UNIVERSITY ENVIRONMENTAL SCAN
Draft Report

Introduction

On May 14, 2010, President McDavis announced the advent of a multi-year planning approach for Ohio University. In making his announcement, he referred to the strategic planning work of last academic year, which yielded six strategic priorities and a Vision Statement.

The priorities called on the University to improve the quality of undergraduate and graduate education; to promote student and faculty research and creative activity; to create short-term and long-term enrollment goals; to improve financial strength; to establish effective total compensation; and to complete the capital campaign.

The Vision Statement declares that "Ohio University will be the nation's best transformative learning community where students realize their promise, faculty advance knowledge, staff achieve excellence, and alumni become global leaders."

The priorities related to undergraduate/graduate education and research and creative activity are grounded in four fundamentals: inspired teaching and research, innovative academic programs, exemplary student support services, and integrative co-curricular activities. As we strive to strengthen the university-wide commitment to the student experience, all of us, regardless of our roles or responsibilities, can profoundly influence how successful we are as a university at achieving these fundamentals.

The goal of our engagement in multi-year planning is to ensure that our strategic and budget planning align tightly with the four fundamentals so that individually and collectively we can work to achieve our Vision Statement's call to become the nation's best transformative learning community.

Rationale for the University Environmental Scan

The goal of conducting university and planning unit scans is to identify the trends that we believe are most likely to influence our continued progress over the next six years on the fundamentals outlined above.

Once those trends are identified we then must determine which trends should be selected to inform our actions.   The University scan and planning unit scans must be aligned with the realities of this time of straitened resources, and resources cannot be invested in any activity without attention to how its effectiveness, efficiency, and productivity will be measured.
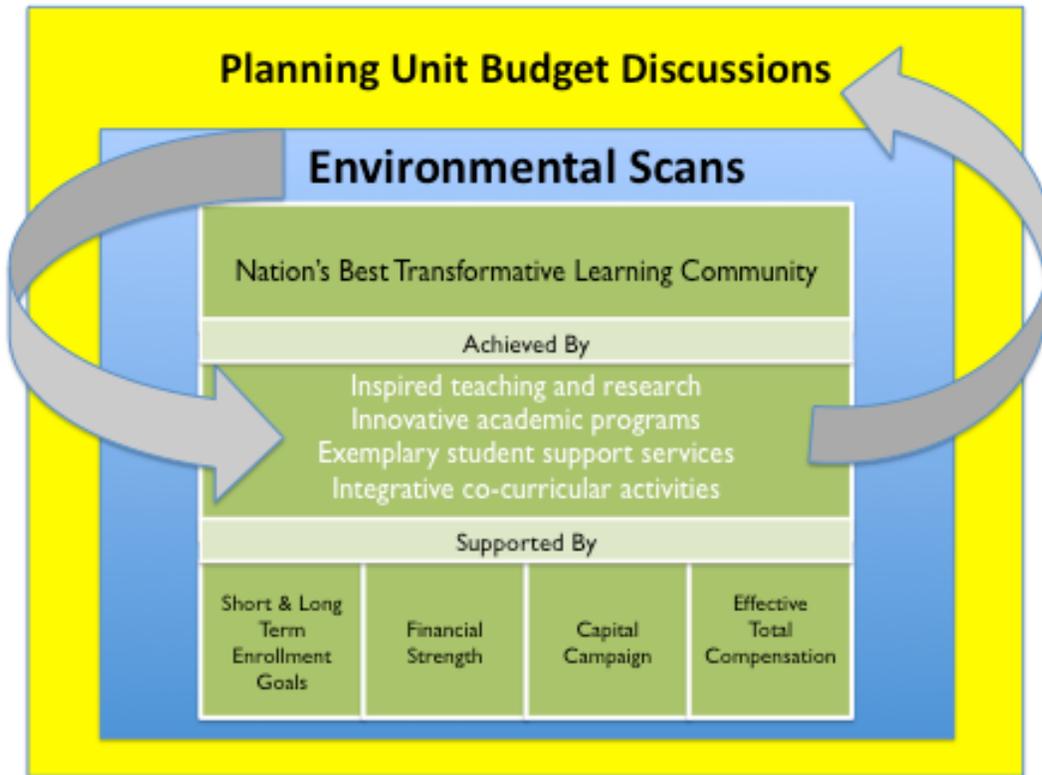
Universities have successfully used environmental scans to refine and focus their strategic and budget planning. The University of Calgary scan generated seven trends that it viewed as most important for the future of the institution. Those trends were used to establish goals to accomplish between 2009 and 2012. The University of New Mexico's environmental scan enabled it to select a set of strategic directions which were then woven into its academic, personnel, and budget planning.

