

# The CIO's GUIDE

## To Strategic Planning in Higher Education

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In the last ten years, technology has dramatically transformed the landscape of higher education at every level. In the classroom, it is creatively enhancing traditional teaching methodologies with new and exciting alternatives to reinforce course content. It has also become a valuable tool in addressing multiple learning styles and is an aid to overcoming the instructional challenges faced by students lacking adequate pre-college skills. In administration, information systems such as Banner, Jenzabar, and Datatel provide accurate, real-time information needed to support senior management decisions. Technology has also become a strategic asset in the highly competitive process of identifying, recruiting, and subsequently enrolling and retaining students. Finally, the need for lifelong learning regardless of time, place or circumstance has resulted in a quantum demand for technology supporting online education. Clearly, technology has become a ubiquitous asset within higher education and thus, a key player in its success.

The leadership of our nation's colleges and universities today must clearly understand and embrace the vital role technology plays in their unique mission. This is particularly challenging today as all institutions struggle with the impact of rapidly changing technology and a growing appetite for faster and more transparent access to technology. Effective planning is essential in order to address these challenges while at the same time taking advantage of the numerous opportunities presented by technology.

The role of information technology in any academic environment is simply to support the short and long term strategic goals and priorities of the institution. As your college or university's CIO, you have the primary responsibility for creating, communicating, and implementing a vision that identifies how technology can be used to support these priorities. *CIO Magazine's 2008 State of the CIO* report found that nearly 60% of CIOs surveyed say *long-term strategic thinking and planning* is the executive leadership skill *most critical* in their current role, followed by collaboration and influence (47%), and expertise running IT (39%). This new reality has forced technology departments to operate more as a strategic *business partner* as opposed to a traditional functional unit. Accordingly, college and university Presidents now look to their CIOs

to: (1) ensure that their annual investments in technology are being *effectively leveraged to achieve the strategic goals of the institution*, (2) evaluate and recommend new or existing technologies that *reduce costs* and offer academic and or administrative *value*, and (3), ensure that the institution does not overextend its dependence on *end-of-life technologies*.

## THE IMPORTANCE OF TECHNOLOGY STRATEGIC PLANNING

In basic terms, strategic planning can be defined as the process of defining business *strategy*, or *direction*, and *making decisions* on *allocating resources* (capital and people) to pursue this strategy. In the case of information technology this definition is more aptly described as the process of *defining your IT strategy* and *making decisions* on *IT investments that support the business strategy*. The “business strategy” in this case is the college or university’s strategic plan. An IT strategic plan therefore becomes a critical factor in successfully achieving the institution’s mission and vision. Given this importance, the implications of *not* having an IT strategy are many, but typically result in the following situations: (1) IT investments are made that do not support organizational goals, (2) systems are not integrated, typically resulting in a duplication of effort, (3) there are no means for setting priorities for projects or resources, (4) projects are evaluated on a financial basis only, and finally (5) there is the constant disconnect between IT and the user community.



In addition to its contribution to your institution’s strategic mission, there is also tremendous value to be gained by the “process” itself. In his classic article “*Strategic Planning – What’s So Strategic About it?*” Bart Strong believes the true *value* of IT strategic planning lies in the alliances and relationships developed during the process.

We would tend to agree. The development of a technology strategic plan brings together the entire college or university community to share needs, ideas, and expectations for technology both now and into the future. It provides an opportunity for CIO’s to understand their users, and for users to understand the unique challenges faced by CIO’s in funding, implementing, and maintaining technology. The relationships developed during this process are both critical and beneficial to maintain long after the process has ended.

## WHERE DO WE START?

The end result of any strategic plan is typically a set of high-level objectives that contain specific goals with detailed action plans and timelines for their accomplishment. The plan must of course take into account a variety of complex assumptions, constraints, and unknown factors in order to ensure a sense of reality and meaningfulness. At a minimum, the plan must consider things such as current infrastructure needs, current staffing levels and expertise, funding expectations, what students/faculty/staff want, need, and expect of technology, potential positive *and* negative external trends, and risks associated with unproven strategies, solutions, or platforms. This items will dictate realistically *what* can be achieved, *how* it will be achieved, and by *when*.

