Solution Center Interview Process

Introduction

The most important part of the Solution Center is our people. Our ability to attract and develop good colleagues must be a competitive advantage.

# Overview

The Solution Center interview process must be consistently applied to ensure that each candidate receives an equivalent and equitable evaluation. The interview team should have a clear purpose and understanding of the open requisition and its requirements from management.

# Purpose

This interview process should help us with hiring and developing the right people.

# Process Structure

The interview process is made up of five critical steps:

1. Sourcing candidates
2. Value screening
3. Technical screening
4. Personal narrative statement
5. Offering.

Sourcing

* Finding candidates via referrals and postings
* References, then internal recruiting, then external recruiting
* Initial screening from recruiter to gauge timeline and interest and issues that may be immediately disqualifying

Notes on effective interviewing

# Golden Rule

Simply put, the interviewer’s role is to find a reason not to hire. Reasons for this include:

* [The negative effects of hiring a toxic employee outweigh the positive effects of hiring a stellar employee.](https://hbr.org/2015/12/its-better-to-avoid-a-toxic-employee-than-hire-a-superstar)
* The candidate you’re speaking with has already passed a phone screening, so if you only look for positive traits, you’re likely to find them.
* If you enter the interview looking for a reason *not* to hire and come up with nothing, you can be confident that you’ve found a great hire.

# How to take notes during an interview

Taking accurate and thorough notes during an interview is an important way to ensure that we are fairly assess our candidates. When taking notes, record what is being said rather than how you feel about what is being said. An example of this might look like

* Good: Candidate forced engineers to do $X
* Bad: Candidate has an adversarial relationship with engineers

# The Importance of follow-up questions

A lot of the time a candidate might answer your question without providing all relevant details. It’s your job as an interviewer to watch for this and ask follow-up questions. Because the questions are behavioral by nature, it’s important that you understand *why* candidates chose to act the way they did. Dig for specifics

* “how did you arrive at this decision?”
* “what was your process?”
* “if you could replay the scenario again, what would you do differently?”
* “what were some alternative ways you could have addressed this problem?”

You’ll find that this is where the “real” information is gathered. You get past the prepared answer and begin to see how the candidate thinks.

# Other interviewing tips

* It’s okay to interrupt your candidate if they are beginning to ramble. Be respectful - “I appreciate you being thorough but need to cut in because we have limited time…”

Value Screening

During the value screening step, the interview team will ask the candidate behavioral questions and evaluate the answers against the Solution Center’s core values and principles. The questions should be general and give the candidate plenty of flexibility in their answer. A few templates to utilize are:

* "Give me an example of..."
* "Tell me about a time...."
* “Describe an occasion when….”

A popular behavioral question is, “Give me an example of when you had to deal with a difficult customer.” Use the behavioral questions to distill the values and principles; resist the urge to ask things like “Tell me about a time where you were passionate” or “Give me an example of when you were disciplined.”

# Interview Format/Pacing:

Introductions - 10 Minutes

2 Minutes - Employee 1: My background, work experience, time with Neudesic.

2 Minutes - Employee 2: My background, work experience, time with Neudesic.

Candidate - Background, recent projects, what do they like to do outside of work. **Be sure to give instructions to the candidate for “time boxing” their discussion.** Too many candidates run on excessively (verbalizing entire resume, talking about every project in too much detail). We are expecting to hear “the highlights,” not a replay of an entire game.

PDITI Questions - 30 Minutes (Sample questions to choose from, below)

Candidate's Questions - 10 Minutes

Give time for the candidate to ask about us or Neudesic

# Evaluating A Candidate During A Values Screening

Below is the list of our core values. Underneath each value you’ll find:

1. Questions to help you evaluate the presence of our values in the candidate
2. Additional information about each value to aid in your evaluation

## PASSION

#### What is it?

Passion is intense desire or enthusiasm for something. Passion clarifies purpose and leads someone to be willing to make personal sacrifice in order to serve their passion.

