Quality, Culture, and Process: Coming Together to Find Success

Heather M. Wilcox
Heather.wilcox@nwea.org

Abstract

How does your Development culture affect your quality?

The Quality Control team I work on was recently looking at a series of Data Quality issues that had been found in production. In digging through the “whys” behind the defects, we came to the conclusion that most of the bugs were a direct result of the “Hurry Culture” that the development team had created for itself. From there, it wasn’t a difficult leap to the realization that our processes for handling production defects weren’t appropriate for a “Hurry Culture”. The question then became: Do we alter our culture to inspire a process that creates fewer defects, or do we embrace the “Hurry Culture” and rebuild our bug handling procedures so that teams were more responsive and faster at resolution?

Regardless of the answer to our own question, the lesson at hand is that success is driven by understanding the culture of your Development Department. Once you have that, you can deep dive into whether your tools and processes are appropriate for your development philosophy. This paper will explore the process of examining and diagnosing your team’s culture as well as determining whether your development practices, tools, related teams, and other programs adequate support that culture.

Biography

After leaving a potential career in Anthropology, Heather has spent over 25 years working and learning in the software industry, choosing to focus primarily on start-up and small companies. As a result, she has had a broad range of job descriptions which include, but are not limited to: Technical Support Engineer, IS Manager, Technical Writer, QA Engineer, QA Manager, and Configuration Management Engineer. More recently, Heather has moved into a more permanent relationship with a mid-sized educational company where she’s been for the last 10 years. This has given Heather a wide range of experiences to draw from in her current role as a Staff Quality Engineer. In her spare time, Heather enjoys fiber arts, equestrian sports, and training donkeys.

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1 Introduction

As Quality Engineers, we are constantly searching for better ways to improve our products: new tools, methodologies, and processes. We'll try whatever it takes to build a better mousetrap. However, it's not clear that many of us consider our company or team culture when we're building our quality infrastructure. However, in reality, we should be tailoring our processes and tools to suit the characteristics of our development culture.

The Quality Control team I work on was examining a series of Data Quality issues that had been found in production. In digging through the “whys” behind the defects, we came to the conclusion that most of the bugs were a direct result of the “Hurry Culture” that the development team had created for itself. From there, it wasn’t a difficult leap to the realization that our processes for handling production defects weren’t appropriate for a “Hurry Culture”. The question then became: Do we alter our culture to inspire a process that creates fewer defects, or do we embrace the “Hurry Culture” and rebuild our bug handling procedures so that teams were more responsive and faster at resolution?

Which is the right answer? That is up to you. Either can be right, depending upon the circumstances, your products, and your desired end-state.

The lesson at hand is that success is driven by understanding the culture of your Development Department. Once you have that, you can deep dive into whether your tools and processes are appropriate for your development philosophy.

2 What is Culture

Culture (/ˈkʌltʃər/) is an umbrella term which encompasses the social behavior and norms found in human societies, as well as the knowledge, beliefs, arts, laws, customs, capabilities, and habits of the individuals in these groups. (Tylor, Edward. 1871)

This is to say that Culture describes the way a group chooses to interact both within its membership and externally. It drives the determination of acceptable and unacceptable behaviors as well as expectations and customs. Cultural norms can vary widely and are wholly dependent upon the society in which they are constructed.

A common example of a cultural norm in practical usage is the handshake in modern American society. The handshake has been around since at least the 9th century B.C. and was thought to have begun as a gesture of peace. As a result of its longevity, it exists as a form of greeting in many cultures. Interestingly, even such a simple gesture has specific customary requirements depending on where you are in the world. For instance, the firm “American Style” handshake is considered rude in Turkey and other Middle-Eastern countries. (Wikipedia)

Even within the relatively short span of American history, the handshake ritual has had its own evolution. The Pre-covid modern American process is simple: When meeting someone formally for the first time, the custom is to exchange names and then shake hands. (“Hi, my name is Bob Jones.” "I'm Jim Thornton. Good to meet you!” <handshake>) We do this ritual without even thinking about it. However, even this simple exchange isn’t the same as it was even 100 years ago. At that point in time, just men shook hands – women were accorded a polite nod, but no actual handshake. But as American culture has evolved, along with the status of women, it became polite to shake hands with women as well. Now we are undergoing a Covid-19 inspired evolution of our formal greeting process. For the sake of disease control, the handshake has all but died. However, a new greeting custom has not yet fully risen to the top. The process of formally meeting new people is now complicated by what to do after the exchange of names. Do we bow? Elbow bump? Knuckle bump? Toe touch? What is the correct answer?