The University Environmental Scan report, which will be updated on a regular basis and interwoven with planning unit scans, will play a pivotal role in determining strategic opportunities and planning unit budgets over the course of the next six years.

Background
Accompanying President McDavis' May 14 message to the University community was a memorandum from the Office of the Executive Vice President and Provost and the Office of the Interim Senior Vice President for Finance and Administration (available at http://ouenvironscan.wordpress.com/documents/) that outlined the elements of a multi-year planning approach and a related environmental scan initiative.

President McDavis appointed a nine-member University Environmental Scan Team[1] and charged them with developing a draft environmental scan report for Ohio University which would then be shared with the university community for review and input.

The University Environmental Scan Team met several times over the summer. They established a blog (http://ouenvironscan.wordpress.com) for the purposes of sharing their work with the university community and creating a repository for resources and information for planning units to use in their scans.[2] Updates on the team's work were posted on the blog throughout the summer. EVPP staff and members of the university community helped members of the team find useful reports and analyses to add to the collection on the blog.

At their first meeting the team selected eight major categories (culture/communication, demographics, economics, higher education, infrastructure, politics, regional issues, and technology) for the university scan, with each member of the team taking responsibility for an area. Team members then produced summaries of key trends in their areas. They further refined their lists by identifying the top three trends in their categories, and these trends formed the core of the draft report.

In researching, analyzing, and selecting trends, members of the team were aware of the many trends that existed in each area as they worked to select those that they viewed as being most critical to Ohio University. This draft document is a starting point for a university-wide conversation about the trends the team has proposed and whether other trends should be considered.

Process Connected to the University Environmental Scan Team Report
The environmental scan process can best be understood as a set of interlocking phases.

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[1] Members of the University Environmental Scan Team are Pam Benoit (Chair), Executive Vice President and Provost; Terry Conry, Associate Vice President, Finance and Administration; Ralph DiCaprio, Professor & Chair, Biological Sciences; Rich Greenlee, Dean, Eastern Campus; Christine Knisely, Athens community member and retired College of Osteopathic Medicine staff member; Randy Leite, Interim Dean, College of Health Sciences and Professions; Joe McLaughlin, Chair, Faculty Senate & Associate Professor, English; Kent Smith, Vice President, Student Affairs; and Scott Titsworth, Associate Professor & Chair, Communication Studies. *Ex Officio*: David Descutner, Executive Vice Provost and Ann Fidler, Executive Associate Provost.

[2] "Environmental Scan Team Begins Work and Blog," *Compass*, June 21, 2010, http://www.ohio.edu/compass/stories/09-10/6/enviromental-scan-team-685.cfm

Phase	Timeframe	Activities
One	September	• Draft University Environmental Scan Report Produced • Draft University Environmental Scan Report shared with constituent groups and planning units. • Input solicited & draft revised.
Two	October	• Planning Unit Environmental Scans are shared with the university community. • Revised University Environmental Scan shared with the university community. • Open forums held on the University Environmental Scan and its intersection with the Planning Unit Scans. • University Environmental Scan revised based on input.
Three	November-January	• Revised University Environmental Scan report presented to President and to Board of Trustees. • Elements of University Environmental Scan report begin to be used in the construction of a multi-year plan and in budget conversations with planning unit heads.
Four	January-February	• University Environmental Scan revisited as draft budget recommendations are published, open forums take place, and meetings with planning unit heads continue.

Key External Trends

The University Environmental Scan Team put forward twenty-four trends in its initial draft. After sifting through them it became clear that there were three major drivers behind most trends: demographics, economics, and technology. Every trend was tied to at least one or, frequently, more than one of these drivers. Whether the trend was changes in faculty and staff morale or utility production and procurement, the forces inherent in demographics, economics, and/or technology exerted a strong influence.

It also became clear during the course of the team's discussions that there were three essential institutional characteristics that could not be ignored when considering the trajectory of trends at Ohio University—geography, community, and quality.

