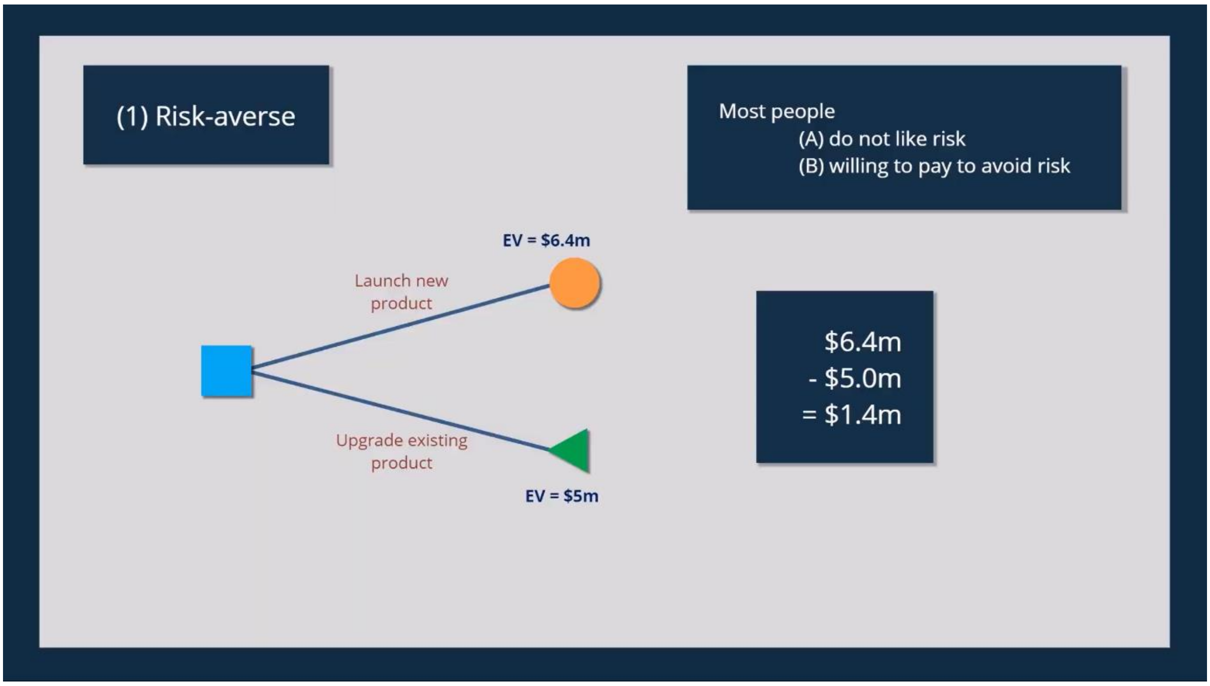
M4L15. Risk Tolerance

Slide #1

In this topic, we will continue our discussion on managers' risk profiles and correlate them to certainty equivalent value.

In the following topic, risk profiles will be analyzed using the utility function.

Slide #2



Most people do not like risk and are willing to pay to avoid it, such people are called risk-averse.

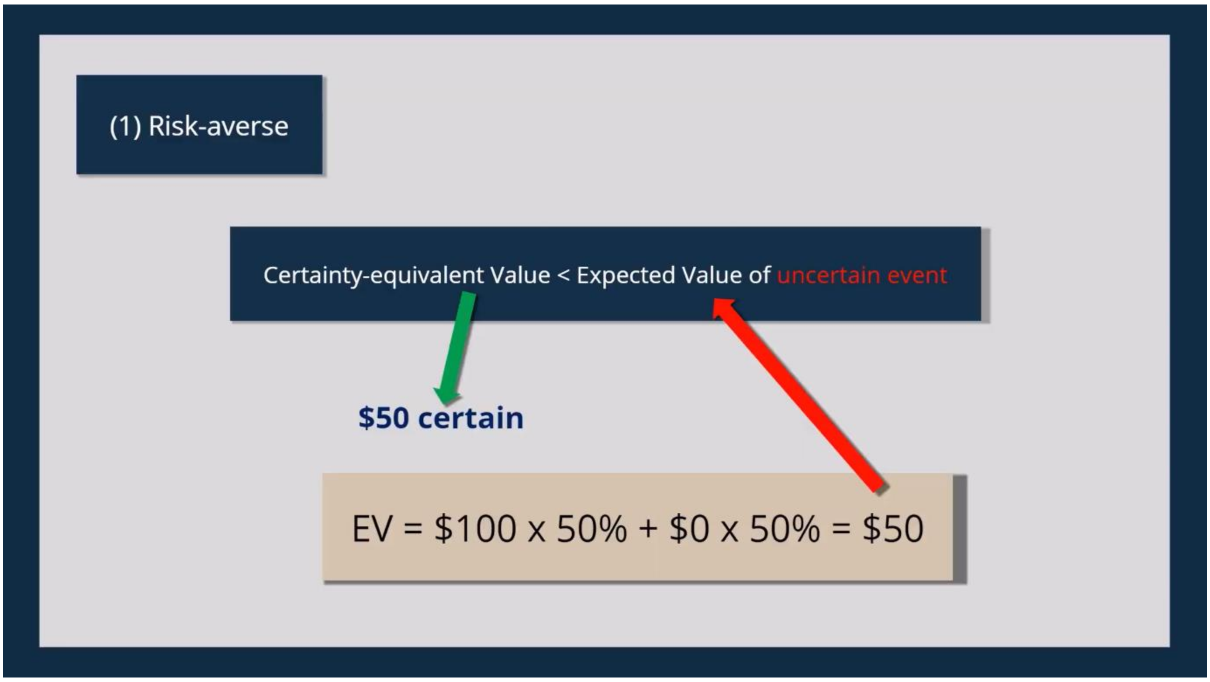
By choosing to upgrade an existing product with less than a 6.4 million dollars expected value, you are effectively paying to avoid risk.