Eventually, a new cultural norm will evolve to replace the handshake. Or perhaps our love of the handshake will win out and it will once again regain its status as “most favored greeting ritual.”
Realistically, the handshake tradition is entirely driven by American culture. We could just as easily bow, lock pinkies, wave our hands, or even do nothing at all past verbally acknowledging the other person. But, in the US, we shake hands because that’s our cultural norm.

In most societies, Culture drives laws, “acceptable” punishments, societal norms, food choices, intersex interactions, clothing choices…. The list is endless, but the bottom line is that most of the decisions that we make each day are influenced by the culture in which we live.

Within the business world, culture drives how we interact with each other. In Japan the business card is considered a representation of a person’s identity. There is an entire process around the giving and receiving of business cards. The success of your business transaction with a Japanese company can be greatly influenced by how you handle a business card given to you by one of their representatives. Whatever you do, don’t put that card in your wallet! (Plaza Homes, 2021)

Culture can be both Macro and Micro. A country’s culture is clearly a macro concept. When you hear “American Culture”, you probably think about football, cheeseburgers, certain TV shows, and other “Typically American” things that most Americans like and are known around the world for enjoying. Micro culture, on the other hand, can be as small as two good friends who have developed their own idioms and rules for interaction. “I saw you were bummin’ so I brought you a peach.” In this example, someone was unhappy (bummin’) and the friend brought them a peach because, in their micro culture, that is an accepted token for inspiring happiness.

In the business world, as in other places, cultures can be nested. Your company may have a macro culture that it has established and nurtures, but different corporate divisions or groups within the divisions can have their own sub (micro) cultures that may or may not be reflective of the greater company culture.

This brings us back to the topic of this paper – figuring out what kind of development culture(s) your team has, how it affects your quality, and what processes you need to support it.

3 Examples of Cultures

As previously described, culture is whatever you make or allow it to be. There are a multitude of Anthropological, Sociological, and Business textbooks that define different types of cultures and describe what they might look like inside of your environment. However, putting a textbook name on your culture isn’t as important as determining the characteristics of it and deciding whether that is what you want.

There are as many “culture types” as there are adjectives in the dictionary. These are examples of some of the cultures I’ve seen or experienced in the engineering world. You may recognize bits of your own world within these examples. Each has advantages and disadvantages depending on your product and the developmental stage of your company.

3.1 The “Hurry Up” Culture

The “Hurry Up” culture values speed over all other things. Teams are rewarded for on-time delivery. Medium and minor defects aren’t penalized and are expected. Major and critical defects are highly discouraged but do happen. A company that has intentionally developed a “Hurry Up” culture has mitigation strategies in place to appease customers, troubleshoot defects and to create and release bug fixes very quickly. This kind of culture is a prime candidate for CI/CD. “Hurry Up” teams function under the premise that “Nobody dies if we release a bug. Though the Boss might have a heart attack.” There may or may not be documentation and any documentation that does exist may or may not be very complete. In an appropriate situation, such as a Web Development company, the Hurry Up culture can be very successful.

However, if a company is an accidental Hurry-Up (like mine), this can lead to a host of issues. Customer dissatisfaction can be a huge problem since escapes are common and it’s likely that there isn’t sufficient Marketing or Support infrastructure in place to support them. Additionally, employee attrition is common
since every big escape inspires a frenzy of activity. Without a specialized team or process to deal with critical bugs, teams end up getting constantly jerked out of their regular work plans to handle problems. That kind of continual context switching and pressure eventually leads to frustration, burnout, and employee searches for greener pastures.