Place, location, and landscape play an important role in defining the university and in the relationships that staff, faculty, and students form with the university. Our geographic location is a vital part of who we are but it can create limitations for our institution. In working with key trends, we must find ways to accentuate the strengths that our location brings and acknowledge how its limitations focus our options.

Community also shapes fundamental characteristics of our institution. We share important values across all of our campuses: putting students first; promoting both excellence and access; having the opportunity to be not only heard but listened to and trusted and respected; and creating workplaces where dedication, creativity, and diversity matter. Community plays a central role at Ohio University and it should be carefully considered as we respond to the opportunities and challenges uncovered by the environmental scan.

Ohio University delivers a quality education. It is the chief reason for our success as an institution. There are many trends that this scan has uncovered that will challenge our commitment to quality. To meet those challenges, we will need to work across units and put a premium on creativity and on a commitment to be innovative in an approach to academic offerings and their delivery that does not sacrifice quality.

Demographics➡ Students, Enrollment, Residential Campuses, On-Line, Diversification of Learning Platforms, Graying Workforce
To understand how we can construct an ever-stronger transformative learning community, we must pay particular attention to the characteristics of the age, gender, race, ethnicity, socio-economic status, previous educational preparation, and employment expectations of our prospective students as well as of our faculty and staff. Our analysis also must take into account international demographic shifts.

As we embark on a multi-year plan, we must be able to answer these demographically driven questions:
- Who will be the typical Ohio University student in the year 2016?
- Will there be a typical Ohio University student in the year 2016?
- What expectations will s/he have about the meaning and value of a degree?
- What will be the likelihood of s/he obtaining a job in an area of interest?
- What practical obstacles will s/he have to overcome in order to enroll in and complete a degree program?
- How well equipped will s/he be to complete a degree at the associate, baccalaureate, or graduate level?
- What will the composition of our faculty and staff in 2016?
- What expectations will they have about working at a public university?
- What expectations will the university have about their roles and contributions?
- How well equipped will they be to work with a variety of student populations across a variety of learning and degree platforms?
- What infrastructure needs must be anticipated and how can they be implemented in a timely manner?
- How will the shifts in demographics among students, faculty, and staff affect the cities of Athens, Chillicothe, Ironton, Lancaster, St. Clairsville, Zanesville, and their surrounding counties?
- Who will be our major competitors for students in the next decade and how will we compete effectively for those students?
- How do we create effective pipelines in order to recruit students from specific out-of-state regions?
- How will we attract and retain more international students at all levels using a variety of learning and degree platforms?

These questions are especially pressing for an institution anchored in a rural location that has derived much of its reputation for quality from a 200 year old residential campus approach to higher education drawing on students from urban, suburban, and rural areas across the state.

The University Environmental Scan Team concluded that the demographic currents are pushing at the long established foundations of our identity. It is clear that the student population that has defined Ohio University in the past, which is to say new high school graduates who want a four-year residential experience, will shrink considerably over the next decade. That trend is already evident as 1/3 of the current enrollment at Ohio University is on our regional campuses, which are nonresidential.

There is also evidence to suggest that the smaller slice of the student population that will persist in seeking a four-year residential experience may look for it closer to home because of cost concerns. It is also likely that many of these students will elect to take a number of their courses on-line to facilitate timely graduation or to accommodate work schedules. They may also bring a growing number of college credits with them earned in part by taking on-line university courses while in high school.

Located in a region that is largely rural and losing population, it is likely that the tendency to stay closer to home will present greater challenges for us than for sister institutions that rely on a similar demographic. To maintain the strength of the Athens campus residential experience, we will need to demonstrate that an Ohio University education is a safe and worthy investment capable of providing life-long dividends.

For the foreseeable future, the student population that will see the highest growth consists of adults who want to begin or finish degrees in circumstances that preclude residency and require flexibility and choice. Enrollment in public, two-year programs is expected to exceed capacity. At four-year institutions, a 25 percent increase in graduate enrollments is projected. Similar growth in baccalaureate degree enrollments is not predicted. Growth in two-year degree programs also is projected to increase particularly in areas of high job growth.

Technology provides possibilities for reaching these students but an Ohio University degree acquired on-line or through a blended program must be seamlessly integrated into our ambition to be the nation's best transformative learning community. On-line instruction or blended instruction cannot be just a replication of what is offered in the traditional classroom. We must find ways to incorporate our transformative learning community characteristics into every educational platform. An encouraging trend here is that recent federal investments in broadband technology in our region will aid us over time in developing innovative degree programs and delivery.

