Exercise ISO 56007

TOOLS FOR REDUCING THE UNCERTAINTY OF AN IDEA

An effective mechanism of reducing and identifying uncertainties is to describe them across three levels: low, medium, and high.

Instructions for using this screening tool for reducing the levels of uncertainty are as follows:

— consider the requirement statements on the left-hand side and uncertainty questions on the right-hand side.

— place an 'X' in the box for each of the five categories of uncertainty to indicate level of uncertainty.

i. **Low** = If requirements are in place and **all** or **most** of the uncertainty questions **can** be answered.

ii. **Medium** = If **some** of the questions **can** be answered

iii. **High** = If **most** of the questions **cannot** be answered.

— Next, look across the five categories of uncertainty:

i. **if all are at medium to high levels** of uncertainty, then the idea or opportunity clearly **requires reducing uncertainty** by applying different methods for learning to answer questions prior to development.

ii. if there is a **mix of low, medium, and high,** this would also require **reducing uncertainty prior to development.**

iii. **if all are low**, then the idea or opportunity could be **ready for development**. This would suggest that requirements can be defined or there are very few, if any, questions to address.

	Low	Medium	High	

Organization Requirements				**Organization Uncertainty**
Projects have a home or sponsor. Commitment comes from a clear strategy and metrics.				Where does the idea or opportunity fit? Is there a logical home? Who will champion the concept? How are decisions made when operating under conditions of uncertainty?
Technical (or Implementation) Requirements				**Technical (or Implementation) Uncertainty**
Technology or infrastructure exists. Specifications are defined to develop a solution.				Is the concept feasible? What technology could we leverage or develop? How could this change the world, performance or costs? Will it be economic to develop? Can the solution be scalable?
Resource Requirements				**Resource Uncertainty**
People and money are assigned. Projects are prioritized through a portfolio process.				Is there funding available for the idea or opportunity? How do we fill our knowledge gaps? Can it be resourced with the right people and capabilities, internally or externally? Can we find the right partners?

Market (or Mission) Requirements				**Market (or Mission) Uncertainty**
Market or mission is familiar, already exists. Data is available to support the business or concept case. Regulatory, environment or societal guidelines are clear and already exist.				Is there a need or compelling vision for the market or mission? Are there multiple potential applications and/or business models? Is there a viable concept? Will it create sufficient value? Are there market, regulatory, environment or societal considerations that will help or hinder concept viability?
Interested Party Requirements				**Interested Party Uncertainty**
Interested parties are known, network exist. Organizations are viewed as credible.				How will the concept impact diverse interested parties? Which interested parties will support the concept? What resistances can prevent them from supporting the concept? Can these resistances be reduced?

Low to Medium Levels of Uncertainty   **Medium to High Levels of Uncertainty**

Organization	Technical (or Implementation)	Resource
▪ Where does the idea or opportunity fits? Is there a logical home? Who will champion the concept?	▪ Is the concept feasible? Have we demonstrated technical, business model and/or organizational feasibility?	▪ Is there funding available for the idea or opportunity to reduce uncertainty prior to development?
▪ Does the idea fit with our strategic intent? Do we have the capacity to pursue it?	▪ Is there the potential for significant Improvements and/or cost reductions in what already exists or the creation of something new to the world or market?	▪ Do we have internal foundational competencies we can leverage to pursue this idea or opportunity?
▪ How are decisions made when operating under conditions of uncertainty?	▪ Do we have confidence that there is room to operate within the intellectual property landscape?	▪ Is the team capable and motivated enough to successfully deliver the definition of success?
▪ Can the action plan realistically deliver to the definition of success, or the minimum required?	▪ Do we have confidence that technology, process or other technical challenges can be overcome?	▪ Can this idea or concept be resourced with the right people and capabilities, internally or externally?
▪ Are the organizational risk for any remaining critical uncertainties acceptable?	▪ Can we develop a prototype for market learning?	▪ Can we find the right partners? Which competency gaps could be filled externally via strategic partnerships and compietency-based acquisitions?
▪ Does the proposed solution fit into our DNA/capabilities as of today? Can our organization develop a solution to meet this need?	▪ Will the concept be economic to develop? Can the solution be scalable?	
▪ Can we provide the rationale for why it makes sense for our organization to pursue this idea or concept?	▪ Do we know how to develop this product, service or solution?	

Market (or mission)		Interested Parties	
▪ Is there a need or compelling vision for the business/mission?		▪ How will the concept impact diverse interested parties from policy makers to industry?	
▪ Are there multiple potential application and/or business models?		▪ Which interested parties will support the concept?	
▪ Is it a viable concept? Will it create sufficient value?		▪ What resistances could prevent interested parties from supporting the concept? Can these resistances be reduced?	
▪ Are there stated or unstated pain/need/desire(s) for clearly identified customers?		▪ Are the targeted customer segments willing to pay for help in meeting their needs?	
▪ Is the proposed solution compelling? Is the market entry strategy clear?		▪ Can we provide a clear value proposition (or hypothesis) for interested parties with different objectives?	
▪ Will the target customer prefer this solution over the alternatives available to it and why?		▪ Are the targeted customer segments or interested parties willing to pay our organization to help them meet their needs? Are we credible enough to provide this solution?	
▪ Do we have a sense of the potential for the market or mission and the window of opportunity?		▪ Does this project fit the investor's strategy + brand/image or is it essential for market positioning?	
▪ Are there market, regulatory, environment or societal considerations that will help or hinder concept viability?			