

Fallacies in ORM

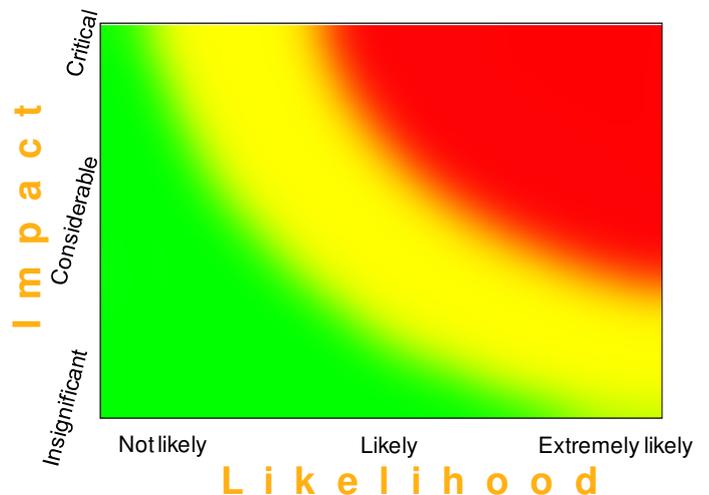
Summary: Four major fallacies are hindering banks in implementing effective ORM by deflecting and confusing business and indeed risk managers. The fallacy that High Impact/High Likelihood risks are relevant makes us look at the wrong risks. The fallacy that Bankwide Key Risk Indicators matter wastes our time and effort. The fallacy that OpRisk data can be aggregated produces useless reports. The fallacy that AMA can only work for large banks turns most banks off a risk sensitive capital calculation for OpRisk.

Dear reader,

ORM requires close cooperation across the bank, which is why ORM departments must make sure that everybody has a clear idea about the underlying concepts, the purpose and the techniques used in ORM. It may not sound earth shattering, but in the absence of commonly shared clear understanding of ORM, the efforts of risk management fall way below standard. This newsletter highlights the most common fallacies and how to tackle them.

Fallacy 1: *High Impact/High Likelihood risks matter*

The most common way to ‘measure’ OpRisk is to use some variant of a colour coded diagram like the one on the right. It is used to prioritise risk management programmes and to rank risks during assessments. Unfortunately, this is completely wrong: the diagram is highly misleading. Trying to emulate an actuarial approach with independent impact and likelihood characteristics, ORM has backed the wrong horse. The flaw is that this diagram fails to identify the risks that really matter, the ones that have a devastating impact, a weak control environment and a very low likelihood.



These are the risks that should attract our attention. Instead, this diagram leads us to believe that High impact / High likelihood risks are the ones that matter. But these risks do not exist in real life. Banks would self-destruct within a month if they were experiences risks that exhibit both a high severity and a high likelihood. Failing to find these risks, as we expect, attention often turns to other risks with a high likelihood. This is because the high likelihood risks are the ones that people are familiar with¹. The result is that banks end up spending a lot of their ORM energy on battling mediocre risks and ignoring the killer risks.

¹ It is not uncommon to find risk registers where all the identified risks are of the high likelihood class, and hence of the low impact variety. Some banks even exclude risks that have not yet occurred to themselves from the risk register, thereby making the risk register virtually useless for risk management.



Fallacies in ORM

Fallacy 2: Meaningful Bankwide KRIs exist

Early warning indicators² are the silver bullets of risk management. They allow banks to take swift preventative action thus avoid OpRisk events and their effects. Since OpRisk is present in all bank activities, it may sound reasonable to develop KRIs that can be used across the bank. That way, all processes could be monitored, compared and ranked. Unfortunately, this is completely wrong. Banking processes share few characteristics and none that deliver interesting KRIs. Consider, e.g., Home loan processing and Brokerage. There is no tell-tale KRI that can be applied across such diverse processes. There are not many KRIs anyway, and experience has shown that the most valuable ones are always in relation to a very specific product / process and are measured objectively and very often³.

