

**STRATEGIC PLANNING FOR
SCIENCE & TECHNOLOGY CENTERS
OF
THE NATIONAL SCIENCE FOUNDATION**



WHAT IS STRATEGIC PLANNING?

Strategic planning is a management tool used to optimize and ensure the successful outcomes of long-term organizational goals or initiatives.



STRATEGIC PLANNING IS:

Focused---energies and resources selected and dedicated to achieve goals.

Strategic---steps to achieve goals are carefully crafted with required resources.

Integrated---all the pieces of the plan fit together and work synergistically.

Feasible---goals are achievable and designed to produce practical results.

Adaptable---plan is a steady guide, with built-in flexibility to adjust to changing situations.

Measurable---process and outcomes of the plan are demonstrable and quantifiable.



WHY STRATEGIC PLANNING?

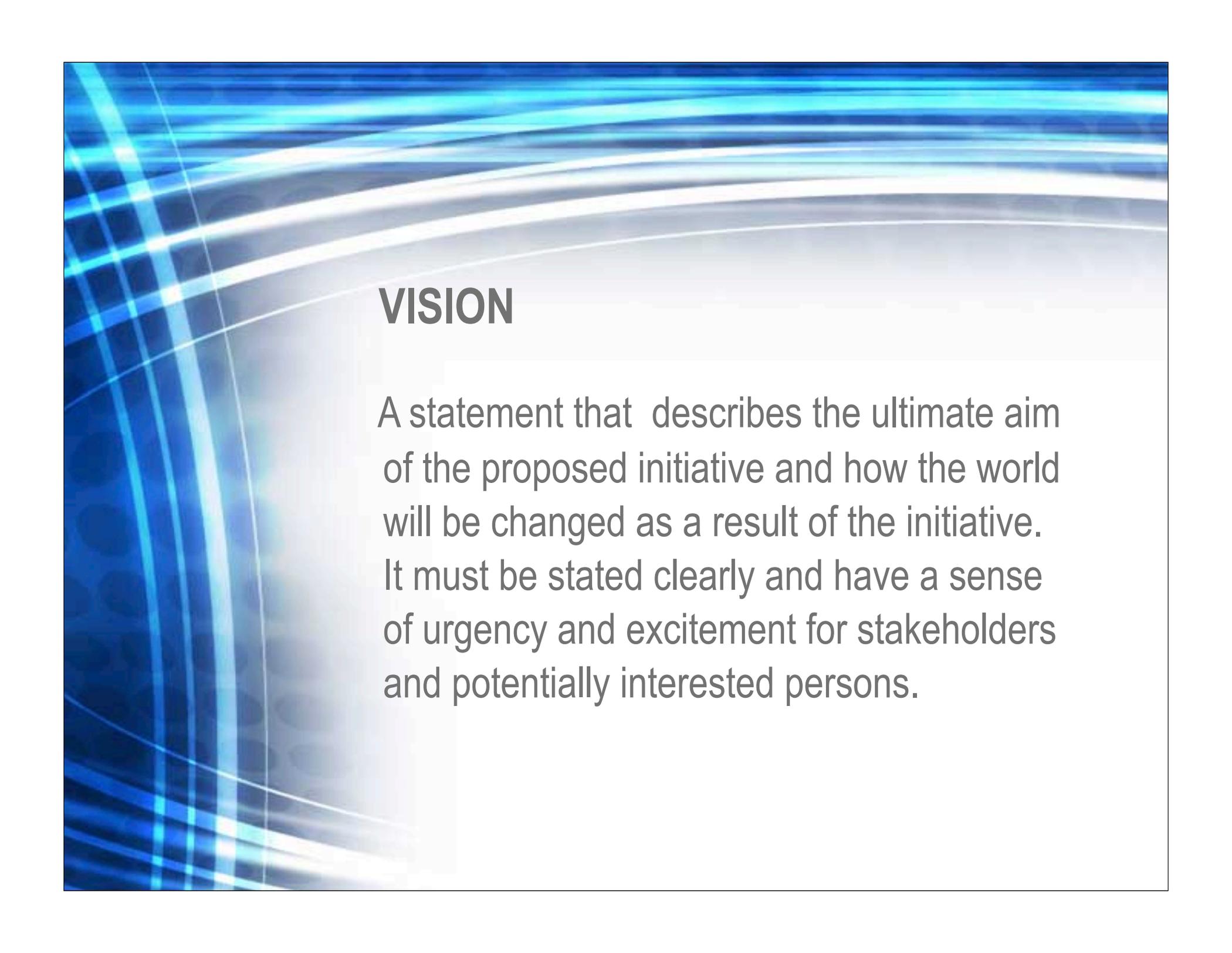
It is a highly useful management tool to:

- Guide simple or complex initiatives over long periods of time
- Minimize risks in execution of plan
- Optimize successful outcomes



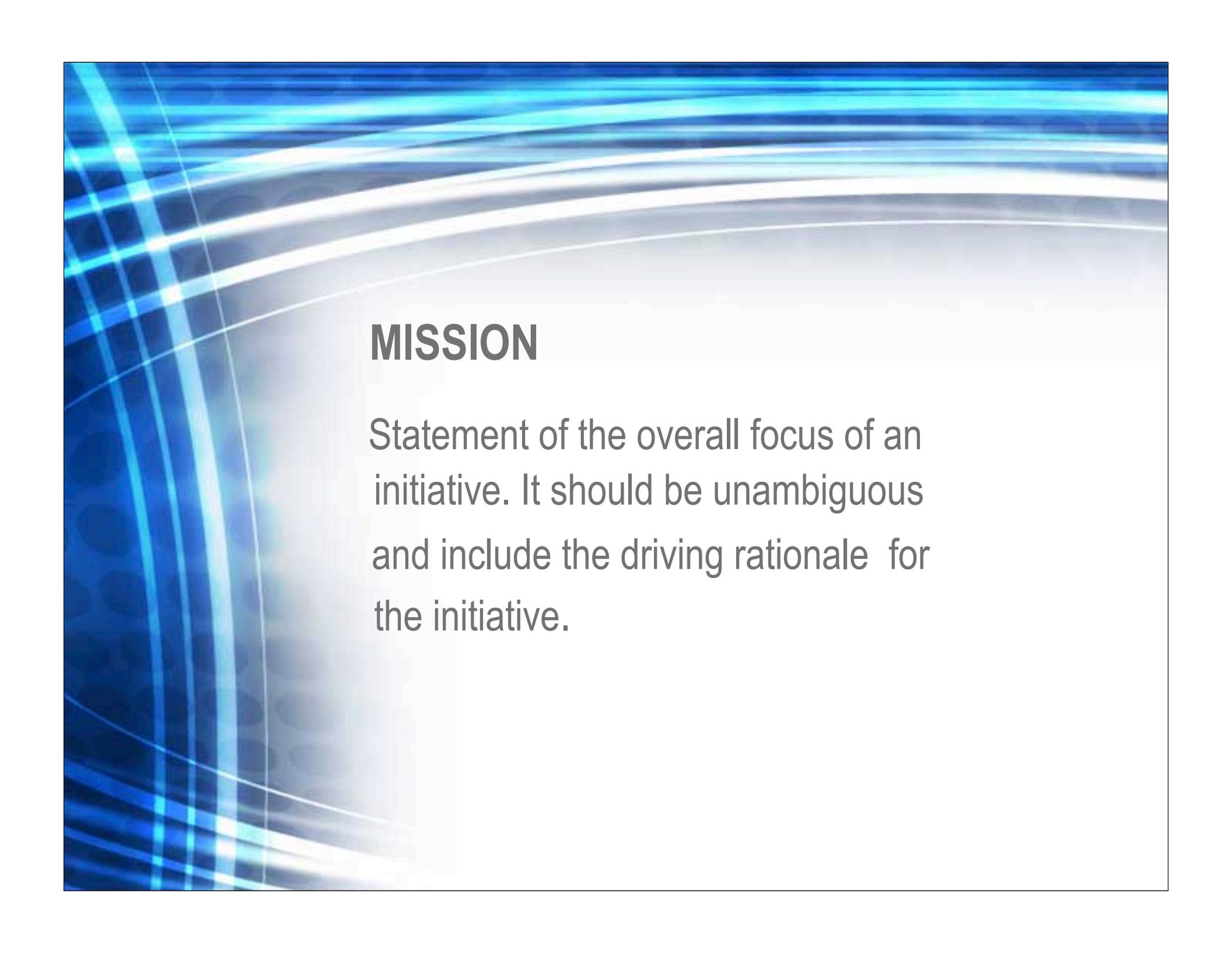
HOW TO DEVELOP A STRATEGIC PLAN?