In addition to using technology to reach new markets there are significant possibilities in the delivery of on-site courses in locations beyond those presently available. The success of the Pickerington Center is one example of this approach.

Another important demographic trend is the continued growth in minority populations. In the past, members of these groups have been underrepresented in university student enrollment, but predictions suggest that by 2042 minorities will become the majority of the nation's population. Finding effective ways of recruiting and retaining minority students will become increasingly important in the years ahead. This will require

understanding and addressing barriers to enrollment that are often unique to these populations.

Even though enrollment is currently growing on our regional campuses, demographic changes anticipated in Appalachian Ohio indicate that the current decline in population and public school enrollment will continue. Outmigration of younger residents means fewer high school graduates and a population that is becoming increasingly made up of the elderly. The situation is most acute in the communities in the most southern and eastern part of the region covered by Ohio University.

On the faculty and staff side, we face an aging workforce on all of our campuses. Following national trends, there is an aging faculty workforce at Ohio University.[3] It is anticipated that there will be significant numbers of retirements over the next ten years. Who will replace them, the degree to which they will be replaced, and in what capacity are questions that must be addressed. Part of the groundwork that needs to be laid in the course of multi-year planning is how best to staff the university workforce of the future. What skills will faculty and staff need in the future? In what format will faculty primarily teach? What is the best way to deploy resources and personnel when the ultimate goal is the support of a transformational learning community?

Trends suggest that the next generation of faculty will be different as more individuals from underrepresented groups and more women become professors. Future faculty also will reflect patterns of generational shift that are evident in the larger populations. These predicted changes in faculty demographics will likely result in changes in faculty expectations and in faculty culture.

Economics➡ Slow National Recovery, State of Ohio Forecast, SSI, Regional Challenges, Research Funding, Physical Infrastructure, Accountability, Accreditation, Employee Morale

The past decade scarcely brought the best of times to higher education but there is no doubt that since the global recession of 2008 many universities are experiencing the worst of times. Ohio University has been buffeted by the recession and we are likely to face additional budget pressures in the next biennium and beyond.

As we embark on a multi-year plan, we must be able to answer these economically driven questions:

- In a period of declining state support how do we promote affordability while maintaining the value of an Ohio University degree?
- Are there benefits that would accrue from different tuition price points?
- With limited resources how do we address the need for financial reserves and growth in expendable net assets?

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[3] 32 percent of the full-time Group I Athens faculty and 37 percent of the full-time Group I regional faculty are 55 and older. 27 percent of full-time classified Athens staff and 35 percent of full-time classified regional staff are 55 and older. 32 percent of full-time Athens administrative staff and 37 percent of regional full-time administrative staff are 55 and older.

- How can we meet the fiscal challenges presented by increases in fixed costs such as health benefits, total compensation, and utilities as well as the growing backlog of deferred maintenance?
- How can we construct a support staff model that provides the best value—optimal service with tightly controlled costs?
- How can we continue to recruit and retain the individuals best suited to a transformative learning community?
- How can we meet our sustainability commitments and our other environmental responsibilities?
- How do we prepare ourselves to be successful in a global economy?
- How do we best assist the state in workforce development?
- How can we partner with local municipalities on critical infrastructure issues?

The economic trends are clear. The recovery from the global recession has been slow. The window for economic recovery is now predicted to be 2013-2016.

The state of Ohio, if past trends are any indication, may lag behind the national recovery. The state's "graying workforce" will bring increased demands on social security, state retirement systems, and health care. Coupling an $8 billion deficit in the next biennium with a declining tax base due to population loss in our state means that higher education may become a target for even deeper budget reductions.

To put this in perspective it is worth noting that between FY 2000 and FY 2010, State Share of Instruction declined from 44 percent to 31 percent of the Athens Campus General Program revenues. In constant dollars, these revenues declined from $100.6 M to $85.4 M.