That is, you are behaving in a risk-averse fashion.

Risk-averse people will prefer the projects with lower risk when faced with two investments.

With a similar expected return, risk-averse investors will accept a certain payment of less than the expected value of uncertain payoffs, rather than taking a chance and possibly receiving much lower return.

Slide #3

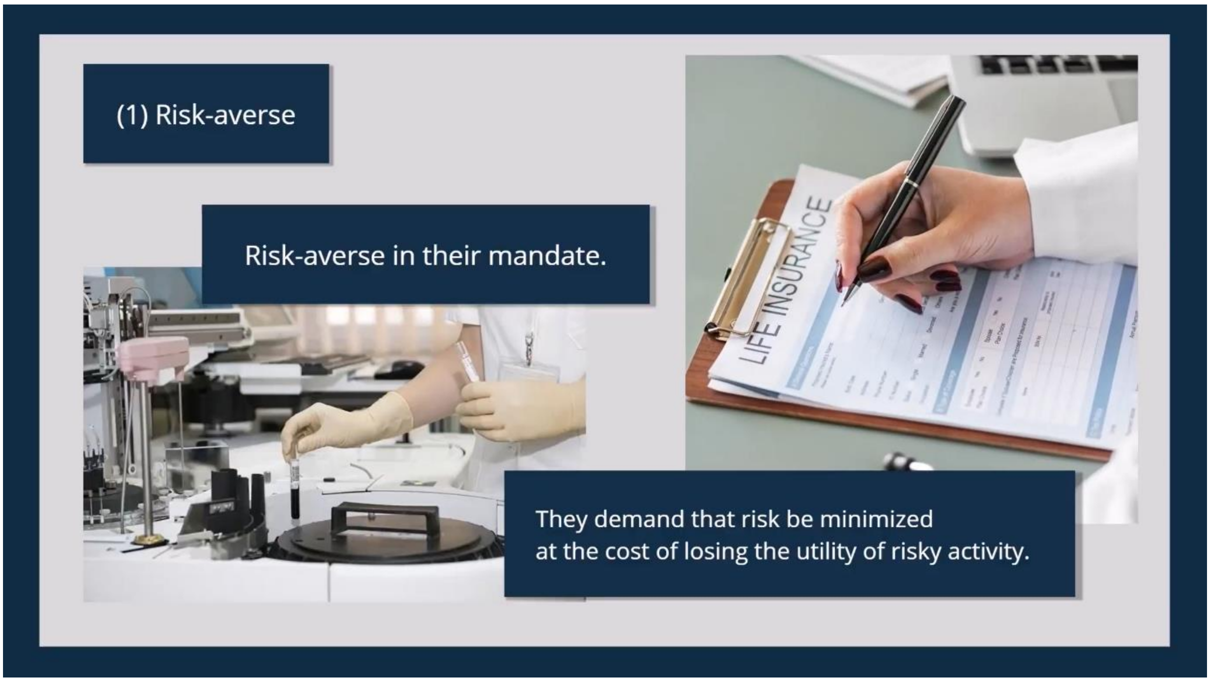


When in a risk averse fashion, a person's certainty equivalent value is less than the expected value of an uncertainty event.

A risk averse person prefers 50 dollars certain to uncertain situations, 100 dollars at 50% and 0 dollars at 50%.

Even though in those two scenarios, the expected values are the same, 50 dollars, the risk averse person prefers the 50 dollars certain.