- First, form a group of concerned persons, including the organization's (or project's) leader and other stakeholders who will steer the development of the plan to completion.
- Stakeholders must then carefully consider,



VISION

A statement that describes the ultimate aim of the proposed initiative and how the world will be changed as a result of the initiative. It must be stated clearly and have a sense of urgency and excitement for stakeholders and potentially interested persons.



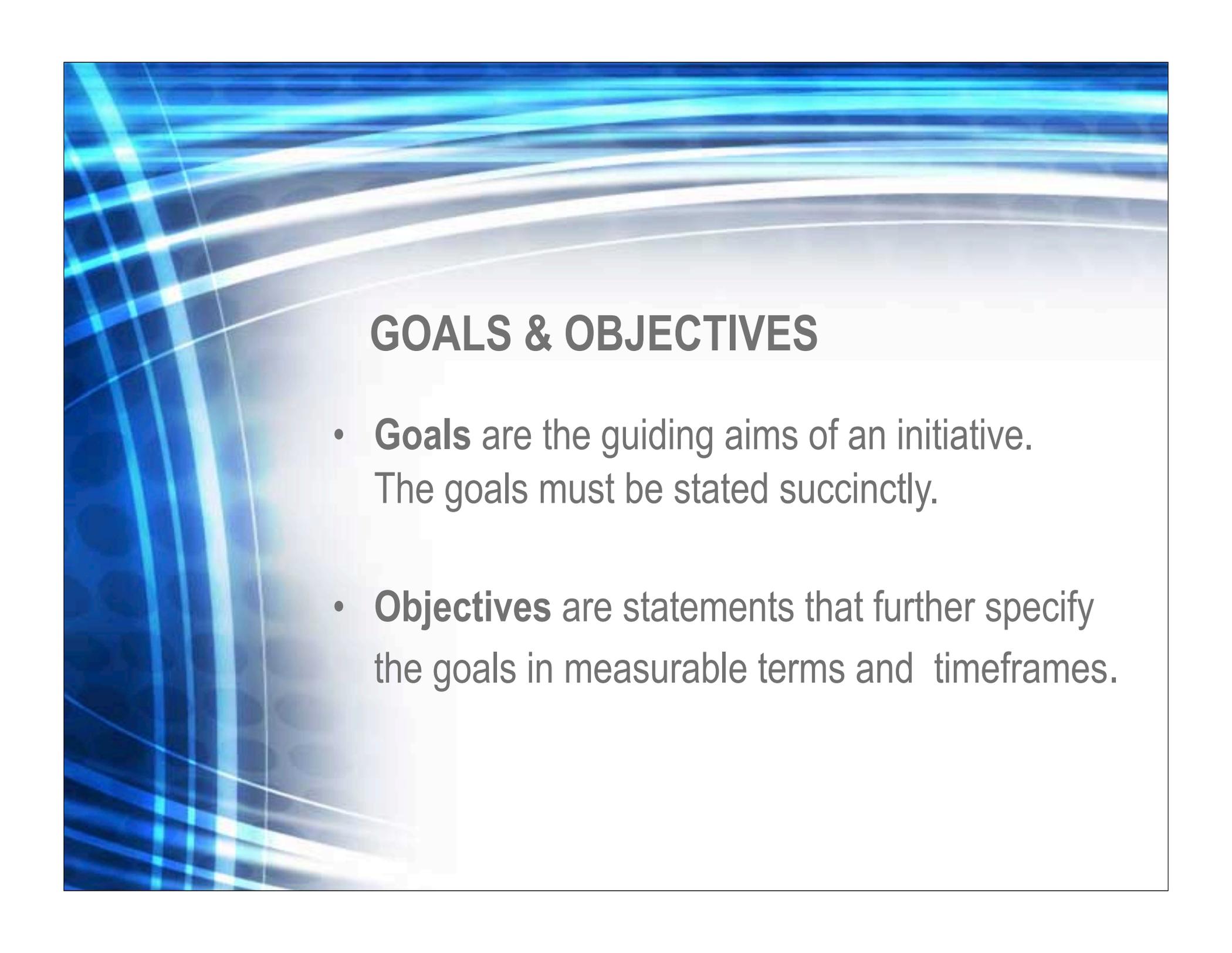
MISSION

Statement of the overall focus of an initiative. It should be unambiguous and include the driving rationale for the initiative.



SITUATIONAL ANALYSIS

Describes the strengths, weaknesses, opportunities and threats (SWOT) that are involved in or may impact an initiative. This analysis is essential for the strategies and adaptability of the plan, and is critical to the overall success of the strategic plan.