#### What does it look like?

* Displays excitement for learning new things
* Significant interest in personal/career growth

#### Questions

1. Tell me a time you had to go learn a new technology. How did you approach it, and what method did you find most useful?
2. Tell me about your favorite project you have worked on. What made it your favorite, what made it fulfilling?
3. What do you enjoy about developing software?
4. Take five minutes and teach me about something you find interesting.
5. What has been your most meaningful work experience?
   1. Listen for details of a project or challenge where the candidate showed competence and initiative, even if they weren’t ultimately successful. A great answer will include specifics of a quantifiable outcome or result from a successful experience or valuable insights and strategy improvements from a meaningful failure.

**What to look for in an answer:**

* Industry-specific problem-solving skills
* Creativity and initiative
* Self-awareness and an accurate appraisal of business value

1. What are your career goals, and how do you plan to achieve them?
   1. A great employee is both ambitious and cooperative. Here, they should demonstrate a vision for their future that will make them an energetic and functional addition to your team.

**What to look for in an answer:**

* A motivating vision
* Interest in skills development
* Interest in the industry and mission of the company

## DISCIPLINE

#### What is it?

Discipline is the ability to control what one does and doesn’t do regardless of their feelings. Motivation and feelings are fickle and inevitable to come and go, but discipline keeps results more agnostic of motivation or lack of motivation.

#### What does it look like?

* Ability to navigate ambiguity
* Ability to create structure for themselves (goals/plans etc)

#### Discipline Questions

1. You just got back from vacation, and you have 100 unread emails. How do you address them? (looking for a logical process for addressing all messages, rather than just ignoring or deleting them)
2. How many icons are on your desktop, right now? (a messy paper desktop is generally an indication that a person may be unorganized. A messy digital desktop may be analogous to a paper desktop)
3. Give me an example of a time you had to prioritize certain tasks or projects over others.
4. How do you motivate yourself to tackle the least appealing item on your to-do list? (looking for an answer the gives a process that the candidate follows)
5. What are some of the things you've been working on improving recently?

## INNOVATION

#### What is it?

Innovation is the ability to practically implement ideas. Innovation takes ideas and actually translates them into real world benefits and results. Ideas without action are cheap. Ideas that innovation carries into becoming results can be of near-infinite value.

#### What does it look like?

* Displays evidence of creative problem solving
* Displays an ability to absorb and retain advanced/unfamiliar concepts

#### Innovation Questions

1. Tell me about a time when you took an innovative approach to solve an issue.

Employer asks this question because they want to understand how candidates can apply innovative thinking to their problem-solving skills.

Example: "At my old job, there was an issue with one of our computer databases, causing it to lose data every few days. This caused many disruptions in our business processes. I helped to develop a new database system that refreshed itself regularly instead of deleting its data."

1. Tell me how you experiment with new ideas.

This question helps employers gauge a candidate's trial-and-error process as they experiment with innovative ideas.

Example: "The first step in my experimentation process is creating multiple versions of the same idea with slightly different variations. This helps me to identify which changes brought the best results. I usually take my top three variations and then continue experimenting with those even further until I find the one that's most successful."

1. When innovating, how do you balance creativity and functionality?

Employers may ask this question to understand if a candidate's creative ideas have practical and realistic applications.

Example: "An innovation should have practical applications. I try to make certain that whenever I design or innovate a product or service, my primary goal is for it to have a specific purpose and solve a problem that doesn't have an efficient solution yet."

1. Are you aware of any innovations Neudesic has produced?

Companies ask this question when they want to determine a candidate's motivation for applying. This is a great opportunity for a candidate to show that they researched the company before the interview.

Example: "I want to work for your company because I have been a long-time client of your organization and am continuously amazed by the innovative apps you release. I'm also impressed that you've remained a leader in the information technology industry over the past six years. I want to be a part of a space that encourages new ideas and innovative solutions, and believe I have a lot of ideas to bring to your company."

1. What has been your most meaningful work experience?

Listen for details of a project or challenge where the candidate showed competence and initiative, even if they weren’t ultimately successful. A great answer will include specifics of a quantifiable outcome or result from a successful experience or valuable insights and strategy improvements from a meaningful failure.