Slide #4

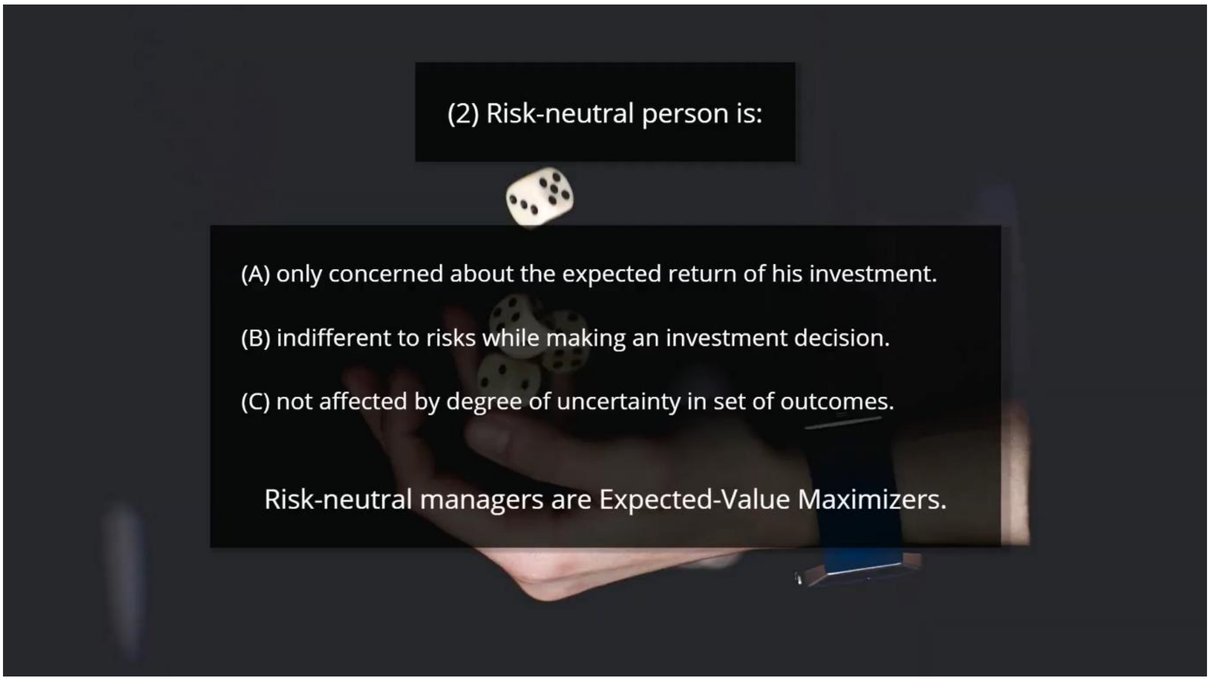


Health and safety executives are fundamentally risk averse in their mandate.

This often means that they demand that risk be minimized at the cost of losing the utility of risky activity.

Also, when you buy insurance, therefore reducing or eliminating your risk, you are behaving in a risk averse fashion.

Slide #5



A risk neutral investor is only concerned about the expected return of his investment.

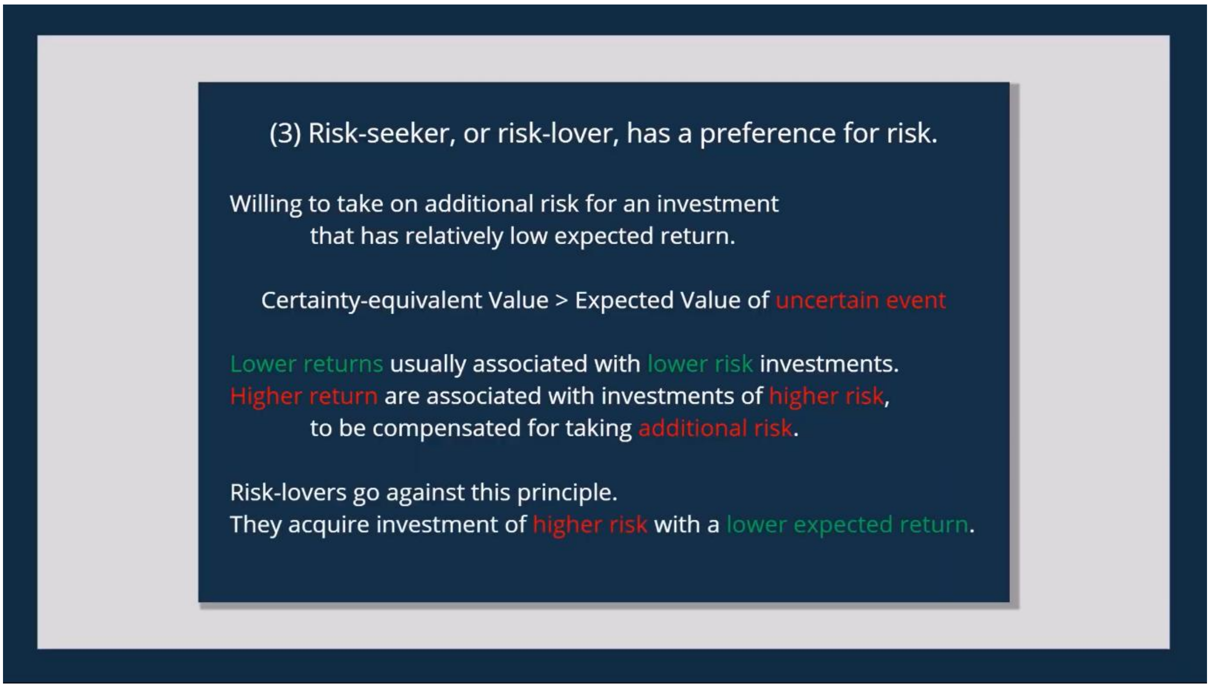
They are indifferent to risks while making an investment decision.

