



SAMPLE CANDIDATE WRITE-UP

SEARCH: Vice President of Engineering
CLIENT: Computer Networks Company

CANDIDATE'S RESPONSE TO THE POSITION'S PERFORMANCE OBJECTIVES:

1. **Assessment:** Conduct an assessment of the engineering group's people and processes, identifying strengths, weaknesses, management challenges, etc., and determine a course of action to effectively manage the group.

Prior Experience: Over the last 25 years, I have been involved in many successful projects, with a few unsuccessful ones as well. I have had the opportunity to work with engineers in several disciplines (hardware, software, firmware, and mechanical). My hands-on experience extends to three of these disciplines (hardware, software, and firmware). My management experience includes both people and projects, and I am formally trained in management. As a manager and team leader, I have helped engineers to advance their careers from junior level to principal level.

Through this experience, I have developed an understanding of how successful projects get done and am able to recognize risk factors that can threaten or delay projects.

Approach: My assessment of the situation at [*Client Company*] would include the following:

- Staff assessment to determine if new skills need to be acquired through either hiring or training;
 - A forecast of resource loading to determine if current and future projects are properly staffed, and if engineers are equipped with the necessary tools, equipment, information, and training;
 - A review of development processes to determine if the processes being used can insure project completion within goals for quality, cost, and timeliness;
 - An assessment of the department's productivity, attrition rate, teamwork, and morale to determine if any steps should be taken to improve the working environment.
2. **Establish Schedules:** Taking into account the creative, solution-oriented approach to development that the company uses, implement a method of creating project schedules to enable each engineer to work to known deliverables on a specific timetable, with measurable milestones.

Prior Experience: Hi-tech development projects can be difficult to manage. Short market windows create short development cycles and hard deadlines. Rapidly changing technology makes it difficult to predict market requirements. With fifteen years of experience in the personal computer industry, I am very familiar with this environment.

Approach: The exact approach to project management I would use at *[Client Company]* would depend on the current culture and processes in place there today, but they would bear a strong resemblance to the methods that I used at *[Company A]*. A traditional, waterfall-style development process is not effective in this environment; an incremental, spiral-type development model is usually more successful. Basic project planning and tracking techniques can be adapted for this. Project tracking requires not only the monitoring of progress against the project's goals, but also continuous reassessment of project goals in order to react to changing market requirements or customer requirements (this must not be allowed to become an excuse for feature creep or missed deadlines). A small cross-functional team (engineering, marketing, sales, quality control) should be responsible for making decisions that modify engineering deliverables. Development contracts with customers or suppliers should specify a process to be used when changing requirements warrant a change in project deliverables.

3. **Establish Work Processes:** Establish improved processes to ensure the smooth flow of work through the development cycle.

Prior Experience: My knowledge of engineering process comes from a number of sources, including the following:

- First-hand experience with a number of engineering disciplines, environments, and methodologies over the last 25 years;
- Examination of the work done at the Software Engineering Institute on development models;
- Formal training in Quality Management;
- Experience as a key contributor to a process improvement program instituted at *[Company]*;
- Contributing author to the book *[Title]*.

Approach: In my experience, the hardest part of process improvement is not in defining processes, but in gaining the level of cooperation and teamwork that is needed to achieve lasting change across an organization. Successful process improvement requires:

- **Leadership:** Management must clearly articulate a vision of what they want to achieve through process improvement (e.g. faster time to market will improve market share, increased customer satisfaction, better profitability) and why those goals are important.
- **Commitment:** Management must be willing to stay the course on process improvement to overcome the inevitable resistance to change in the organization.
- **Participatory Approach:** Resistance to change is greatly lessened when those who will execute the processes are involved in defining them.

I personally believe that intelligent, creative people react negatively to being told how to do their work, but are much more willing to accept criteria placed on their work output. In other words, instead of specifying procedures for how work is done, I prefer to specify criteria that can be applied at each step of the development process to insure that the project goals are being met. Criteria can be set for requirements documents, project plans, design specifications, code, fabrication drawings, test specifications, etc.

An effective development process must provide traceability. The review criteria at each step of the development process must effectively insure that the original requirements for the project (e.g. market requirements or customer specifications) are actually being met.

4. **Technical Specifications:** Work with the Marketing group to define functional specifications and develop a clear understanding of the customer's expectations. Ensure that the features expected by customers are deliverable within the time and cost parameters negotiated. Ensure that schedule commitments are realistic.