### 3.2 The “Careful” Culture (or NASA Culture)

The old school NASA culture is the exact opposite of the Hurry Up. I use NASA as the example because, if they don’t get it right, people do die. NASA-style or Careful cultures use words like accountability, repeatability, safety, specification, and regulation. Everything is carefully specified, documented, and tested. Error rates are measured in the thousandths and millionths of a percent. Failures are a big deal where forensic resources are brought in to analyze and determine cause. Projects are developed using a waterfall methodology and are planned years in advance. Highly regulated industries like Banking, Medical, and Aerospace tend to gravitate towards this cultural style.

A fascinating side note to this example is that, each time NASA has abandoned its Careful Culture, they’ve experienced terrible results. Both the Challenger and Columbia incidents were determined to have been caused by a shift away from careful to more of a “Hurry Culture”, where warnings and concerns from experts within the teams were ignored in favor of “shipping the product”, e.g. launching the mission. This is a tragic yet strong example of the value of upholding your chosen culture and the importance of ensuring that your culture is appropriate for your type of business.

Interestingly, the “Careful” culture would mean the end of most technology startups. When you’re trying to get that first version out using only the angel money that you sold your soul to get, there’s no time for being careful. You assemble the best code you can, and you get it out there as quickly as possible so that people can see it and the income can start flowing. Then you cross your fingers and hope for the best.

### 3.3 The “Better than Average” Culture

Believers in the “Better than Average” paradigm try hard to take the time to do it right while still shipping in a timely manner. They ship good code on a regular basis and take pride in the quality of their products and the resulting positive reputation. Defects aren’t penalized, but minor defects are considered annoying and major bugs are anathema. All defects are taken personally. Programmers in this group say things like, “I can’t believe we let that out. I’m so embarrassed right now…”

This kind of culture, or a variant thereof, likely represents a majority of the healthy development teams in the software industry. A “Better than Average” team is usually a collection of honest and hardworking folks who are doing the best that they can to turn out a quality product in a timely manner. Everything about their practices, documentation, and interactions is reasonable and practical. They won’t be wowing the world with crazy new technology, but they will impress their customers with solid products that are delivered on a predictable schedule. They are the Peanut Butter and Jelly Sandwich of the software industry.

### 3.4 The “Innovate or Die” Culture

Startups that survive are often founded with this kind of culture. The healthiest of these have a “push-me-pull-you” type of constant information and idea exchange. Group discussions and problem solving in front of a whiteboard are a daily event. Everyone pushes everyone else to think harder and better. No idea goes un-debated and un-discussed. Innovation is key and every idea is valued. These teams are close, fractious, and are incredibly dedicated to the cause. They work as many hours as it takes to get the job done and they’re excited about the outcome. To be clear, this kind of behavior is not sustainable – your employees will eventually burn out and leave if it continues too long. But if you’re boot-strapping a company, this kind of culture is a great way to get things off the ground.
3.5 The “Purist” Culture

The Purist-style groups are all about doing it exactly right. These groups tend to be either R&D teams nestled deep inside much larger companies or they are short-lived startups. They’ll build their entire product from scratch, including the platform and tools, even if those things have already been built by another company. These folks are purists to the core, who want full control over every_last_detail. They’ll take as much time as they can to ensure that the product is exactly the way they want it. It doesn’t matter what they’re building, but whatever that thing is, it will be beautiful, expensive, and perfect. For obvious reasons, these teams are rarely fiscally successful, but they can be great sources for innovative thoughts, process, and tools. They fill the “think tank” role in the software world.