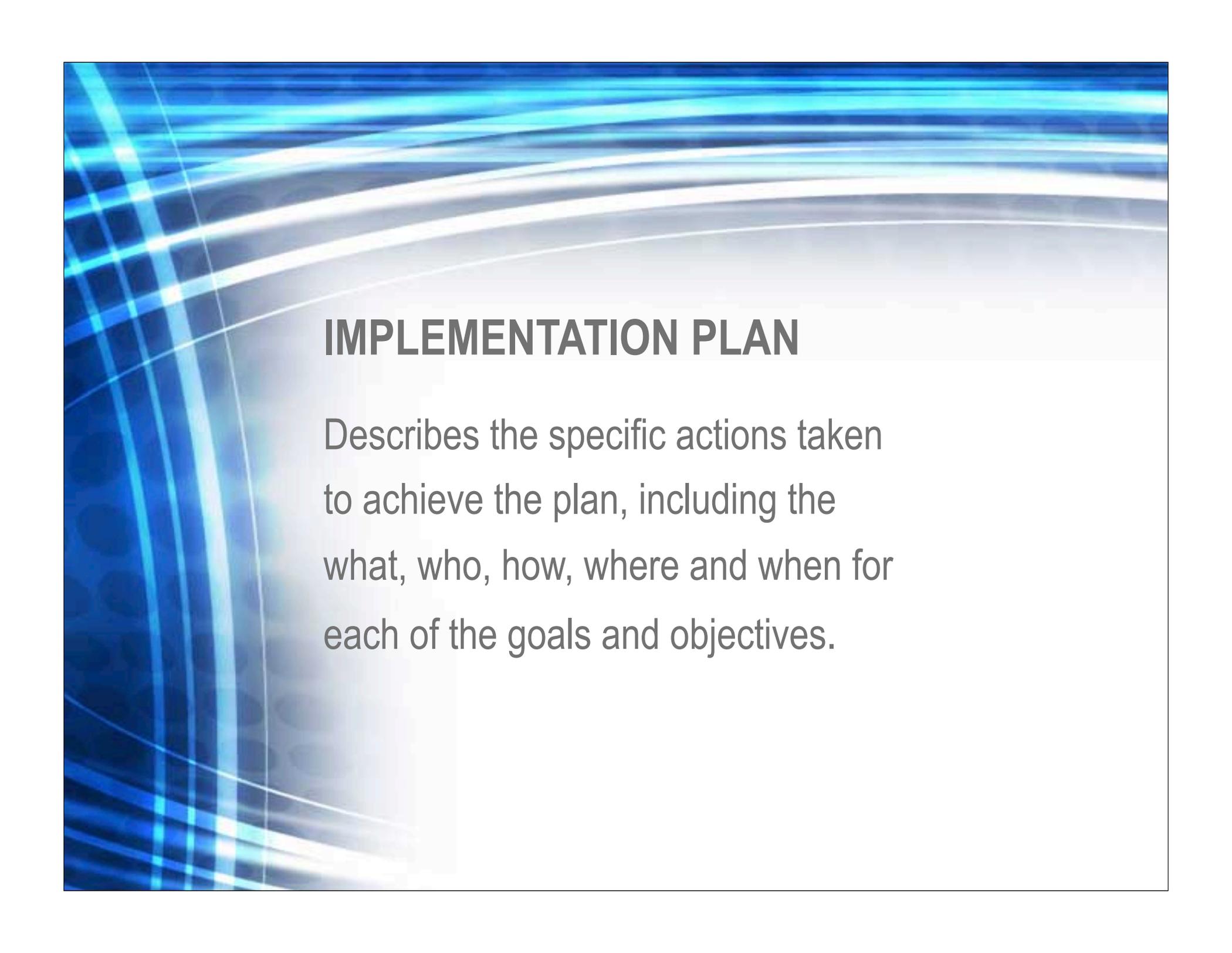
GOALS & OBJECTIVES

- **Goals** are the guiding aims of an initiative. The goals must be stated succinctly.
- **Objectives** are statements that further specify the goals in measurable terms and timeframes.



STRATEGIES

The approaches used to achieve the goals and objectives. Strategy statements must be feasible, and include contingency strategies. Also, the approaches used to achieve the goals should include how the opportunities found in the situational analysis will be utilized and challenges addressed.



IMPLEMENTATION PLAN

Describes the specific actions taken to achieve the plan, including the what, who, how, where and when for each of the goals and objectives.

SAMPLE IMPLEMENTATION CHART

| Goal | Obj.# | Action | Who | Loc. | Time-frame | Status |
|------|-------|----------|------|------|--------------|--------|
| 1 | 1.1 | Do study | P.I. | Lab | Jan-May 2006 | |
| | | | | | | |



METRICS

Metrics are the quantitative and qualitative measures used to assess the effectiveness and efficiency of the plan's implementation and the goal-related outcomes. Also included in the assessment is documentation of lessons learned from executing the plan and adjustments made in