Economic issues surely present a complex problem for our region and make attainment of a degree, which is often already a struggle, even harder. Historically, the Appalachian region of the state of Ohio has higher rates of poverty and unemployment than the rest of the state. Fourteen of the counties with the highest poverty rates are located in the Appalachian region. The 32 Appalachian Ohio counties have a poverty rate of 13 percent and the rest of the state has an average poverty rate of 10.1 percent. In July 2010, all seven counties with unemployment rates over 14% in the state of Ohio were located in the Appalachian region of Ohio. In addition, there are fewer jobs in the region and many of the jobs that do exist do not pay a living wage with adequate benefits to support a family. A large percentage of the children in our school districts live below the poverty line.[4]

Continuing declines in state and federal funding will have a growing impact on our research mission. A decrease in the growth of research output at public universities has been tied to slower growth in tuition and state appropriations compared to revenue growth in private universities. Resource disparities are making public universities less

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[4] Poverty rates in other parts of the state are also important particularly for the Athens campus since a significant number of its students come from urban/suburban population centers.

attractive to researchers than private universities. 23.44 percent of academic research and development is supported by institutional funds at public universities compared to 11.28 percent at private universities and given the resource challenges faced this is not sustainable.

At Ohio University, the research mission may face additional challenges because royalty income is expected to decline as patents expire. Indirect costs derived from sponsored programs, which amounted to $7.1 M in FY 2010, help to fund the institution's research mission. But with shrinking federal research dollars and without additional federal assistance such as the Stimulus/ARRA funds, the ability to fund our research agenda at its current level will grow increasing difficult.

Economic concerns also weigh heavily on our physical infrastructure. The condition of that infrastructure directly affects recruitment and retention of quality students, faculty, and staff as well as having an impact on their ability to work to their highest potential. For the past two decades, American higher education has recognized its "edifice" complex. Studies point to the ever-increasing backlog of deferred maintenance and relatively few institutions have plans to systematically fund the liability. In Ohio, if the state has difficulty issuing debt because of its budget circumstances, the capital bill may be affected thereby exacerbating the problem of attending to physical infrastructure needs.

Concerns about college costs have triggered a nationwide trend toward accountability and outcome measurement. In order to demonstrate academic effectiveness, institutions are being asked to report to state regents and to the public on costs, retention and graduation rates, expenditures on academic programs, etc.

The morale of faculty and staff is also being tested by the economic challenges that we face. Doing more with less cannot be sustained absent ways of making our employees feel valued. Nationally, work has been done on the state of faculty morale. A 2009 study found that although faculty are still strongly affiliated with their institution, the strength of that affiliation has eroded since 1992. Similar trends may also be present in the case of university classified and administrative staff.

A number of factors appear to be at work. Over the last decade or more shrinking budgets have contributed to uncertainty and forced quicker, more comprehensive actions that may challenge a culture based in slower, more deliberative approaches. Shrinking resources at many institutions have created concerns about shared governance between faculty and administrators. Rising college costs and greater anxieties about the link between a degree and a career have created a greater sense of entitlement among students and parents. That sense of entitlement often comes into conflict with faculty obligations to evaluate students on performance rather than effort.

Technology➡ Hype-Cycle, Open Source, Communication Overload, Techno-Centric/Info-Centric Divide
Technology has wrought a revolution in higher education over the past two decades. It has transformed or is in the process of transforming every core university activity from

teaching to provision of utilities. Important to note here is that the constant, rapid growth of technology often exceeds the ability of institutions to use it effectively.

Various areas of current and developing technology may contribute to Ohio University's efforts to become the nation's best transformative learning community. However, no technological "magic bullet" exists that will quickly and radically transform institutions of higher education with respect to their intertwined teaching and research missions and their operating environments.

As we embark on a multi-year plan, we must be able to answer these technologically driven questions:

- Considering the limited resources at our disposal, how do we understand and prioritize our overall technology needs?
- When it comes to classroom technology, educational technology, and research computing, what types of technology (hardware and software) will allow us to provide optimal functionality, flexibility, and ease of use?
- What technological expectations will characterize students in the future?
- Should the university prepare for greater use of electronic textbooks?
- How do we develop quality academic offerings using the capabilities of the Internet?
- To what extent is it possible for the University System of Ohio to implement or mandate some commonality in IT systems?
- How can our facilities operations make the best use of available technology when it comes to saving energy, labor, time, and money?
- How should our internal information technology infrastructure and systems be maintained in order to efficiently and effectively support the work of students, faculty, and staff?
- How can the "Open Source" movement help Ohio University reduce its software expenditures and provide easy-to-use, quality programs to meet the needs of our major support operations and the daily work of students, faculty, and staff?
- How do we cut through the communication clutter engendered by technology to make a persuasive case to the increasingly mobile and value conscious prospective student that Ohio University is a unique and compelling place?
- Given the many avenues for communication, how do we communicate effectively with faculty and staff about their value and ability to contribute to the strengthening of our transformative learning community?