4 Determining Your Culture

There’s an old saying that, if you don’t choose a company culture, one will evolve on its own and you may not like what you get. This is a great sentiment to use as a start for digging into your development culture. Does your company have a Vision Statement? Mission Statement? Does everyone in the company know the corporate mission? If the answer is yes, then you’ve got a place to begin. Hopefully, whatever culture your development team has is a direct derivation of your Company culture. However, that is not always true. It’s not uncommon for different divisions in large companies to develop their own sub-cultures which may or may not be aligned with the overall corporate culture. Even individual dev teams can develop their own way of working that is significantly different from the other teams in their department. It’s important to determine the culture your team has and how aligned it is with that of your organization.

Sometimes your company is small enough or different enough that there is no “Corporate Vision”. Or, you may be launching a new company or a new group. In that case, you get to start from scratch which, although challenging, is really an ideal situation. You get to work with your team to make a conscious decision about exactly what kind of culture you want to have.

4.1 Starting from Scratch

If you are in the unique and privileged position of building a team from the ground up, then you can choose the culture you want to develop. Bring in your entire team. If the members of the team are involved in the creation process and can see their contributions integrated into the final result, they will act as the standard bearers for the organization that you want to build. Their belief in the vision will be passed on to new hires as they are brought into the team. This allows the chosen culture to proliferate and reinforce itself.

A great way to jump start your team culture is by doing a Chartering exercise. This process is detailed in section 5. Chartering provides a methodology for digging deep and figuring out what’s important to your organization and how you want to work as a team. The result of a completed chartering is a set of artifacts that you can use to help guide your decisions and ensure that your team stays on track and true to your team and corporate vision.

4.2 Searching the Truth in an Established Team

In the organization where I work, we had several projects where there was a hard deadline and an amount of work to be done that was seemingly impossible. Each time we were challenged and each time, we delivered. “We know you can do it” became a regular refrain from our management. We tossed out good process, attention to detail, and even some testing practices to get things completed in time. When we did succeed in pulling off the impossible, we were rewarded - extra time off, gift cards, all sorts of different appreciations to acknowledge the achievement. Even when big defects were found in the resulting products, quick fixes were assembled, customers were soothed, and the work went on.
Eventually, the culture we had before evolved into what we called the “Hurry Culture”. Clearly, we valued getting it done quickly over all other things, but that came at a cost – big tech debt, lax testing practices, customer dis-satisfaction, and some shoddy process. Ultimately, we didn’t intentionally drive our culture one way or the other, so we ended up with something that we didn’t necessarily want.

Hopefully, you can see from the example how a team culture can evolve on its own simply based on what managers choose to reward and emphasize. Alternatively, if conscious choices are made about what behaviors to encourage and why, team or organizational culture can be driven in a more intentional direction. Culture is like a hot-house flower – it needs constant attention and maintenance to flourish and, without those things, it dies and is replaced by weeds. If you neglect your culture, it can evolve into something ugly and uncomfortable.

This brings us back to determining what kind of culture you’ve cultivated within your workplace.

The search begins with values and rewards. What does your team celebrate and prize? Do you reward getting it done on time or early before all other things? How about releasing a product with such quality that you’ve gone a whole month without a single defect report from the field? (We wish….) Perhaps a high customer satisfaction rating is key for your team? Or maybe it’s all of the above in a “Balanced Culture” where quality, velocity, and customer satisfaction are equally valued. If you can determine the things that are most celebrated around a release, you will discover the core of your team’s culture. Root that central idea or ideas out and then write them down in big letters.

4.3 Put a Name on It

Once you’ve determined what it is that your team values (whether it is intentional or not), put a name on it. Is yours a Customer Culture? A Quality Culture? Are you the “Process People”? Choose a name that epitomizes the thing that your team values most. Use it as a touchstone when it feels like the group is straying from its core mission: “We are Quality!” If you find that your culture resonates with the team and with leadership, then celebrate it. If you have a culture but haven’t done any chartering work, then use your culture as a starting point for those exercises. For example, if yours is a “Customer First” culture, then the word “Customer” should appear in your mission and vision. Your charter should reinforce your culture and the opposite should be true as well since the concepts are closely linked together.

