

Guide to Telling Better Stories with the Same Facts

Picture this: You're sitting in an interview for the perfect job. You've had your sights on this company for 6 months, researching them to learn about their market and products. Now you are in their office, speaking to the hiring manager for a job they posted two weeks ago. They've read your resume, and they want to know more about you.

What will you say about your qualification to make yourself stand out? Sure, you have experience you can relay. It may be your dissertation research, or perhaps you have some valuable real-world experience, but how do you make them choose you over all the other candidates?

Tell engaging stories and make yourself stand out!

Why Stories?

Humans have told stories for as long as we have historical records. Nearly every culture on earth has used stories to retain historical knowledge, to educate, to convey moral teachings, or to entertain. Why are stories so powerful?

Stories draw people in.

Humans engage with stories, because stories bring facts to life. A good story puts facts in a context that others can identify with. When someone can identify with what we are telling them, it becomes easier for them to see things the way we do. In the case of building our career, we want to help others see that our skills and experience will be useful for solving their problems and making them and their company more successful.

Stories leave lasting impressions.

Before writing was developed, humans had to rely on their memory to retain knowledge. Creating stories made it easier to retain and disseminate the important information. Stories are much easier for people to remember than a list of facts. As scientists and engineers, we are trained to list numbers and facts, and to be extremely specific in our communication. This is very important for strictly technical communication, but not very good for selling yourself. Stories work much better!

When Can You Tell Stories?

There are many opportunities to tell stories, but here are the top four:

In an interview: Develop a series of stories that you can pull out to answer a whole range of questions you may be asked, from “Tell me about your experience” to “Tell me about a time you faced a problem you didn’t know how to solve.” If you have a story ready for each of the questions you anticipate, you’ll make a much better impression than you will with an answer you improvise at the last minute.

At networking events: It’s a good idea to develop a few short stories that you can pull out in conversations when you’ve just met someone. Note that these should be used to quickly illustrate your skills and experience, not take up someone’s time. No one wants to hear you go on and on about what you’ve done.

When someone asks “So, what do you do?”: This question is common at networking events, but applies to many other situations as well. Your answer to this question may not be a full story, per se, but it should be carefully planned to grab their attention quickly. Instead of listing your job title and a few of your responsibilities, use the 15 seconds to convey the value you bring to the world.

With friends and family: The first few times you tell a new story, it probably won’t come out the way you hoped, so find as many opportunities as you can to practice and refine each one. Friends and family can be great for trying out new stories. Ask a good friend to listen to a few and give you some feedback. Pull a few out at a family gathering when relatives you haven’t seen in a while ask what you are up to. Do they understand what you are telling them? If not, revise, simplify, and try again.

Tell Stories Your Grandparents Would Understand

When you develop your stories, it’s important to make them simple and easy to understand. The people who interview you may be very smart, but they probably won’t be familiar with the details of your work. It’s important to make your stories easily understandable to a wide audience. Focus on why they might care about your work.

A good technique for this is to tell stories that your grandparents would understand. Now, I don’t know your grandparents. They may have a Ph.D. in nuclear physics for all I know, but they are probably not very familiar with what you do. If you develop stories that they would understand, you are off to a good start.

Useful Story Elements

If you have been in an academic environment up to now, developing stories that will help you move into industry can be challenging, because you are not familiar with what goes on in a typical company. You want to make sure people in the private sector can relate to your experience, so use the following elements for your stories:

Projects: Everything in industry is done as a project, with a schedule, a budget, and intermediate milestones that help the team track progress along the way. If you can describe your experience in these terms, you will have their attention. Most other candidates coming from academia will not be doing this.

Results: In industry, results are everything. Tell them what you accomplished and why it was important. Be quantitative. Did your work create a solution at half the cost of the current approach? Was the output of the device you built three times higher than anything that had been done to date? Even results from fundamental science research can be put in terms that will impress a hiring manager in industry.

