advantage and cut costs.

The risk management process does not stop once a final decision has been made; Badger must continue to scan for and address risks throughout the implementation of the new technology. Common reasons for failure of a new project revolve around levels of commitment, co-ordination and communication across all stakeholders, and the management accountant has a key role to play in helping the senior management team address these issues and ensure that the implementation is a success.

This tool has been developed as part of a wider range of resources, which you can find on the CGMA website. You may also find the following useful when focusing upon informed decision-making in your organisation.

How to develop non-financial KPIs

How to turn data into decisions
http://www.cgma.org/Resources/Tools/Pages/turn-data-into-decisions.aspx

How to communicate risks using a heat map
http://www.cgma.org/Resources/Tools/Pages/communicate-risks-using-heatmap.aspx

How to evaluate enterprise risk management maturity
http://www.cgma.org/Resources/Tools/Pages/evaluate-enterprise-risk-management.aspx
Footnotes

1. Internal Control - Integrated Framework, COSO, May 2013

The association of International certified professional accountants®, a joint venture of AICPA and CIMA, established the CGMA® designation to elevate the profession of management accounting globally.