



Quad Chart Template

What is a Quad Chart?

- A quad chart is a single-page, landscape-oriented document or slide divided into four quadrants.
- It is used as a technical and operational snapshot to summarize a project, invention, or technology proposal.
- It acts as a written elevator pitch in the military especially within agencies like [DARPA](#), and USSOCOM utilizing [SBIR/STTR grants](#).
- It provides military program managers and decision-makers with the core facts required for rapid decision-making without wading through a 50-page proposal initially.
- It is primarily used as Initial Gatekeeping and Screening
 - Evaluators review hundreds of proposals. The quad chart allows defense reviewers to complete an efficient information assessment.
 - If the quad chart doesn't clearly articulate a viable technical solution, acceptable timeline, or realistic cost, the proposal can be filtered out immediately.
 - Evaluators use the quad chart to ensure the contractor has clearly met basic formatting, security markings ("Proprietary" vs "Non-Proprietary"), and high-level requirements before a deeper review.
 - Program managers who love a proposal will often use the contractor's quad chart to pitch the project upward to senior command or budget committees. It gives them an instant, easily digestible slide to justify funding the technology.
 - Contractors often submit a quad chart alongside a meeting request to brief military officials. It allows defense personnel to familiarize themselves with the innovation quickly so the actual meeting can focus on technical drill-downs rather than broad introductions.

Tips

- Create your quad chart from information in your White Paper
- **Do NOT** use prose
- **Do use** bullets, with as little text as possible
- Do not waste words or space on the quad chart
- You are presenting information to a gatekeeper who knows nothing about your technology
- You have less than 30 seconds to capture their attention
- Keep It Simple (10th grade reading level)
- Present you best ideas first. Don't make them guess.
- Benefits sell, not features. Tell them why this is important
- Keep it to **ONE** page
- Use professional contact information (no gmail addresses)

Business Logo

Capability Name

Contact Information

Problem

Technology name, picture, and brief description:

- Provide a concise overview of the evaluated technology.
- Provide a descriptive picture of the technology

What problem do you solve?

- Focus on identifying the specific problem and Critical Technology Area need faced by the Warfighter.

Solution Specifics

How do you solve the problem?

- Details of how the proposed technology addresses the identified problem.

Why you? What makes you different from the competition?

- Unique Selling Proposition (USP)

Impact and Technical Approach

Technology Readiness Level (TRL): The TRL scale ranges from 1-9

Manufacturing Readiness Level (MRL): The MRL scale ranges from 1-10

What is the Impact of your Solution?

- The potential impact of the proposed technology on addressing the identified problem.

What is the Technical Approach?

- Methodology employed in developing the technology.

Performance

End-user payoff/expected operational value/new capability:

- Expected outcomes or benefits that end-users, typically the Warfighter, would gain from employing the proposed technology.

Dual-Use (Commercial / Military) applications for the technology solution:

- Technology's potential applications beyond the military domain in both commercial and military contexts.

Problem

- **Technology name, picture, and brief description:** This section of the Quad Chart provides a concise overview of the evaluated technology. It includes the
 - name of the technology,
 - a representative picture, and
 - a brief description that highlights its key features and functionalities.
- **What Warfighter problem do you solve?** This section focuses on identifying the specific problem or challenge faced by the Warfighter (military personnel or units).
 - It outlines the context in which the technology is intended to be deployed and how it addresses a particular issue.
 - The problem statement should clearly define the gap or need that the technology aims to fill, ensuring that it aligns with the requirements and objectives of the Warfighter.

Solution Specifics

- **How do you solve the problem?**
 - This section delves into the details of how the technology proposed in the quad chart addresses the identified problem.
 - It describes the specific capabilities, features, or functionalities that make the technology a viable solution.
 - It should highlight the technology's unique selling points or advantages and explain how it directly addresses the problem statement outlined in the previous section.
 - This section may also touch upon any key components, algorithms, methodologies, or approaches the technology employs
- **Why you?**
 - What makes you different from the competition?
- **Unique Selling Proposition (USP)**
 - A unique selling proposition, or USP, is a tool salespeople use to communicate the key factors that separate your product from the competition.
 - An effective USP communicates your brand's values and differentiates what your company offers through what you stand for and how this benefits your customers.
 - An effective USP communicates your brand's values and differentiates what your company offers through what you stand for and how this benefits your customers.
 - It's used in the early stages of the sales process, and the guiding question for creating it is asking yourself, "What does my business offer that's different from the competition?"