Alternatively, if you determine that your current culture is not what you want it to be, use that name as warning to remind your teams what you’re trying to get away from. Are you a “Hurry Culture” but you don’t want to be? Then, when you charter it’s important to ask periodically, “Is this <mission/vision/value> consistent with who we were (a “Hurry Culture”) or who we want to be? That should help you break the habits and mindsets that developed around your old paradigm and assist you in creating a new culture that is more appropriate for your team.

If you do find that you have an inappropriate culture, put some thought into what you want your new world to be like and give that an aspirational name. “Folks, we are stepping away from the ‘Fast and Dirty’ culture we’ve had since we started up and now, going forward, we will be working towards a ‘Quality First’ environment. We all know that we care deeply about Quality, so let’s show that in everything we do!”

5 Embracing or Rejecting Your Culture

Once you determine what kind of culture you’ve got, you need to decide if that’s what you want and then act accordingly.

5.1 Matching Product to Culture

Even if you have a culture that your team likes, it’s important that the paradigm is appropriate for your product. If you build Heads Up Display software for airplanes, a “fast and dirty” culture is clearly not going to work, since a fail can equate to a plane crash. However, that same paradigm may be just fine for a web development company where customers want to see results fast and are willing to deal with errors.
As you evaluate your culture or begin to create a new one, it’s important to consider your product line and account for the requirements of your industry and customers. (Like the need to not die!)

5.2 Loving and Protecting your Discovery

If you’ve discovered that you have a good, healthy culture that is product appropriate and personifies the things you want your development team to be, or something close to it - wonderful! Your job then becomes maintaining and reinforcing that culture. Directives that come in from sources external to the team should be reviewed to ensure that they’re consistent with your desired state. As an example, if you’ve got a Quality Culture and a request comes in for a project that violates the established standard of quality, that request needs to be halted and redesigned or renegotiated before it is passed to your team. Allowing new work that’s not in alignment with your team’s core values simultaneously undermines morale and the culture that you’ve built. However, the rework process can serve as an opportunity to educate other parts of your organization about your team’s values and priorities which will help to reduce future occurrences of requirements misalignment.

Empowering your team members is also critical to maintaining your desired paradigm. Ideally, the people in your group believe in your culture. Allowing them to speak up and reject or renegotiate work that’s inconsistent with your declared values is vital to maintaining their participation in the process. It also demonstrates a respect and appreciation for their thoughts and feelings. Every time someone speaks up and is unceremoniously overruled because “shipping the code is the most important thing”, your team will lose confidence that the whole organization really believes in the culture. It’s also incredibly demoralizing and disheartening. If it continues, eventually your team will begin to disengage and to believe that the “company culture” is a joke and that people outside the team are disingenuous and just mouthing the good words for show.

Negotiations in good faith can go a long way to assuaging the quality concerns of your development team and meeting the needs of the business. One of my favorite tactics is providing a “menu” of acceptable options to the business team. E.g. “We can ship the code late with the desired quality, we can ship on time with that feature removed/disabled, or we can ship it now but without the support of the Engineering team.” Nobody gets exactly what they want, but everyone gets something and, most importantly, the members of your team feel supported and can see good things happening in real time.

Like anything that is worth doing, maintaining your culture is not easy. It requires vigilance, perseverance, and consistency. Anything less will result in degradation and the loss of the team’s confidence.

5.3 Jumpstarting a New Culture - Chartering

It is not unusual for an organization to discover that their culture has morphed into an undesirable state – especially in cases where there was no initial effort to define and pursue a particular paradigm. When the determination is made to create, “fix”, or modify a team’s culture, Chartering or Re-Chartering is an effective method to reset and restart. Additionally, once you’ve created a culture and chartered your team, periodic rechartering can be helpful to reenforce your culture or to rejuvenate a team that’s gotten stale. Unless the constitution of the team changes drastically or there’s some external turbulence that’s affecting things, it shouldn’t need to be done more than once a year.