**What to look for in an answer:**

* + Industry-specific problem-solving skills
  + Creativity and initiative
  + Self-awareness and an accurate appraisal of business value

## TEAMING

#### What is it?

Teaming is consistently putting the wants and needs of the team above your own. Teaming seeks what is best for the team and other teammates before seeking what is best for themselves.

#### What does it look like?

* Ability to communicate effectively
* Ability to give and receive feedback effectively

#### Teaming Questions

1. Give me an example of a time you made a decision that was unpopular and explain how you handled implementing it.
2. Share an example of how you were able to motivate a coworker, your peers or your team.
3. You get a call from your manager saying your web application is having intermittent access problems. At first glance, it sounds like an issue with one of the VMs on the load balancer managed by the network team. How do you proceed?

*Project Management (Senior/Team Lead)*

1. How do you determine if a task or project is at risk?

Team leaders have a responsibility to communicate team goals. They must ensure work is completed by the deadline and at the quality level that’s expected by upper management and customers. This question lets you see how Candidates monitor tasks and projects, identify issues and make certain the team is helping the company achieve its main goals.

**What to look for in an answer:**

* + - Candidate’s ability to communicate expectations and collaborate with team members
    - Critical thinking and problem-solving skills
    - Management style

**Example:** “First, I communicate work expectations clearly to team members, being sure to highlight everything that’s been communicated to me from managers and executives. This reduces the chance of failure. Second, throughout a task or project, I monitor key performance indicators to see if the team is on schedule, within budget and producing quality work. I also ask that team members maintain constant communication with me throughout the project. This allows me to anticipate and identify problems before they arise and reduce any negative effects.”

1. What metrics do you use to evaluate team performance?

Team leaders are not just expected to generate and share detailed performance reports with the team and company management. They should also know how to use data-driven insights to boost team efficiency. Look for answers that show a team leader won’t rely on instinct to make decisions but rather will examine the numbers to determine the best solutions and changes to increase performance.

**What to look for in an answer:**

* + - Candidate’s method for improving team performance
    - Knowledge of performance metrics
    - Opinion of data-driven approaches

**Example:** “Given all the data we have today, it’s essential that team leaders analyze and extract insights from that data to increase effectiveness. My opinion is that the metrics a team focuses on should strongly link to a company’s strategic objectives. In a general sense, I always look at quantity, quality and time. For instance, to measure the quality of work, it’s important to look at the number of errors and customer satisfaction. Another thing I measure is employee morale and engagement because those can make or break a team.”

*Team Management (Senior/Team Lead)*

1. What do you do if there’s a disagreement within your team?

The success of a team often depends on the ability of its leaders to get everyone working together towards a common goal. A lack of unity can lead to failure. With this question, you can gain an understanding of how the Candidate would handle the situation successfully and move the team in a positive direction.

**What to look for in an answer:**

* Candidate’s decision-making and problem-solving approach
* Conflict management and resolution skills
* Opinion on the value of teamwork

**Example:** “Disagreements can happen, especially when people have strong opinions over the way a task should be done. I would first ask the team members to take a step back. I would then lead a team discussion so that we can all understand each other’s point of view. If appropriate, I would negotiate a compromise that would put the team in the best position for success. If there is clearly a right way to handle the situation, I will explain why we’re choosing one solution over the other.”

1. Describe your leadership style.

When you hire a team leader for our business, you want to ensure they have a strategy in place for overseeing their employees. Many team leaders subscribe to a specific leadership style, while others create their own with clear and effective tenants of their own choosing. Regardless of what leadership style our potential candidates employ, the candidate should be able to clearly explain it to you.

**What to look for in an answer:**

* Describes a specific leadership style or strategy
* Provides evidence of success
* Highlights values that align with Neudesic’s

**Example:** "I tend to lean towards a democratic leadership style when establishing a new team. After a few months, I become a bit more laissez-faire in my leadership style as my employees become more accomplished in their roles. I've found in my past experience that most employees do best when you get out of the way and give them the space they need to do their work independently. I'm always present, however, and implement regular check-ins, both formal and informal, to ensure my team has all the support and resources they need.”