Begin by defining the *scope* of the plan. This establishes the *process* by which the plan will be *developed*, *implemented*, and *measured*. This is a critical first step. The scope identifies who will be involved in the development of the plan (and their specific roles), what has to be done to develop the plan (tasks and deliverables), and when (timelines for completion of the plan). The scope also helps to define a framework for *decision-making* and *conflict resolution* among committee members responsible for developing the plan, and helps to establish *approval levels*, *review* and *update cycles*, and *measurement criteria*.

## GOVERNANCE STRUCTURE FOR THE PLAN

Executive oversight responsible for the development and implementation of the plan should exist on several levels. This is necessary in order to provide a controlled and consistent structure for making decisions regarding priorities, funding, and overall strategic direction. The typical governance structure for the development of an IT strategic plan includes the college or university **President**, the institution's standing **IT Steering Committee**, and finally, the **Strategic Planning Committee** itself.

As the chief sponsor of the strategic planning effort, the President serves as the key decision maker and is accountable to the institution's Board of Directors for making sure that all technology decisions in the final plan are in line with, and support, the overall strategic goals of the institution. Accordingly, the IT Steering Committee (also known as the Technology Advisory Committee) provides recommendations to the President regarding IT priorities and decisions. This committee is also responsible for *approving* the IT strategic plan, *monitoring* and *implementing* the plan, providing *periodic* progress and status reports, and *preparation* and *oversight* of the annual IT budget as defined by the plan.

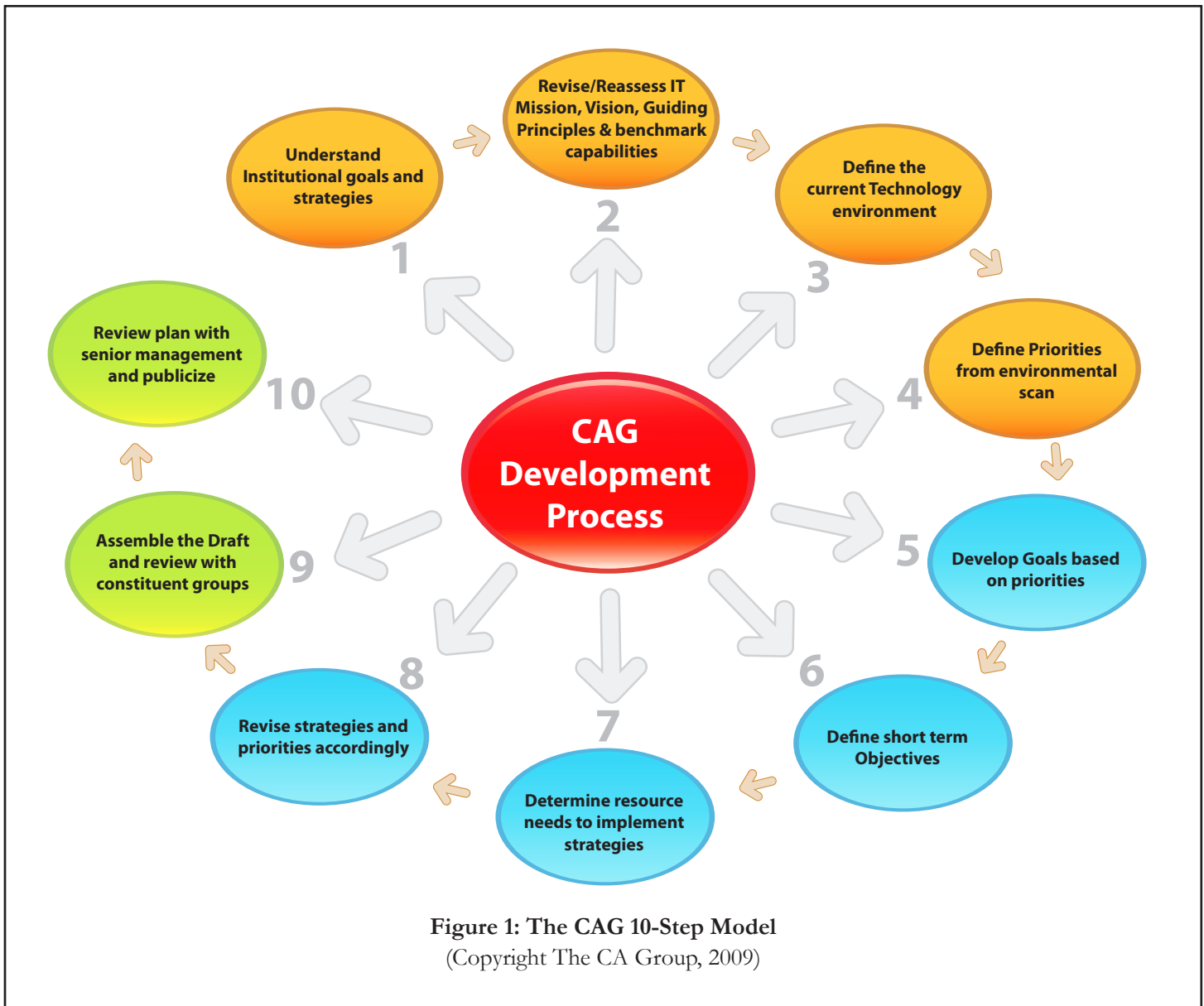
Finally, the **IT Strategic Planning Committee** has the sole responsibility for the actual development of the plan. This “short term” group is comprised of the IT Steering Committee (core) supplemented by other representatives from selected campus groups who serve in “ad hoc” capacities throughout the development of the plan. This committee should be representative of *all* aspects of the institution (academic affairs, enrollment services, student affairs, business and finance, advancement, etc.). It should also include a Student Government representative, a Faculty Council selection, a member of the institution's strategic planning committee, and a member of the Instructional Technology Committee. If desired, alumni participation can be included as well. The IT Strategic Planning Committee may also convene ad hoc subcommittees to gather information and make recommendations on specific issues. Membership on subcommittees may be drawn from members of the campus community who *are not* members of the core committee. At the conclusion of the strategic planning process, the IT Strategic Planning Committee is *dissolved*, and responsibility for maintaining and monitoring the plan becomes the sole responsibility of the IT Steering Committee.