I’ve done many chartering exercises in the last 8 years and I’ve found that certain pieces are more important than others. I’ve included brief descriptions of those parts here. A detailed explanation of a complete chartering can be found at:  http://www.codegenesys.com/agile-chartering-summary-key-activities-teams-can-use-liftoff/

I need to stop right here and directly thank Diana Larsen for teaching me the chartering process. Much of what I do now is derived directly from her work. It is her article that is linked above.
Before starting your Chartering process, consider what kind of environment you want to create. As discussed before, name your culture, and put that name out where everyone can see it during the chartering process. The most asked question during the session should be, “Does this support and or drive our Culture?” If the answer is “no”, then the statement should be either thrown away or modified so that it does.

5.3.1 Purpose

The “Purpose” portion of chartering is the definition of what the team wants to work on. This is couched within the overall directive provided to the team by a guiding entity. Perhaps a team has been created to build video encoder software. Clearly, that part of their directive is non-negotiable. But the processes and technology behind that code are driven by the team.

5.3.1.1 Vision

The creation of a Vision Statement is the first step in Chartering. This is a description of a future state where the ideal has been achieved: “Software is released easily and with consistently high quality.” The vision should be something obtainable but can also contain an element of “Pie in the Sky” thinking.

It is not uncommon for initial attempts at a Vision Statement to result in pretty a good Mission Statement or two. Be on the lookout for these and, when you see them, set them aside for later. Often, one of these “vision statements” will end up as the actual team Mission.

5.3.1.2 Mission

The Mission is a single statement that concisely describes the “What” and “How” the team will use to achieve their vision. “We will build the best widgets with the highest quality using new technologies.” In this example, the “What” is “The best widgets with the highest quality” and the “How” is “using new technologies”.

5.3.1.2.1 Mission Tests

Mission tests support the Mission statement. They are brief statements that describe the ways in which the team can verify that that are achieving their mission. These should be things which are reasonably actionable and/or measurable. Common examples:

- We explore new technologies as they become available.
- We POC all major ideas before fully executing.
- All code is reviewed by at least 2 developers before check-in is allowed.
- We have a 98% Customer Satisfaction Rating

5.3.2 Alignment

Alignment is the process of aligning all team members around the values that the group feels are important to drive their best work. This portion of the chartering exercise is aimed at how the team will do their day to day work and interact with each other and with entities outside of their team.

5.3.2.1 Shared Values

Shared values are simple, usually single words, that encompass the Values that a team wants to uphold. Common Value words: Honesty, Integrity, Creativity, Innovation, Communication, Fun. Members of the team should all agree that the words are important and there should be a common understanding around what they mean. If there is disagreement around a word, it should either be replaced with a similar Value word that everyone agrees with or thrown out altogether. Ultimately, everyone on the team should agree with and believe in the values.

Creating a common understanding around each value can be achieved through simple rules.
5.3.2.1.1 Simple Rules

Simple rules are exactly what you would expect: Short statements that support each Value. They can be used to prevent misuse of a value. (For example, using the premise of Honesty to embarrass a team member instead of confronting them privately.) They can also be used to clarify how the team intends to personify the value.

Examples:

- Honesty
  - We will always tell each other the truth even if it’s inconvenient or uncomfortable.
  - We will always be kind when we tell the truth and will do so in good faith.
  - We will never hold back information.
- Innovation
  - We will always look to the future and Innovate where we can.
  - We will not use a comfortable solution when there is a new and better solution that requires us to learn.

5.3.2.2 Working Agreements

These are statements that define how the team carries out their daily business. They can be serious and/or silly

I find working agreements to be the easiest for the team to create. Often, while trying to complete earlier parts of the chartering exercise, participants will accidentally stumble on to working agreements. Try to recognize these and set them aside for this part of the exercise.

Common examples:

- We will not accept half-baked code.
- No meetings before 9 AM
- We will always celebrate our wins and learn from our mistakes.