“Knowing a bit about your company culture, I think this approach will work well. The innovative and creativity driven culture fits well with my leadership style."

## INTEGRITY

#### What is it?

Integrity is consistently adhering to moral and ethical values regardless of the benefits or consequences. Simply, it is doing the right thing regardless of the consequences.

#### What does it look like?

* Exercises meaningful judgement
* Understands how to build and maintain trust

#### Integrity Questions

1. What has you on the job market at this time?
2. What are you looking for in your new role/opportunity?
3. Tell me about a time you developed a feature for a user and, once delivered, it wasn’t what they wanted. Where was the disconnect, and what did you learn from this experience?
4. Can you give me an example of how you’ve contributed to the culture of previous teams, companies or groups?
5. What do you look for in an employer?
   1. The best answer to this question would highlight the overlap between the candidate's passion and Neudesic’s objectives. Look for signs of self-awareness, thoughtful career goals and an appreciation for the needs of the company.

**What to look for in an answer:**

* Clearly articulated career goals
* Desire to contribute meaningfully
* Recognition of the role employees play in meeting company goals

# STAR method (situation, task, action, and result)

* “Tell me about a time where you had to use a skill or technology that was new.”
* Look for PDITI values
* Go level deeper, e.g. “How did it feel to struggle?” or “Tell me about when you failed”

Technical Screening

The goals of the technical screen are three-fold

1. Assessing a candidate’s ability to reason through and solve complicated problems
   1. Can the candidate take a seemingly large problem and break it down into manageable pieces? What is their attitude toward complexity?
2. Assessing a candidate’s aptitude for technical growth
   1. Not an assessment of the candidate’s current state, but an assessment of where they could be after 3/6/12 months. Have they given evidence of upskilling? Was it self-guided?
3. Assessing a candidate’s ability to talk about/communicate and teach complicated material to a technical and non-technical audience.

As a general rule, the question of being a junior, mid-level, or senior developer doesn’t have much to do with how many years of experience a given candidate has – a junior developer can even be older than a senior developer. It is partly a question of the knowledge and technical skills which candidates have acquired. But, above all, it has a lot to do with how a developer perceives their work, how they interact with their peers, and how they approach problems. In this sense, the label of junior, mid-level, or senior refers above all to a certain level of maturity.

**Junior / Associate Developer Main Requirements**

When it comes to junior-level and associate-level positions, the main requirement is that candidates have the ability to perform technical tasks independently. Frequently, the mindset of a junior/associate developer revolves around just making the code work. Junior/associate developers are not fully independent and will need to discuss how to implement certain elements of the project.

Remember that junior developers write fancy code, as they find it hard to write straightforward code. They will also need to review their finished code with a more senior software engineer. This also means that you can expect that juniors/associate won’t understand all the nuances in a project and they will make mistakes from time to time. Junior developers are not expected to design any part of the architecture of the software.

**Expected Qualities:**

* The real desire to develop and learn
* Willingness to learn from their own mistakes
* Ability to accept (constructive) criticism in a calm way
* Genuine energy and commitment

**Key Behavior Questions:**

* Took the initiative to solve a small, but significant issue
* Were able to support the team, even if though you disagreed with the team
* Were empathetic towards a new team member

**Additionally:**

* Have been through the whole development cycle at least a couple of times
* Possess some knowledge of the relevant programming language and technology stacks
* Have some knowledge of most of the processes involved in creating software
* Are very keen to learn more about everything involved in making software
* Are able to find solutions to small issues
* Can be productive in working on a specific feature of the product

**(Mid-Level) Developer Main Requirements**

When it comes to mid-level positions, the main requirement is that candidates have the ability to perform tasks independently. As long as mid-level developers are not assigned highly complicated technical tasks that require an in-depth level of knowledge, they should be able to complete those tasks independently. However, at this level, developers must also understand the business requirements, and then be able to translate them into technical solutions.