Problems: No project in industry ever goes completely to plan, and managers need smart, creative technical people to solve their problems quickly and efficiently. No one expects your projects to have gone smoothly, so go ahead and talk about the problems. Use them as opportunities to describe how you found solutions. If you had many things go wrong in your dissertation project, that's fine! You have lots of content to tell great stories about the awesome problem solver you are!

Lessons: In academia everyone expects you to be the smartest. Not so in industry. That's just not realistic. They do expect you to learn from mistakes and keep getting better. Tell stories that demonstrate how you learned from problems or mistakes. This will add to your credibility, not reduce it.

Leadership: Leadership is very important in industry. This is less about being a manager, and more about having the ability to influence others. In an academic environment, facts tend to speak for themselves. In industry, ideas have to be sold. People have to be convinced that your idea is the best one, so tell stories that show you can influence other people.

Be positive and sell yourself, but never lie, and never exaggerate!

Let's Outline Your Story

Use this section to identify key elements that you can build into your stories.

Define where you are headed:

Technologies you want to work with: _____

Type of work: _____

Geographic areas you want to/are willing to work: _____

Specific companies to target: _____

Define your audience:

List specific people who can help you advance your career in the direction you want
(Include their name as well as their title/role):

At your target companies: _____

In your network: _____

Who do you not know yet, but want to contact? _____

Define your strengths:

What have you been told you do well?: _____

What activities do you find the most rewarding?: _____

Define the outcome you want:

What do you want your audience to think?: _____

What do you want them to feel? (Many decisions are made based on gut feel, so take this seriously): _____

What action do you want them to take?: _____

Describe your story elements:

In the next several pages, list the details of the projects you have completed. These projects don't have to be years or even months long. Anything that had a well-defined outcome can be used as a project. If you solved a problem on someone else's project, include that. You can even include a project that was not completed, if you think there was an important lesson learned. Remember, problems and lessons make great stories if you can describe how you came out of it smarter, better prepared, or with a more improved process.

Project 1 Outline:

Project description: _____

Project duration: _____ Completed on schedule? _____

Intermediate milestones in project plan: _____

Results achieved (quantify): _____

Problems encountered: _____

Solutions you provided: _____

Lessons learned: _____

Leadership/Influence you demonstrated: _____

Other important details that may impress a hiring manager: _____

Project 2 Outline:

Project description: _____

Project duration: _____ Completed on schedule? _____

Intermediate milestones in project plan: _____

Results achieved (quantify): _____

Problems encountered: _____

Solutions you provided: _____

Lessons learned: _____

Leadership/Influence you demonstrated: _____

Other important details that may impress a hiring manager: _____

Project Outline Example:

Project description: Built an atom interferometer using standing light waves and Ne atoms

Project duration: 22 months Completed on schedule? Finished 3 months behind

Intermediate milestones in project plan: MS 1: Fabricate and assemble all hardware

MS 2: Demonstrate interference fringes, MS 3: Measure fringe shift with magnetic field

Results achieved (quantify): Demonstrated 1st order fringes with a contrast of 62%, 2x higher than any previous contrast. First ever to demonstrate 2nd and 3rd order fringes.

Problems encountered: When interferometer was first assembled, fringes were not seen. This is reason for 3-month delay

Solutions you provided: I incorporated lower sensitivity optical interferometer on to the atom interferometer structure. This demonstrated that vibration was washing out atom fringes. Optical interferometer then used to stabilize mirrors and recover atom fringes.

Lessons learned: I anticipated mechanical vibration may be a concern, but was in a hurry. Better planning would have suggested that I incorporate the optical interferometer at the project outset as a risk mitigation step, and it would have saved significant time.

Leadership/Influence you demonstrated: When the fringes were not visible, my advisor believed that the problem was mirror alignment. I had done the analysis and created an alignment process I knew was robust. I convinced her vibration was the likely culprit.

Other important details that may impress a hiring manager: When I first implemented the optical interferometer, before I spent the time building stabilization control system, I binned the data and showed fringes were present. This gave me the confidence I had a solution.