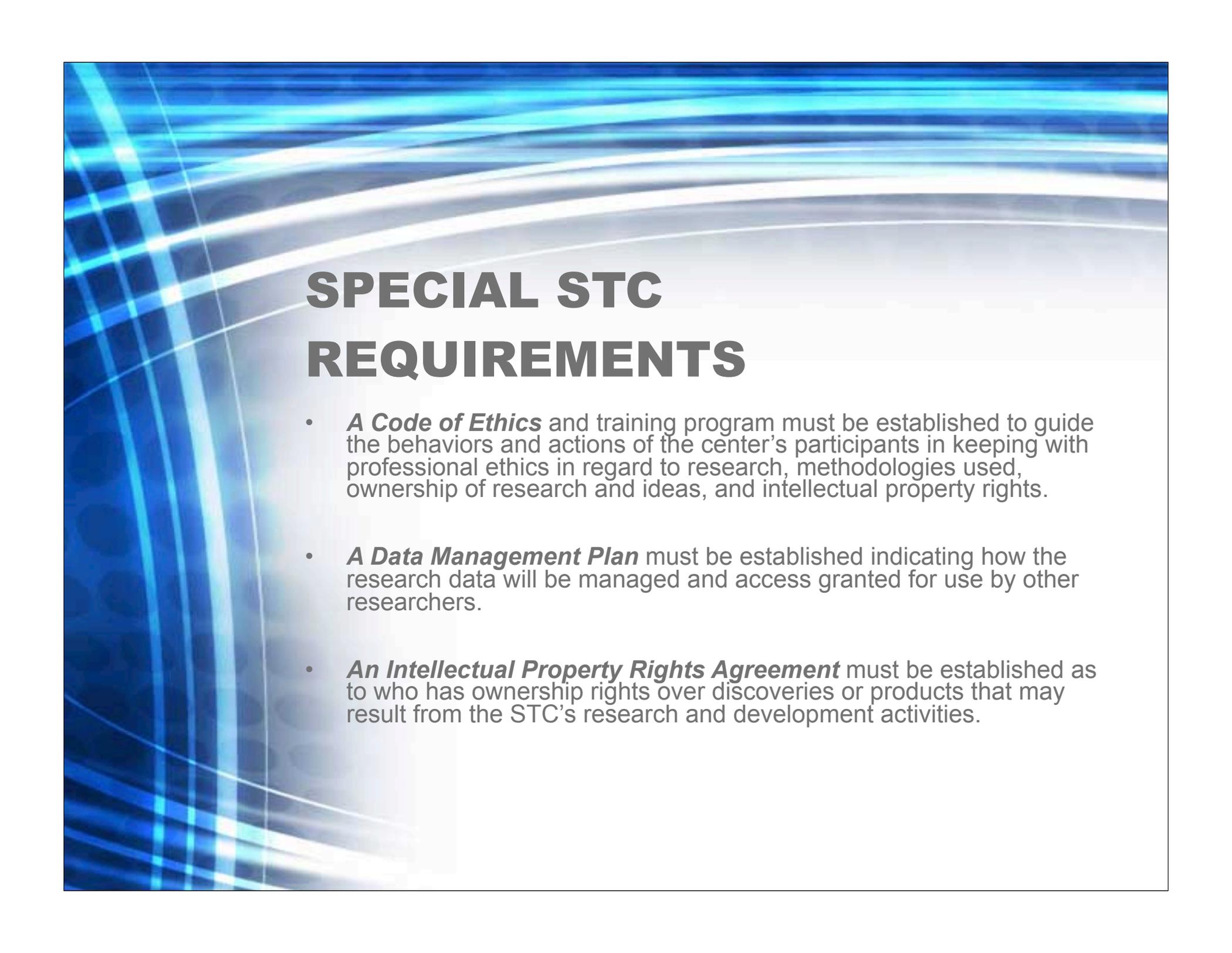
FINANCIAL RESOURCES

- Description of linkages between the financial (and in-kind resources) and the goal-related activities. The specific linkages provide a basis for monitoring and accounting for the allocation and expenditure of the plan's resources.



MANAGING THE STRATEGIC PLAN

- A description should be included in the plan of how and who will oversee and manage the plan's implementation. This should include a description of administrative controls, and a succession plan for possible termination of key personnel during the NSF funding period.