At the planning stage, a good mid-level developer must be able to read the requirements and know that something is missing or can be improved. On the other hand, junior developers will probably implement exactly what is stated in the requirements. This means, that an application works correctly (according to the “happy path”), but might crash after the user takes some non-standard action.

**Expected Qualities:**

* Be able to understand exactly what a given application does in a given context.
* Be able to read the requirements and know that something is missing or can be improved
* Be able to help junior developers get comfortable

**Key Behavior Questions:**

Please provide examples of situations when you:

* Were prepared to take on tasks that no one knows (or wants to know) how to fix
* Were able to find a balance between complexity and performance in solving a complex technical problem
* Played a major part in creating requirements analysis
* Were involved in testing software
* Played a major part in creating documentation
* Took the initiative in solving problems and fixing critical errors
* Had to work on several projects simultaneously

**Senior Developer Main Requirements**

A senior developer has seen a lot of code, made a load of mistakes, and has drawn the right conclusions from the total process. A senior developer’s main responsibility is always to ensure that the right decisions are taken (with the available information at a given moment), decisions that create the maximum benefit to the business, and minimize costs.

A good senior developer is always looking for ways to gain more value but is also aware that it is necessary to make the best use of resources, like time and money. A good senior is always thinking about the end-point, so they can often solve problems even before these appear. For example, they think in advance about the bottlenecks of the system, remember vulnerabilities and problems caused by the improper use of tools. Code written by a senior developer will be made with maintainability and scalability in mind.

**Expected Qualities:**

* Be able to solve several complex tasks (and faster) than a mid-level developer
* Be able to distinguish between a product which is “good enough” from one which is either too good or not good enough
* Know how technical debt manifests itself. How much refactoring costs in real terms, what patterns are really needed, and when to draw a line when it comes to levels of abstraction
* Have outstanding communication skills, because they must not only tell others what the “right decision” is, but also convince their client and the team to agree with them. An authoritarian approach (“do as I say”) will often lead to more conflicts, which means there is no progress in improving the overall situation.
* Be able to explain and justify any important decision in a way that can be truly understood by all concerned. In this way, the team itself has the chance to learn from its experiences, and so develop more rapidly, whilst avoiding most of the pain points along the way.

# Code Review Questions

As is the case in all interview situations, the more conversational you can keep the interview, the better. For the code review, your goal should be to hear and see how the interviewee thinks through and explains code that they are seeing. Rather than quizzing them on the code they are seeing, ask them to look through the code and explain their thought processes out loud.

As the candidate is reviewing the code sample here are some questions to help guide the conversation.

1. Walk me through this code
2. Are you happy with your solution to the problem?
3. (If candidate if presenting their own code) – Where did you get stuck? How did you get past it?
4. I see you used Module X here. How would you solve this problem without Module X?
5. (Where applicable) If your data file was several orders of magnitude larger (say, 1 TB), would this code still work? Why or why not? What would you do differently?
6. What would you do differently if you had a significantly longer period of time to work on this problem?

# Code Agnostic Questions

1. Problem Solving
   1. “Let’s say your team is working for the Public Building Service, an arm of the GSA that is responsible for the maintenance and upkeep of all government buildings. They’ve asked you to create a feature where a building inspector can upload photos of their building inspection findings so they can document them visually and ensure issues are fixed. How would you approach the design and build for this?”
   2. “Tell me about a difficult technical problem that you helped solve: what was the problem, and how was it solved?”
2. Maintainable Software Development
   1. “What does refactoring mean to you? Why is it important and when have you done it? Where does it belong in the process?”
   2. “Tell me about your approach to software testing. Why is it important and when have you done it? Where does it belong in the process?”
3. Technical Communication / Ability to teach
   1. Pick a foundational web development concept or technology and explain it at two levels: first as you would to a colleague who’s not a software developer, like a designer or product manager; next, as you would to a peer.
4. DevOps
   1. “You’re tasked with writing a guide for developers about ensuring high reliability for a web application. What topics would you cover?”