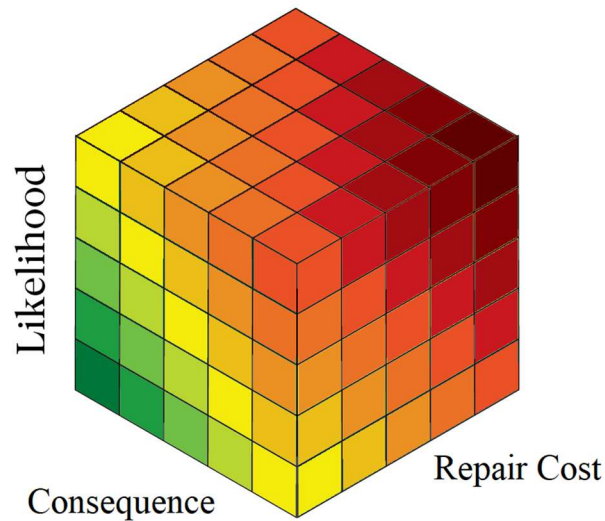


Risk-Cost Cube



Cost-Risk Cube. HCI Systems, Inc.

This article will discuss the RBI methodology of probability x consequence = risk rank equation and ties it in with another variable, cost to repair (or replace). This is not to be confused with some consequence models that embeds the overall cost of the event since that usually involves other cost factors as well, such as loss of production. The cost factor gives the risk ranking a third dimension or cube that relates similar risk ranked issues with the cost to repair (or replace). But, before I get started, I would like to thank Kelly Rice at Imagination Print and Design for her help in visualizing the risk-cost cube.

Her web site: <http://imaginationpad.com/>

So now the backdrop story.....

Backdrop Story

Early on in my career I worked at a plant on their engineering staff. I was asked to attend a plant budgeting session with the department managers that included the maintenance engineer and the accountant. I listened to the maintenance engineer go through his assessment of what equipment needed to be replaced in the upcoming year. It was a great presentation.....or so I thought.



The plant accountant gave it some thought and then asked a very simple question. Do we really need to do all of this next year? If we can push-off the pump replacement a year we could fund the new conference room project. And so it started, the tug-a-war between maintenance and accounting. It continues to this day. (And you thought RBI was an engineering thing. :))

Now back to 2017, the maintenance engineer is tooled with RBI software, inspectors, engineers and risk ratings on hundreds if not thousands of assets. So now he sets his RBI report sorted by risk on the conference table with a thump (it's a big report). He looks at the accountant and says what level of risk is not acceptable and starts turning the pages.

Now the accountant is smarter too. He looks at the report and sees that there are hundreds of assets with risk ranking 20 or higher (i.e., a 5 x 5 matrix) and says; "I need to see what the repairs (or replacements) will cost for each asset with a risk ranking 20 and higher. We only have \$x dollars to spend next year." Someone in the room mumbles; "Well, that's just great."

So the accountant is really asking for a third factor to sort out those easy to fix problems from those that are more costly but both having the same risk factor. Makes sense right?

So How Does it Work

So this user configurable cost ranking dimension is able to have any number of increments for clarity. If this increment is 5, as an example, a low cost fix (level 1) would have a risk-cost fact of 20. A high cost fix (level 5) would have a risk-cost of 100. Got it?

This risk-cost cube methodology was tested at a refinery in conjunction with our MI tablet app and is now being made available for general Beta testing. Note: this is a free license software to qualified companies. For details please contact me at richgehse@hcisoftware.biz

I should point out that this HCI MI software is not intended to replace your existing MI software. So if you are running another MI software application, that's OK, please let us know. In the presence of another MI application, our MI App can function as an add-on module.

<http://www.hcisoftware.com/>