As a permanent member of the IT Steering Committee, your role as CIO is to *educate* the committee in order to provide an understanding of the demands, complexities, and issues associated with the daily provision of technology services and support. This “education” is essential to nurturing the committee's understanding of many of the strategic priorities and funding necessities that may ultimately become part of the strategic plan. Use the committee as a vehicle to explain topics such as infrastructure (what is it? what does it do? what happens if it's down?), network security, service level demands, campus bandwidth characteristics, etc. A more informed committee can make more informed decisions regarding strategic priorities and funding.

## THE CAG MODEL

The CAG 10 step model for IT strategic planning (Figure 1) is based upon the premise that in order to be effective, the IT strategic planning effort must be an *inclusive* process involving *all constituents of the campus community*. This model has been tested and developed over the last eight years and incorporates both “best practices” and “lessons learned” along the way. The specific steps include:



**Step 1: Understand institutional goals and strategies**

Leadership begins with a vision of what can and should be, and includes a strategy for achieving that vision. This vision should always be connected to your institution’s strategic plan. What does the College or University want to achieve in the next 3 – 5 years? You can’t hope to have an effective IT strategy that aligns with the strategic direction of your college if you don’t first make an effort to understand the college’s strategy itself.

**Step 2: Revise/Reassess IT Mission, Vision, Guiding Principles & benchmark your capabilities**

A plan is only as good as your ability to accomplish it. Taking an honest, internal audit of your current IT philosophy, capabilities, and infrastructure is critical to understanding what you are capable of accomplishing in relationship to the plan. It begins with an assessment (or reassessment) of your IT Mission statement, Vision, and Guiding Principles. These items are critical to the development and implementation of the plan. Your *Vision statement* should identify “where” you want to go. It’s typically more blue-sky and less measurable. Your IT *Mission statement* on the other hand should describe “how” you plan to achieve your vision. It’s more specific and measurable. And finally, your *Guiding Principles* should define the *values* that govern your decisions and actions regarding the acquisition and use of technology.