A risk neutral person's decisions are not affected by the degree of uncertainty in the set of outcomes.

What they are concerned with is the expected return.

Risk neutral managers are expected value maximizers.

Slide #6



Risk seeker or risk lover is person who has a preference for risk.

Risk lovers are willing to take on additional risk for an investment that has relatively low expected return.

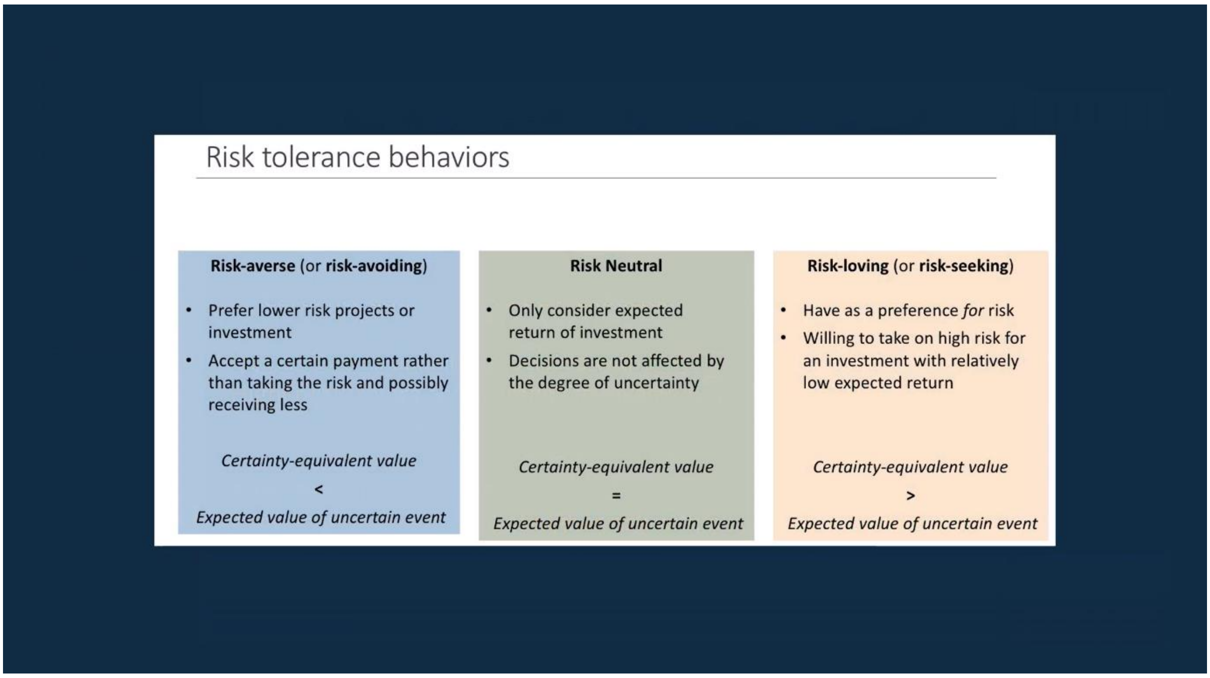
When in risk loving fashion, a person's certainty equivalent value is greater than the expected value of an uncertain event, there is always a risk return trade off in investing, lower returns are usually associated with lower risk investments.

Higher potential returns are associated with investments of higher risk, as most investors expect to be compensated for taking on additional risk.

Risk lovers go against this principle.

They acquire investment of higher risk with a lower expected return.

Slide #7



This table summarizes the three risk tolerance behaviors presented by business managers.