One of the chief difficulties is parsing the myriad trends connected to technology is clearing away the clutter of the constant proclamations of the latest and greatest. The Gartner "Hype-Cycle" reports for Higher Education IT provide a useful model, and a cautionary tale, for institutions considering the adoption of, and large-scale investment in, developing technologies in any realm (Appendix).

The model consists of a timeline for information technology development and deployment that consists of five stages starting with a new technology and followed by

inflated expectations of the benefits of the technology, disillusionment when the initial promise is not fulfilled, and then renewed interest and finally a stable plateau of implementation as the technology matures and is widely adopted. The basic lesson here is that especially when resources are limited an enterprise should look to implement technologies at or near the final "plateau," rather than placing risky bets on unproven systems and methodologies.

The development of "open source" software initiatives is a trend that has captured the attention of many universities. The initiatives strive to offer "a development method for software that harnesses the power of distributed peer review and transparency of process. The promise of open source is better quality, higher reliability, more flexibility, lower cost, and an end to predatory vendor lock-in."

The scope and nature of new technologies have resulted in communication overload. Individuals working in a university setting regularly receive a barrage of emails and attachments, cell phone calls, text messages, tweets, Facebook and blog postings. The sheer quantity can become overwhelming and make it difficult to respond effectively.

From an external communication standpoint, the communication overload spawned by technology can cause important messages about a university to become lost in the clutter. One consequence is that, without careful planning, the key communications that we try to send out about our institution could be ignored or misinterpreted because of so many other messages competing for our attention.

Another important trend driven by technology and its applications is related to our curriculum and pedagogical approaches. Students now enter the university setting with a great deal of technical knowledge because from the earliest days of childhood they have been socialized to play with technology. That socialization, coupled with rapidly changing technology infrastructure(s), means that modern students are adept at finding and adopting new trends.

Although the sheer rate of technological change can overwhelm the ability of individuals and institutions to keep up, the more pressing issue is that students are not necessarily taught how to process, interpret, and use the information accompanying new technologies. For instance, despite constant contact with the Internet aided in large part by widespread adoption of mobile Internet devices (e.g., devices such as iPads and smart phones), students are not necessarily better at researching ideas and forming arguments. While students are techno-centric (i.e., very capable of learning new technologies) they often are not info-centric (i.e., capable of using information effectively).

We must recognize the potential and problems of this techno-/info-centric divide. Although our students will be able to adapt quickly to innovation, our teaching practices and curriculum must help them process the concepts, ideas, and ways of thinking that surround those objects. Our task must be to re-envision a vibrant curriculum (defined broadly) for the future rather than trying, in piecemeal fashion, to adapt a curriculum of the past that will meet the exigencies of the present and future.

As we re-envision such a curriculum, several other specific trends should also be taken into account along with the technology/information component. For example, a recent University of Michigan study found that students today are less empathetic than in previous eras. We also should recognize that students will be increasingly mobile as technology allows them to mix classes from multiple sources and institutions, and as we rethink curricula we should expect students to react well to various types of engagement efforts including service learning, applied learning, and experiential learning activities. As we invent ways to transform our curriculum to help students learn foundational knowledge and skills, we must also find ways to build community and thereby enhance students' abilities to connect and communicate in an increasingly techno-centric world.

While students stand on one rim of the techno/info-centric divide, faculty and staff are often on the other side. All but the newest generations of faculty and staff struggle to understand the potential of the technological tools at their disposal and often lack the incentives, training, and the time needed to know how to use them in meaningful ways.

Conclusion

Demographics, economics, and technology drive many of the trends that have the potential to influence Ohio University in the years ahead. Not all trends are created equal nor do they have equal applicability as we plan for the future of our institution. Winnowing out the trends that matter is the work that lies ahead. If we can do that work well and with sensitivity to important characteristics such as geography, community, quality, and available resources we will be able to succeed in constructing a multi-year plan that will allow us to meet our challenges and take full advantage of new opportunities.