Prior Experience: I had responsibilities similar to this at *[Company A]*, where our development plans were also largely driven by the development plans of Intel as well as other silicon vendors. We held joint roadmap sessions with silicon vendors to align our development plans. These involved both marketing and engineering. I participated in engineering discussions with Intel during the early phases of programs, such as I2O and Merced. My team also drove industry initiatives such as the *[Product Descriptions]*.

I interfaced with the Director of Marketing to define feature sets for major releases and to plan the introduction of products and features at trade shows. I interfaced with project managers from customer deployment teams to insure that core development efforts were aligned with customer deployment plans. In some cases, I interfaced directly with customers to gather information about their product requirements. Our team involved key customers in design reviews to insure that products would meet customer expectations.

Approach: My preferred method for controlling high-tech projects is through a small (six people or less) cross-functional team of senior participants (engineering, marketing, sales, quality), who can effectively negotiate to make all of the hard decisions that apply to fast-track projects (schedule, feature set, cost, quality criteria, etc).

5. **Resource Management:** Establish a skills matrix to identify current and needed skills in the department, and utilize this matrix in executing hiring plans. Maintain responsibility for recruitment, hiring, training, supervision, motivation, and discipline of all engineering group personnel.

Prior Experience: I played a key role in hiring and training engineers at *[Company]*. I came to the company when it acquired a small *[Location]*-based company of about fifteen engineers, *[Company A]*, in 1991. By 1996, that office had expanded to over 100. I created job descriptions and performance criteria, and hired a large number of engineers. I created search criteria that were used by HR to identify candidates. I also developed strategies for training BIOS engineers. I defined the mix of skill levels (junior, intermediate, senior, principal) for the department.

Approach: The current economic environment is making it tough to find and retain talent. It is fundamental to have an overall strategy regarding recruitment. This involves the following:

- Make sure that the work environment is one that attracts talent. Talented engineers are attracted to an environment where they are challenged, where they are empowered to make decisions, where their work is recognized, where they are judged by their results, and

where they are given flexibility (such as flex-time). Most of all, I think that the best way to prevent attrition is through the honesty, integrity, and sincerity of management.

- Establish a plan for finding talent. Recruiters are expensive, but effective. Contract-to-perm situations offer the advantage of a “try before you buy” approach to hiring. Advertising can be effective if well placed. College recruitment is most effective as a long-term program for growing talent. Contractors and out-sourcing are most useful in situations where the work is non-recurring and outside of the company’s core competence. Partnerships and licensing arrangements can also be used to strengthen a company’s product line without hiring additional staff.

In the current job market, hiring plans can be met but it requires a commitment by the company to do what is necessary to find talent.

6. **Performance Management:** Develop an understanding of what motivates each individual in the department. Manage the group to ensure the needed results in terms of completeness, quality, timeliness and cost. Maintain responsibility for driving optimum performance, while maintaining high morale, employee satisfaction, low attrition and retention of key individuals.

Prior Experience: My personal references include several individuals who reported to me at *[Company A]*. I have always enjoyed high credibility among those who reported to me. I take a personal interest in the career development of my team members and had the pleasure of watching a number of my engineers grow from junior level to senior level. The attrition rate of my department was far below industry average. I believe that good engineers are motivated when they understand the impact of their work.

Approach: When coaching engineers on career development, I always explain to them that the skills required to advance to senior and principal level include non-technical skills such as ability to estimate work and participate in setting schedules, ability to meet schedules, ability to communicate both on technical matters and on project status, and ability to lead a team. These factors are an important component of the performance reviews of engineers.

7. **Budgets:** Develop and continuously refine and update a budget for hours and tools and equipment. Monitor expenditures to ensure compliance with the budget, taking steps to ensure that problems are resolved before costs are incurred.

Prior Experience: I carried budget responsibility as Director of Engineering at *[Company A]*. The company started out using Excel as a budgeting tool, and then moved on to a more sophisticated budgeting tool. I have formal training in accounting and finance as part of my MBA program, and I am comfortable in talking with financial personnel.

Approach: I approach budgets as being a part of the team function. When approaching company budgets, it is fundamental to use a budgeting tool and to take an incremental view of the overall engineering budget, considering the role that the specific (hours, tools, etc.) plays in general operations.

8. **Customer Interface:** Serve as the technical interface with Intel for intellectual property input to the company for use in its development work.

Prior Experience: I served in this capacity at *[Company A]*. I participated in joint roadmap sessions to align our development plans. I had team members directly involved in the early phases of Intel initiatives, such as I2O and Merced. The company also drove initiatives that Intel participated in, such as the *[Product Description]*.

Approach: One key to successful project management is to maintain clear and open communication channels with clients. Regular interaction must occur with key clients, especially Intel, specifically in the development and execution of project schedules and technology transfer.