Impact and Technical Approach

- **Technology Readiness Level (TRL)**

- This section uses the Technology Readiness Level scale to assess the technology's maturity level. The TRL scale ranges from 1 to 9, with 1 indicating basic principles observed and 9 representing a fully operational technology deployed and proven in its intended environment. (see chart on next slide)
- The TRL assigned to the technology indicates the level of technological development and readiness for deployment. It helps evaluate the feasibility and potential risks of implementing the technology within the desired context.

- **What is the Impact of your Solution?**

- This section examines the potential impact of the proposed technology on addressing the identified problem. It explores the benefits and advantages that can be derived from successfully implementing the technology.
- The impact could include improvements in efficiency, effectiveness, cost reduction, enhanced capabilities, reduced risks, or any other positive outcomes that can be attributed to the technology.
- It also considers the broader implications and relevance of the technology within the target operational environment.

- **Technical Approach**

- This section outlines the technical approach or methodology employed in developing the technology. It overviews the key steps, processes, or methodologies used to design, build, and refine the solution.
- The technical approach may involve specific engineering principles, scientific methods, research and development practices, software development methodologies, or other relevant approaches used to create and advance the technology.
- This section highlights the technical expertise and innovation behind the solution.

Technology Readiness Level (MRL)

Actual system proven through successful mission operations.	9	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation. Examples include using the system under operational mission conditions.
Actual system completed and qualified through test and demonstration.	8	Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation of the system in its intended weapon system to determine if it meets design specifications.
System prototype demonstration in an operational environment.	7	Prototype near, or at, planned operational system. Represents a major step up from TRL 6, requiring demonstration of an actual system prototype in an operational environment such as an aircraft, vehicle, or space.
System/subsystem model or prototype demonstration in a relevant environment.	6	Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness.
Component and/or breadboard validation in relevant environment.	5	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment.
Component and/or breadboard validation in laboratory environment	4	Basic technological components are integrated to establish that they will work together. This is relatively "low fidelity" compared to the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.
Analytical and experimental critical function and/or characteristic proof of concept.	3	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
Technology concept and/or application formulated.	2	Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.
Basic principles observed and reported	1	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples might include paper studies of a technology's basic properties.

Manufacturing Readiness Level (MRL)

Operations and Support	10	Full Rate Production demonstrated and lean production practices in place.
Production and Deployment	9	Low Rate Production demonstrated. Capability in place to begin Full Rate Production.
Engineering and Manufacturing Development	8	Pilot line capability demonstrated. Ready to begin low rate production.
Technology Development	7	Capability to produce systems, subsystems or components in a production representative environment.
	6	Capability to produce a prototype system or subsystem in a production relevant environment.
Material Solutions Analysis	5	Capability to produce prototype components in a production relevant environment.
	4	Capability to produce the technology in a laboratory environment.
	3	Manufacturing proof of concept developed
	2	Manufacturing concepts identified
	1	Basic manufacturing implications identified

Performance

- **End-user payoff/expected operational value/new capability**
 - This section highlights the expected outcomes or **benefits** that end-users, typically the Warfighter, would gain from employing the proposed technology.
 - It outlines the **value proposition** of the technology and its potential to provide a significant advantage or new capability to the end-users.
 - This could include increased operational effectiveness, improved situational awareness, enhanced decision-making capabilities, reduced workload, increased speed, or any other **measurable and meaningful improvements** the technology brings to the end-users.
- **Dual-Use (Commercial / Military) applications for the technology solution**
 - This section explores the how the proposed technology can be used for both civilian (commercial) and military (defense) purposes.
 - It investigates how the technology can be leveraged to address challenges or provide value in non-military sectors.
 - The technology's potential for broader adoption, scalability, and commercialization can be assessed by identifying dual-use applications.
 - This could involve exploring how the technology can be re-purposed, modified, or integrated into existing commercial systems or processes, extending its impact beyond the military domain.
 - Failure to adequately address this area is one of the most common reasons that innovation is NOT selected for funding.