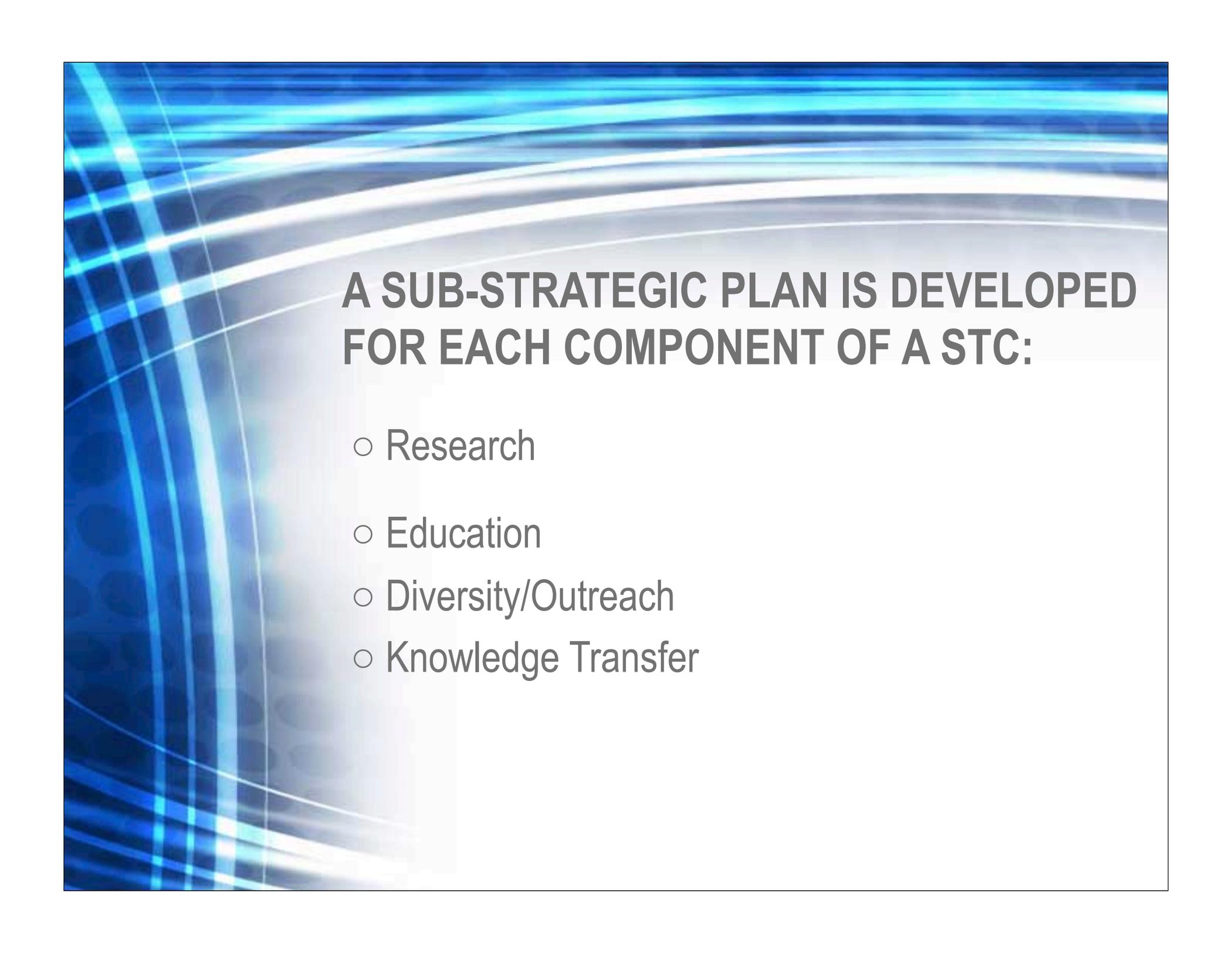
SPECIAL STC REQUIREMENTS

- ***A Code of Ethics*** and training program must be established to guide the behaviors and actions of the center's participants in keeping with professional ethics in regard to research, methodologies used, ownership of research and ideas, and intellectual property rights.
- ***A Data Management Plan*** must be established indicating how the research data will be managed and access granted for use by other researchers.
- ***An Intellectual Property Rights Agreement*** must be established as to who has ownership rights over discoveries or products that may result from the STC's research and development activities.

STRATEGIC PLANNING RECAP

The 9 basic elements of a strategic and implementation plan are:

- Vision
- Mission
- Analysis
- Goals/Objectives
- Strategies
- Implementation Plan
- Metrics
- Resources
- Management



A SUB-STRATEGIC PLAN IS DEVELOPED FOR EACH COMPONENT OF A STC:

- Research
- Education
- Diversity/Outreach
- Knowledge Transfer

END