Today’s dynamic markets are motivating companies to develop greater flexibility. An effective strategy requires that managers discern the specific market challenges faced by their business and choose an appropriate approach to flexibility in response.

Dynamic markets may be defined by their volatility (rate of change) and unpredictability. When the pace of change is high, the manufacturing facility and infrastructure must be prepared to provide a wide variety of products and volumes without requiring changes to the production system. In such volatile environments, there is simply no time to make any adjustments to the system even if the changes are relatively predictable, and therefore the inbuilt capability of providing range flexibility is valuable.

Unpredictable environments require a different flexibility response. Customers, competitors, technology, and government regulations are among the factors that can cause unpredictability. Providing manufacturing capabilities to simultaneously support the full market spectrum over which those environmental elements have influence can necessitate large amounts of costly capacity. Successful companies in unpredictable environments use mobility flexibility to adapt their system capabilities in response to changes. Mobility denotes an ability to alter the production system to support new product mix and volumes with low time and cost transition penalties.

It is important to note that regression models not only showed the benefit of range flexibility in volatile environments and mobility flexibility in unpredictable environments, but also supported the notion that range flexibility is more appropriate than mobility in heavily volatile environments, whereas mobility is more appropriate in the presence of high uncertainty.
Furthermore, the below graphs indicate that little competitive advantage (or even a performance penalty!) may result if flexibility is applied when not required (when there is low environmental dynamism). The opportunity cost in such situations makes for a poor investment.

In summary, it is important that managers not blindly invest in flexible technologies as a hedge against an uncertain future: careful analysis is required to achieve fit with the marketplace and improved performance.