As an aside, the best KRIs identify changes in the circumstances that drive risk (the so-called causes), rather than 'pure' risks. Identifying and collecting valuable KRIs is very hard indeed which is all the more reason our efforts should not be wasted on a spurious hunt for generic KRIs.

Fallacy 3: OpRisk data can be aggregated

Risk management requires frequent reporting and it is natural to seek for summaries, descriptive statistics and models that aggregate the mass of ORM data. But not only are the best KRIs process / product specific, so is all significant ORM. Good assessments identify specific weaknesses rather than general states of the bank; analysis of actual events focus on specific causes; key controls manage specific vulnerabilities etc. Data on these topics are relevant in as far as they help understand and manage the risk *within* that process. The ORM programmes therefore give us *highly specific, typically* qualitative information, when we assess, measure, monitor and, in general, manage operational risk. This is very useful information and really helps ORM.

The next request, however, usually from senior management, is for a condensation of all this information. The subsequent report shows the financial losses and a summary of the assessments, a RAG-overview of KRI data, a one dimensional risk ranking, a single number capturing the quality of the controls, and a generalised list of identified causes. Sadly, this aggregation does not add anything useful (except for financial loss data) since qualitative information requires as much context as we can muster to be useful in any way. We should therefore start by distrusting aggregated ORM data.

² Key Risk Indicator ("KRI") in general have a troubled status among OpRisk professionals. More on that in newsletter 28: *KRI misconceptions and solutions*, which you can find on the website.

³ To allow swift action, KRIs should ideally be measured in real time. Consider how many of your KRIs can even be measured on a daily basis. And then how many of those can be measured in all business units across the bank?



Fallacies in ORM

Fallacy 4: AMA can only work for large banks

A simple reading of the Basel II methods of computing capital for ORM suggest an enormous gap between AMA versus BIA and TSA⁴. This is true in as far as BIA and TSA are virtually not risk sensitive and can be computed without much effort whereas AMA requires an internally developed model, including stress testing, validation and a use test, all of which are not trivial. In fact, the gap between BIA and TSA may be the real gap, since it is with TSA (and AMA) that banks must pass the qualifying criteria⁵. And it is in the day-to-day running of banks that banks face the real challenge for ORM.

As to the AMA models, they have been hindered by the notion that AMA requires building some kind of loss data curve from the ground up. This is commonly done combining internally collected losses (by definition not extreme) with losses from other banks (necessarily fragmented) and scenarios (in other words imaginary losses). These data sets are then manhandled into a distribution and manipulated so as to agree with the numbers as suggested by TSA⁶.

An alternative to this, which is open to banks of all sizes, starts out from the capital charge suggested by TSA as the benchmark, and uses all the usual AMA elements to *modify* that number. Since this approach does not require huge amounts of internal (or external) loss data and does not need to rely only on scenario analysis, it is indeed open to all. The greatest benefit to this would be that we can make ORM capital risk sensitive, which will awaken managers to the importance of ORM.

Conclusion

In the ten years of the Basel Committee's publication of *Sound Practices for the Management and Supervision of Operational Risk*, ORM has become an established discipline. The exact role and status of ORM, however, is much less clear for many people. This is partly due to a number of persistent misconceptions about ORM. We have reviewed four fallacies: (1) *High Impact/High Likelihood risks are relevant*; (2) *Bankwide Key Risk Indicators matter*; (3) *OpRisk data can be aggregated* and (4) *AMA can only work for large banks*. OpRisk managers should work to eliminate these fallacies when and where they see it.

⁴ Apologies for the overuse of abbreviations, but they have become part of the ORM lore. In full they are: Basic Indicator Approach, The Standardised Approach and Advanced Measurement Approach. One reason why the abbreviations are preferable to the full name is that the very mention of "Advanced" has clouded some manager's judgement into believing it must, ipso facto, be "better".

⁵ These criteria are summarised in the Principles of Sound Management of Operational Risk.

⁶ AMA outcomes that fall more than 15% below TSA are typically not allowed by regulators. AMA outcomes that exceed TSA by any percentage are not what banks are likely to accept for any length of time.