As part of the creation process, make sure that the working agreements are usable for everybody on the team. My example of “No meetings before 9 AM” only works if everyone on your team is on the same continent and isn’t an extreme early bird. Working agreements should also have the same meaning for everyone on the team. “We will not accept half-baked code” may be too imprecise for some teams. Perhaps, “We will only accept code that has been reviewed by at least 2 people.” Is a better alternative. Working agreements are only helpful if they can be understood and followed by everyone in the group.

6 Tools for Success

Once you’ve defined your culture or chartered a new one, it’s important to ensure that your tools, processes, and messaging all support it. Without support, it’s likely that your culture will eventually mutate into something that co-exists “peacefully” with the structure around it. If you had to charter a new culture to replace an existing and undesirable one, it is recommended that you look at the infrastructure that supports your team. You may find that it’s necessary to make changes in your tools and processes to help your newly created culture to survive and thrive.

6.1 Development Tools

Above and beyond the basic compilers, your development tools should support the culture you’ve chosen. For example, if quality is your absolute top priority, then the majority of your budget needs to be aimed at Quality Tools – Test Automation, AI Testing tools, code coverage and code quality monitors –
anything that helps your QA team do a better job and be more efficient. Of course, these are great tools to have anyway, but if Quality really is your #1, then that’s where your tech investment should go.

The same is true for whatever culture you choose. Are you a “speedy delivery” culture? Then you should invest in CI/CD tools, so you can release at any and every moment. If you’ve got a group of “Purists”, save your money for people, since that kind of team is going to want to build their own whenever they can. To be completely trite, “Put your money where your culture is!”

6.2 Processes

As with tools, your team processes should absolutely support your culture. If you’ve adopted a “Quality over All” paradigm, your process should be well defined and all about cautious releases. You’ll also likely have heavier documentation and accountability procedures so that, if something does go wrong, root cause is quickly and easily determined.

In a faster release culture, most processes are going to be lightweight and easy. There should be documentation, because going fast doesn’t mean that you can’t still do things the right way. But documentation in a speed-based world is likely more automation based and requires less human intervention. It also may be less than ideal, but there should be enough documentation to ensure accountability and a reasonable amount of knowledge transfer.

The same is true for defect handling, code review, and even your processes around bringing work into the team. In a CI/CD based culture, your Marketing team/Product Owners need to feed your team work in small, quickly coded and quickly released stories. In a slower, more careful culture, you might choose a more waterfall style model, where the entire project is planned out ahead of time, with predetermined checkpoints and quality milestones. Both paradigms are completely appropriate for the right kind of product.

6.3 Corporate Alignment - Marketing, Messaging and Support

It’s a great thing to have a development team or department that has established and defined a culture that it believes in and is proud of. However, if the rest of your organization isn’t on board, success will be harder to achieve regardless of how smoothly things are running within your own group.

When your Marketing plans and Support policies don’t align with your culture, this can severely damage your relationship with your customers. If you have a “We won't release until it’s right” kind of culture and your Marketing team is promising hard shipping dates to your customers, that’s a big setup for failure. Either your development team is going to be upset because a product shipped before it was ready, or your customers are going to be angry because the software shipped late. In each case, it’s likely your support resources are going to be hit with a large number of requests – either for information on the product that isn’t shipping on time or for help because the product shipped on time but it’s broken. If your support team isn’t prepared to be inundated in that way, again your customers get disappointed.

If, on the other hand, your teams (and hopefully your entire organization) are aligned, you can set everyone up to succeed regardless of your chosen culture. If you are a “Turn and Burn” shop where speed is valued over higher quality, then your marketing team should be focused on showcasing the amazing speed at which your team can deliver features. Your support services should be set up to handle a high call volume and to communicate easily with customers. Website and social media should be updated frequently with the latest information so that users know what fixes are available when. You want your customers to know and believe that “the solution is coming fast and that’s okay!”

In summary, when you choose a development culture, you also need to make sure that the teams and processes that support and are supported by Development are also aligned and prepared to act accordingly.
7 Finding Success

By now, it should be reasonably obvious that there is no one right “Development Culture”. However, it is important that your culture is appropriate for your product and that your processes and the rest of your organization support it. If all those things are in alignment, then you should see some immediate improvements and, eventually, success in many areas.