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Appendix: Gartner "Hype-Cycle"
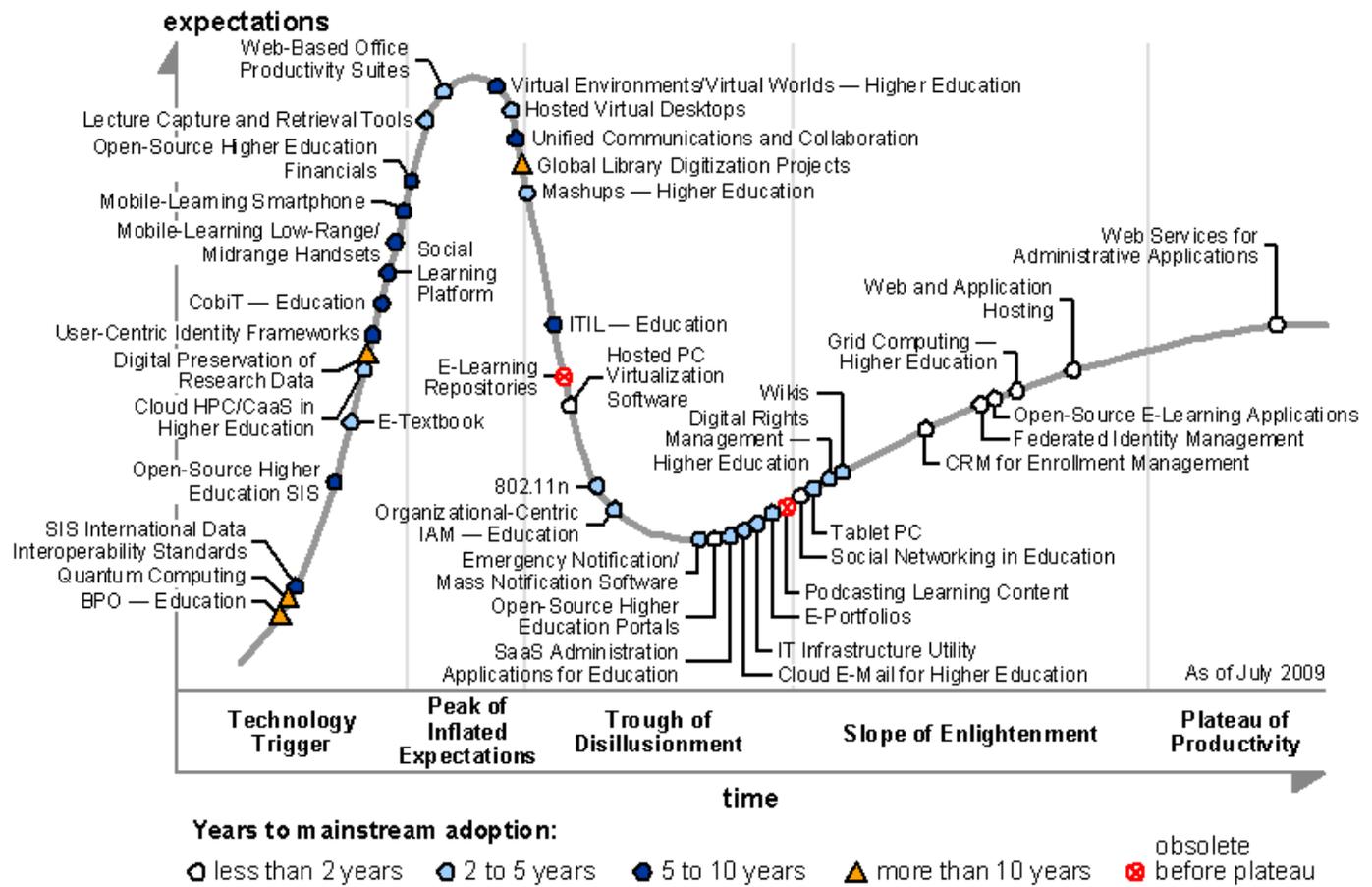
Source: Gartner (July 2009)

The Priority Matrix

Technologies that have the ability to transform higher education include "Cloud HPC/CaaS" in the midterm perspective; e-learning repositories, unified communications and collaboration, and virtual environments/virtual worlds in the longer term; while global library digitalization projects and quantum computing will take more than a decade to fully affect higher education. Most of these transforming technologies focus on the research, teaching and learning environment, where we expect the transforming power of IT to have the greatest impact.

Figure 2. Priority Matrix for Education, 2009