The second phase of this step involves benchmarking your current organization, capabilities, and infrastructure. As stated earlier, these factors will dictate realistically *what* you can accomplish, *how much* you can accomplish, and the potential *timeframes* for completion of key initiatives. The most effective way to accomplish this is through the use of an IT SWOT analysis. This analysis is used to define the “as is” state of your current IT organization and infrastructure. Use this exercise to determine the *skills, staffing, and organization* needed to accomplish the plan and to identify *obsolete* systems and technology, potential infrastructure “breakpoints” or “chinks in the armor”, upgrade and replacement priorities, and redundancy needs. These items must be addressed in the plan.

### **Step 3: Define the current technology environment**

User *needs, expectations, and priorities* can be derived from an environmental scan using online surveys and focus group discussions with administrators, faculty, staff, and students. This activity is intended to reflect the current forces that are *driving* the development and subsequent implementation of the Technology Strategic Plan. It’s an essential step in the overall process that helps to foster a sense of inclusiveness. Online surveys offer confidentiality and are easy to administer to large groups. Creating separate surveys for faculty, students, and staff allows you to tailor the questions to the characteristics of each group. The critical part of this effort is determining “what” questions to ask. Work with your Institutional Research office to design surveys and to ensure that the correct data is collected properly. If possible, use incentives to encourage participation. Once the data is collected, use the results to engage *focus groups* for more *clarification and understanding* of the data.

### **Step 4: Define your IT priorities from the environmental scan**

SWOT results, data from online surveys and focus groups, and a clear understanding of your institution’s goals should provide a general sense of the *overriding priorities* that will frame the goals and strategies of your IT strategic plan.

### **Step 5: Develop Goals based upon Priorities**

Your strategic planning goals will typically fall into one or more of the following themes: (1) Infrastructure, (2) Customer Service, (3) Technology needs in Administration, (4) Access to Information Technology, (5) Teaching, Learning, and Research, and finally (6) Organization and Resources. As a guide, use these categories to organize your priorities/goals.

### **Step 6: Define short term objectives**

Your priorities ultimately become your plan’s goals, which are subsequently broken down into a set of objectives, and finally yearly action (or tactical) plans that establishes accountability for each task (who? what? when?).

### **Step 7: Determine the resources needed to implement strategies**

Once goals, objectives, and yearly action plans have been defined, it becomes necessary to determine what resources (staff, money, etc.) will be needed annually to implement the action plan.

### **Step 8: Revise strategies and priorities accordingly**

Typically, the resources needed to implement your IT plan will exceed current capabilities (skills, resources, money). The IT Strategic Planning Committee is therefore faced with the responsibility for *prioritizing* objectives and action items based upon “resource realities” i.e., a realistic assessment of the skills and financial resources needed to accomplish the action plans. Certain groups within the committee may “push back” in order to argue the priority needs of their constituents, which at this point may require some decisions to be elevated to the executive level.

## Step 9: Assemble the draft and review with constituent groups

IT Strategic Planning Committee members are responsible for coordinating the review of the working draft with *their* specific constituents (faculty, staff, students). In order to avoid getting trapped in a perpetual loop of changes and revisions set “*cut off*” dates for input. Request all feedback, comments, etc. *in writing*. Review feedback with the committee and *agree* on any changes, additions or deletions to the draft. Issue a “*change notice*” to constituent groups that identifies *agreed upon* changes, additions, or deletions, and develop the final draft. Be sure to date all iterations of the draft and final plan.

## Step 10: Review the plan with management & publicize

The final completed plan is typically presented to the President and senior staff. At this point, there should be no surprises. Make efforts to keep the President and senior staff informed of all decisions and issues throughout the entire process. Be specific about the *assumptions* made in the plan, and *resources needed* to accomplish the plan. Finally, market the approved plan. Create a webpage linked from the institution’s main website, or create a SharePoint site to host the completed plan (internal access only). It’s important that faculty, students, and staff see the final plan, and know that their input, suggestions, and concerns have been addressed.

