

Gap Analysis

A problem well stated is a problem half solved. -Charles F. Kettering

If you don't know where you're going, you'll wind up somewhere else. -Y. Berra

Definition

From *A Dictionary of Business*. Oxford University Press, 2002:

A way of examining the outcome of a particular strategy and establishing whether or not it will meet a desired objective. If a failure to achieve this objective is predicted, there is a performance gap between the anticipated and expected states. This gap is closed by means of a modified strategy, which will need to be formulated.

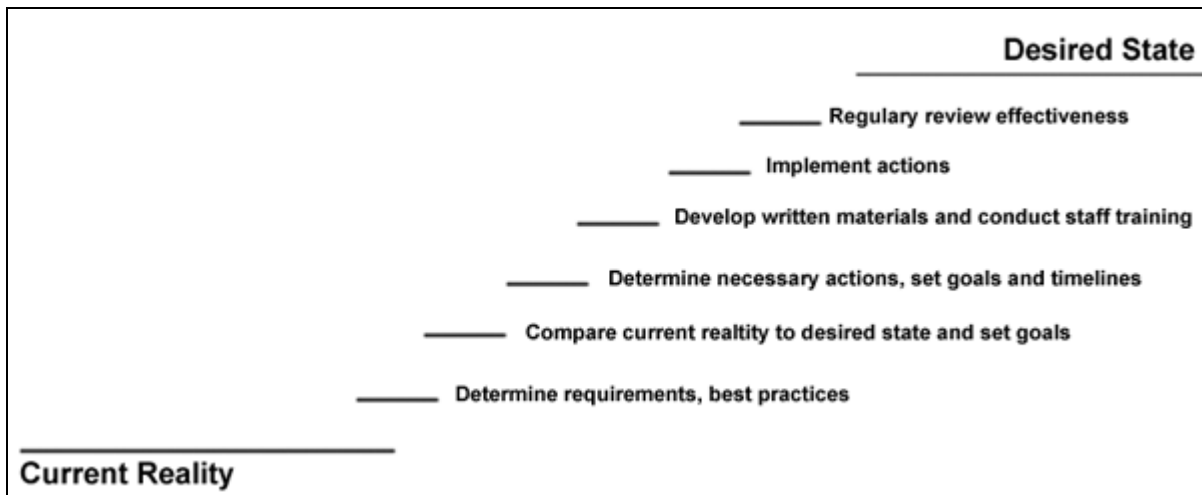
Example (modified from <http://praxiom.com/iso-gap.htm> for ISO 9001)

Phase 1: Identify gaps

- Define and answer all gap analysis questions
- Answer "YES" = requirement has been met, no action required
- Answer "NO" = gap has been identified, remedial action should be taken
- Answer "N/A" = requirement is not applicable, no action required
- For each "NO" answer select the processes that need further development

Phase 2: Fill gaps

- Prepare development plans
- Implement development plans and track implementation



Resources

Examples from cultural heritage domain

Oregon digital preservation gap analysis stages

- Define scope of analysis
- Review current environment
- Identify current constraints
- Identify desired capabilities

- Define steps to address gaps between current and desired
<http://www.osl.state.or.us/archives/strategic.html>

Risk Management of Digital Information: A File Format Investigation

by Greg Lawrence, William Kehoe, Oya Y. Rieger, William Walters, and Anne R. Kenney.
Washington, DC: Council on Library and Information Resources, 2000.

<http://www.clir.org/pubs/abstract/pub93abst.html>

OCLC Automated Collection Assessment and Analysis Services (ACAS)

<http://www.oclc.org/collectionanalysis/default.htm>

Examples From Other Domains

Information technology domain: System Selection including gap analysis

<http://www.jiscinfonet.ac.uk/InfoKits/system-selection>

Software domain: “for spam-filtering software to choose the right solution...”

http://techrepublic.com.com/5100-6313_11-5170067.html

Standards: Compliance, e.g., ISO 9000

<http://www.security-assessment.com/>

<http://www.the9000store.com/Step2-perform-gap-analysis.aspx>

<http://the9000store.com/Step2b-Conduct-ISO-9001-Gap-Analysis.aspx>

Five-step process to assist companies achieve regulatory compliance:

<http://www.enlar.com/services.html>

Step 1 -- Determine applicable regulatory requirements

Step 2 -- Identify goals, budget and time line for implementing

Step 3 -- Develop the written materials your program requires

Step 4 -- Train employees

Step 5 -- Implement needed changes and review effectiveness on periodic basis

Marketing domain: spotting new niches in a market

<http://www.marketing-magic.biz/archives/archive-marketing/gap-analysis.htm>

Heath domain: HIPAA Gap Assessment/Risk Analysis

www.professorsteve.com/HIPAA_Tools/23Jul02_HIPAA_GapAssessment_Risk_Analysis.doc

Modified action steps: based on HIPAA Assessment and Analysis

1. Identify a senior executive sponsor
2. Designate a project leader
3. Assemble an assessment team.
4. Establish team structure, reporting relationships, meeting and report schedules
5. Prepare an enterprise-wide Risk Assessment plan.
6. Develop baseline inventory of policies, procedures, practices, systems and forms.
7. Conduct technical, physical and administrative security review.
8. Review policies, procedures, processes and practices
9. Identify gaps between current and requirements.
10. Perform a risk analysis.
11. Perform impact analysis
12. Prepare final impact report

Quote: “A gap analysis should be used like a preliminary physical examination. It provides you direction and allows you to establish the complexity of the problems. Thus, it provides the roadmap so that the on-going treatment plans that will make activities such as in-depth risk analysis, vulnerability assessment and penetration testing effective in helping cure the ailment, rather than merely soothe the symptoms.”

HIPAA Security Rule gap analysis

<http://www.aplawrence.com/MDesrosiers/securitygap.html>

Sample HIPAA security questions:

- Do you have security policy and procedure documentation?
- Have you performed a detailed security audit within the last 6 months?
- Have you provided for staff security awareness training?
- Are there controls in place, in regards to what information employees can access?
- Is there a disaster recovery plan in place?
- Are you using diligent authentication methods? (ie: strong passwords, tokens, etc)
- If you have a security policy in place, how often is it reviewed?
- Are there plans to do periodic testing and assessments of your infrastructure?
- Do you have an Incident Response Team? If not, who should be on it?

Biodiversity domain: USGS’s GAP project

<http://gapanalysis.nbii.gov/portal/server.pt>

Gap Analysis is a proactive approach to protecting biodiversity. It seeks to identify gaps between land areas that are rich in biodiversity and areas that are managed for conservation. Data is collected to monitor and prevent or minimize impending or potential gaps. Once a critical gap occurs it may be very difficult to correct it.

Stewardship of Research Data in Canada: A Gap Analysis

<http://data-donnees.gc.ca/docs/GapAnalysis.pdf>

From the introduction: “The working group [...] would produce a succinct statement of the problem, develop a strategy for education and training of researchers, and undertake a gap analysis of data stewardship activities in Canada.” The study occurred over the spring and summer of 2008. The report was released that fall (October 2008).

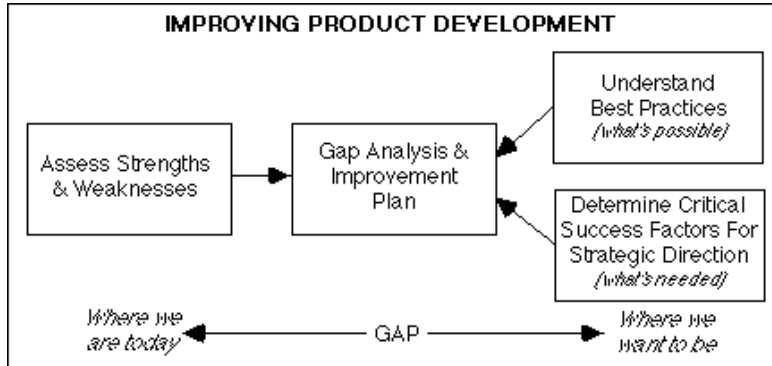
Related Resources: Benchmarking

Sample Benchmarking process from State of Victoria in Australia:

- *Decide what to benchmark:* Make initial choices and then refine.
- *Plan project:* Identify the scope, establish a team, manage project, plan comparisons
- *Conduct project:* Train team, analyze practices, design questionnaires, do comparisons
- *Analyze findings:* Analyze gaps, identify best practices
- *Improve practice:* Plan implementation, manage implementation

Benchmark best practice

<http://www.npd-solutions.com/benchmarking.html>



From *The Benchmarking Book*, Michael J. Spendolini

- Determine what products or processes to benchmark - not too broad or too narrow
- Form benchmarking team with the right mix of experience and analytical skills.
- Identify benchmarking partners that represent the "best-in-class"
- Look outside your industry for benchmark partners
- Collect benchmarking information using interviews, site visits, surveys, research
- Analyze the data you've gathered to get pragmatic, relevant results