

Understanding Risk

“THE RISK assessment.”

There are ways for the Business Continuity and Disaster Recovery industry to improve their risk assessments of their clients.

The standard practice for a risk assessment is for the Business Continuity and Disaster Recovery company to analyze everything about a company that they deem is important information that relates to risk and to give the company a score ranging from one through five, where one being very low risk and five being very high risk. The confusion in this system comes from the process of dozens of factors being weighed into one single digit score. Depending on how much weight is placed on each criterion, Business Continuity and Disaster Recovery companies could easily arrive at different and what look like arbitrary conclusions. This makes explaining to clients the difference between a score of a two and a three or a four and a five very tedious and difficult to comprehend.

It would be beneficial to clients to receive more than just a one through five score describing their risk. Clients need to be able to look at real evidence so the true risk can be appreciated. One way to do this is through deep analyzation of previous historical data that can be presented directly to clients in addition to their risk assessment score.

“People overvalue their knowledge and underestimate the probability of their being wrong.”

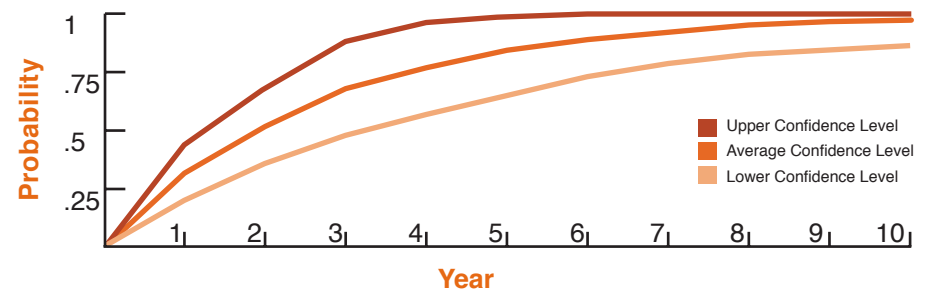
- Nassim Taleb’s “Fooled by Randomness”

The second way the industry can improve, is to make clients realize the likelihood of dangerous events happening in the here and now increase exponentially over longer periods of time. The problems that companies are trying to prepare for will be there as long as they stay in business. Therefore, companies must be made aware of the likelihood of these events happening both in the present, and more importantly, the future.

Using frequency probability (probability theory used to estimate the likelihood of an event happening based on the number of times this event has happened in the past) and historical data, clients can be presented with an accurate approximation of the likelihood of an event happening again. Clients are usually provided with the historical data. A deeper analysis of this data will allow them to understand how likely an event is to happen again.

A great example is the risk of hurricanes touching down on the coast of Texas. According to the National Oceanic and Atmospheric Administration, from 1950 through 2008, eighteen hurricanes touched ground on the coast of Texas. This is valuable information to clients but they need a more detailed analysis of this data. Through frequency probability and using the poisson distribution that measures likelihood of events happening over an interval of time, a 95% confidence interval can be computed to assess the likelihood of this event happening at least once. This interval has an average probability of 26.3% with a range from 15.7% to 35.5%. An accurate estimation of the likelihood of this event happening at least once over a course of the next year based on the past fifty-nine years is 26.3%. Having a straightforward probability interval is something clients can wrap their heads around.

It is also possible to show clients their likelihood of encountering at least one event in a five or ten year period. Going back to the previous example, the 95% confidence interval of the probability of at least one hurricane touching down in the next five years has the average value of 78.2% with a range from 57.5% to 85.5%. In the next ten years, the average probability goes up to 95.3% with a range from 81.9% to 98.8%. A Client’s understanding curve will sky rocket once exposed to these numbers.



It is of importance to note that the numbers in this data are based on only historical data. There are other factors that influence the likelihood of hurricanes occurring in an area. This approximate probability is used to give clients a firm estimate of their risk rather than an exact likelihood. A company may be facing a 60% likelihood of a hurricane touching down in their area over the course of five years. A company may be facing a 25% likelihood of a hurricane touching down in their area over the course of five years. The risk is too great to ignore in either case. It is prudent to plan and prepare for a hurricane if the likelihood is 25% or 60%. An accurate estimate is enough for clients to realize the risk they are facing and gives them reason to plan and prepare accordingly.

Single scores used in risk assessments that quantify many factors still have utility. It portrays information to give a general idea of the risk a company will face. Accurate estimations of the probability of risks explicitly convey more meaning to clients. Use of accurate probabilities to show risks over the course of time is at the utmost importance for any company that plans to be in business longer than one year. Strong numerical analysis would be a great asset to use when supplying clients with risk assessments.

Re:Think...

the risk assessment. Are there better ways to interpret and analyze the data? Can clients be made more aware of the risks they face through deeper analysis and clearer explanations?

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