## Implementing and Managing the Plan

In the immortal words of Sir Winston Churchill, “*Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning.*”

The completion of the IT strategic planning process signals the start of the next phase: implementing the plan, i.e., turning the plan into results. Unfortunately many strategic plans suffer from the “file and forget” syndrome. Maintaining your focus and moving forward with the implementation of the plan requires a commitment to *monitor* and *manage* the plan. In addition to managing accountability and deliverables, it’s important to take into account *changes in agreed-upon strategies* and to *assess the performance* of those strategies. The IT strategic plan is a “living” document, and as such, its strategies can change over time as a result of (1) changes in staffing and resources, (2) the political environment (priorities), (3) the *need, problem, or situation* may change, or (4) *external factors* beyond our control. To address these possibilities, establish cycles for reviewing and updating the plan, specifically, *periodic reviews* of progress against goals and an *annual assessment and update* of the plan. These activities are different.



The **Periodic Review** is an *internal document* used by the IT Steering Committee to track the progress of action plans and deliverables. All tasks scheduled for completion during the review period are denoted as either *Completed, Not completed, On hold, or Other*. A *Comments* section is provided for details regarding any of the aforementioned status descriptions. Finally, a *Performance Assessment* section is included to evaluate the success of the task or project (did it achieve the intended result?).

The **Annual Assessment** on the other hand, is for executive staff and the college or university community. It’s an annual report issued by the IT Steering Committee that details in broad strokes (1) progress made towards the initiatives and goals of the IT Strategic Plan during the academic year, (2) contributions made to the overall Campus Strategic Plan, and finally, (3) any recommended changes to the plan as a result of new challenges or opportunities.

## SUMMARY

The development of a technology strategic plan brings together the entire college or university community to share needs, ideas, and expectations for technology both now and into the future. It provides an opportunity for CIO’s to understand

their users, and for users to understand the unique challenges faced by CIO's in funding, implementing, and maintaining technology. In developing this plan it's helpful to remember the following:

- *Plan* the “process”
- Strive for *inclusion*. Seek *constituent input*
- *Assess* your internal IT *strengths, weaknesses, opportunities & threats*
- Group priorities into *common goals*
- Revise strategies and priorities according to “realistic” resource capabilities
- *Market* the completed plan
- Periodically *review* and *revise* the plan as needed

## **IT STRATEGIC PLANNING SERVICES**

Our staff of experienced facilitators is available to manage the complete IT Strategic Planning process for your College or University. Services include assistance in:

- Organizing and facilitating your IT Steering and Strategic Planning Committees,
- Conducting the SWOT analysis for your IT organization and your IT infrastructure,
- Reviewing (or assistance in developing) IT Mission and Vision Statements, and Guiding Principles,
- Developing and administering online surveys for faculty, staff and students; evaluating the data and conducting focus group sessions,
- Guiding the development of goals, objectives, and action plans in line with strategic priorities
- Developing both the initial draft and final strategic plan. Production of the final plan (physical and electronic copies).
- One year follow up and assessment of progress
- For inquiries, please contact Ms. Deborah Long at [dlong@thecagroup.org](mailto:dlong@thecagroup.org)

## **ABOUT THE CA GROUP**

Located in Boston, The Cambridge Academic Group's mission is to provide leadership, guidance, and technical expertise to help Colleges and Universities achieve their strategic goals. With a staff of experienced consultants who have served in senior administrative roles at major universities, our specific expertise includes Information Technology Strategic Planning, Enrollment Management, Administrative Process Reengineering, and Marketing as it relates to higher education. For more information, contact CAG at (617) 878-2115, or visit us on the web at: [www.thecagroup.org](http://www.thecagroup.org)

## **ABOUT THE AUTHOR**

Walter T. Geer, Jr. is Senior Consultant in charge of Information Technology for The Cambridge Academic Group in Boston. He has over 30 years of experience helping clients solve complex business problems. He specializes in information technology strategic planning, business process reengineering, and technical leadership training. Mr. Geer gained this experience with such organizations as Philip Morris USA, Duracell, General Electric, and more recently in higher education with Harvard University, The State University of New York, and the Community College System of Massachusetts, where he has served in a variety of roles from Director of Information Technology to Vice President and Chief Information Officer. In addition to numerous articles on IT Strategic Planning, he is the author of the recently published book, “*What Lucy Taught Us: Improving your business one process at a time.*”

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