7.1 Releases

When Corporate culture, Development Culture, and process are all aligned, releases work well and people don’t get surprised or upset. Deployments will always have an element of stress just because of what they are. But your Marketing and Support teams should be prepared and knowledgeable about the event because they are in sync with your Development team, who should be satisfied and confident in the code they are about to ship.

Even on “Turn and Burn” teams, where defects are expected, there is a plan in place. Teams know their code and know where problems are likely to occur. They're staged and ready for whatever happens on release day. There may be a “SWAT” team, whose entire job is to stomp bugs while the primary dev team continues mainline product work. Again, however, there are no surprises. Everyone knows about and is prepared for the inevitable.

In a “Better than Average” group, Marketing may prep customers for some uncertainty around release times by messaging that, “We’re expecting a May release, but Quality is important to us, so we could ship as late as early June. We’ll keep you in the loop and let you know the second it’s ready.” They’re setting the expectation that there will be a new release soon, but not before it’s as good as it can be. Customers will wait for good software and will expect it to work well when it does ship. The “Better than Average” team will do their best not to let their customers down.

7.2 Quality

Your release quality should be appropriate for your product and culture. Of course, we always want everything to be perfect, but that’s not realistic. What is realistic is a quality level where (again) nobody gets surprised. If your customer finds a bug, you want them to think, “Meh. It’s okay.” It may be “okay” because the customer knows that they’ll get a fix in less than a day or it may be “okay” because it’s a minor defect (the big ones rarely happen) and there is faith that it will get taken care of in a couple of weeks. In either case, the customer isn’t worried because your Marketing messaging is supporting your Development culture and the quality level associated with it. They’re making good decisions around their communications and they are setting customer expectations appropriately.

7.3 Customer Satisfaction

As described above, when your Marketing messaging and decisions are in-line with your Development culture, your customer satisfaction rates should be high. This rating may not necessarily be due to the amazing quality of the software. It may be because defect fixes are easily available faster than the customer can find defects. High satisfaction may also be because customers feel supported. Whenever they call, there’s almost no hold time and the person on the other end is knowledgeable and helpful. Or, perhaps partners are satisfied because they don’t have problems. There is a single, yearly release and, after the upgrade and any configuration changes, things work reliably like they always have.

Regardless of the reasons, a culturally appropriate Support Team isn’t slammed and has the bandwidth to handle customers properly and ensure their satisfaction without having to hound the Dev team for answers. As a direct result, customers feel supported and will be more loyal your product. (Charlton and Ward, 2021)
This may be a set of idealistic scenarios, but when all the parts of a business are aligned culturally, this kind of harmony is not unrealistic.

7.4 Retention rates

Last, and most importantly, when everyone on your team is happy and comfortable, then nobody is looking for a job. If developers and QA aren’t feeling pushed to ship code they’re not happy with, that is a sign that your Marketing team is aligned with your Development culture. If Support isn’t constantly slammed by surprised and disappointed customers, again, Support, Marketing and Dev are in alignment.

This kind of interdepartmental alignment around culture helps to ensure every team - Marketing, Sales, Development, Support, HR, IT-- are all on the same page. Marketing can build their PR strategy properly. Sales can make more appropriate promises. Development can deliver an appropriate and expected product, for which a prepared Support team can properly help your customers. With a clearly defined Culture, HR knows how to best help your employees and, more importantly, can accurately target potential new hires that will thrive in your environment. Even IT benefits because they know what to expect in terms of network and resource usage. They have the information they need to plan their work and be successful.

8 Conclusion

Regardless of the kind of culture you have or how you do development, if the entire company embraces the same philosophy around how business should be done and how to function together, then things work smoothly and everyone is happier. It really is that simple. What is not simple is the process of achieving and maintaining that level of alignment. It takes effort, time, and dedication from every team to stay in sync and stay focused on maintaining your culture of choice. However, if you are willing to make the effort, the payoff is certainly worth it.
References


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