

Playbooks and Organizational Knowledge in the 21<sup>st</sup> Century: Challenges and Solutions at a  
basketball company, FastModel Sports

Praxis Project

In Fulfillment of the Requirements of the MA Program in Communication at the University of  
Cincinnati

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April 29, 2019

Internship Location: FastModel Sports

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Special Thanks: Kermit Davis, Jr, Andy Kennedy, Greg Youncofski, Carl Schmid, Tony  
Madlock, Michael Fly, Bill Armstrong, Todd Abernethy, Scott Heady, Dr. Gail Fairhurst, and  
Trent Morgan.

## **Acknowledgements**

This project lasted about ten months in total, and there are many people I wish to thank in helping me with this internship, paper, graduate school, as well as life in general. This is probably the largest project I've ever worked on, and certainly the hardest I've ever worked on anything academic related. So, I am going to shout out a few people that helped make this all happen.

First, I want to thank Dr. Autumn Miller for agreeing to be my advisor. She is a very busy woman with way too many responsibilities based on her salary, yet still took time to be my advisor. She is the best person in the department at emotional support. We had our ups and downs, but in the end, I'm glad my ups and downs were with her.

Second, I wish to thank FastModel Sports and Robbie Lehman for providing this opportunity to work for them, as well as be so willing to work with my schedule and allow me to branch out into so many different areas of the company. It started with a cold call, but they trusted me from day one and gave me responsibilities that helped me grow as a coach and a person. I am happy that this paper can help them become an even better company, because the people there are good people.

Third, I wish to thank Ole Miss head coach Kermit Davis for giving me his time to not only review some of my work, but staying in contact throughout the season, always there for feedback if I had a question. I also wish to thank coach Davis for allowing me to visit Ole Miss practice and be in the film room when I visited in late December. Even just one film session can invigorate passion and cause one to learn so many new things about the process.

Fourth, I want to thank Dr. Steve Depoe for agreeing to be my second reader. He is the communication department's biggest cheerleader, and really cares about every student that enters and leaves this program. If the world had more Depoes, it would be a far better place.

Lastly, I want to thank my family. They allowed me to move back in last summer so I could afford to take this internship. My mom would do my laundry every night I got back from digging ditches covered in mud, so I could spend the evenings working on my internship. It was not an easy summer for anybody in our family, but the fact that they let me stay back home when they did not have to, is something I will always be grateful for.

There are many other people not mentioned by name that also helped make this happen. I cannot mention everybody, but I hope that the people in my life know how grateful I am and how much I care about them. Life is not easy, and one cannot do anything great alone. This has been a humbling and enlightening experience, and I can honestly say I am proud of this work, and proud of everybody involved.

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**Abstract**

This paper provides an in-depth account of my internship at FastModel Sports from June 2018-January 2019. It is an autoethnographic account that will take concepts from organizational communication literature, UX literature, and affect theory to discuss difficulties with issues in software organization, ambiguous language, potential ignored markets, as well as advice for future interns. Recommendations for change include adding “gold coin” elements into the FastDraw software, shoring up ambiguous language, adding a glossary to attach to basketball concepts, researching potential markets, adding another communication employee, and advice for future internship processes.

## Introduction

Basketball is a global sport, with over 450 million in at least 213 countries as of 2007 (International Basketball Federation, 2019). A team sport, basketball requires strategy, as well as five players on the floor working cohesively to either score a basket, or keep the other team from scoring a basket. It is a game played by people of all sexes and all ages, and is a game played amateurly, recreationally, as well as professionally.

Like almost all sports, basketball teams practice strategy before playing games, and need to share common meaning in goals, strategy, core values, among other variables in order to have the best chance of winning these games. Coaches are employed to help lead strategy, and make sure players know what to do and when do to things on the court in order to best give their team a chance to win.

This opens up a market for technologies and companies to assist coaches with the creation of basketball strategy. FastModel Sports, the Chicago-based company I interned at from June 2017-January 2018, is the leading supplier of basketball strategy-related software in the industry. At FastModel, I worked as a “content associate,” helping aggregate already existing content, promoting content on their social media pages, drawing up “plays,” working with coaches to summarize and showcase some of their basketball concepts, as well as writing articles for the website.

FastModel has three main products: FastScout, FastRecruit, and FastDraw. FastModel also has an online “PlayBank,” in which unpaid contributors showcase plays that they “drew up,” both showcasing their basketball knowledge, as well as the abilities of the FastDraw software to diagram plays. Plays from the PlayBank can either be added to a coaches “FastDraw” library, or

emailed to other coaches as .PDFs, regardless of whether they own the FastDraw software or not. We will go more into detail about this in a later section.

*FastScout* is meant for teams at the college level or professional levels. They use advanced statistics to map out opponent tendencies, and provide an avenue for coaches to easily produce things called “scouting reports” that summarizes opponent’s tendencies both as a team, as well as player-by-player. A good scouting report will help outline an opponent’s strengths and weaknesses, as well as provide avenues to how to limit the strengths of the opponents, and exploit the weaknesses.

*FastRecruit* is meant for college teams only. It is a service that helps organize the locations of coaches, as well as amateur prospects on the “summer circuit” that showcases player talents to college coaches. FastRecruit helps coaches find out which court at which gym prospects are playing at, so the coaches know where to watch them and get a better look at the players.

*FastDraw* is a software that allows coaches to quickly diagram plays, drills, defenses, and other strategies in a way that looks clean, is easy to share via email, and easy to print. FastDraw, unlike FastScout and FastRecruit, can be used by coaches at all levels, including youth, middle school, high school, college, pros, and recreational leagues.

This praxis paper will focus on FastDraw and the PlayBank, a software designed to help coaches design “plays,” or rehearsed movements of players in an attempt to create the best chance of a made basket, or on the defensive end, keep the other team from scoring baskets.

Overall, FastDraw is a terrific software for basketball coaches, and the PlayBank is a solid resource for basketball ideas, but there are many small things that can be improved in the

product. This includes the lack of avenue for coaches to learn basketball concepts, ambiguous language within the software with certain processes, issues with transferring plays between the PlayBank and FastDraw, among other things that will be addressed in the following chapters.

The first section will give background information on me as a person, and how I got to FastModel. I will detail my previous experience with basketball and school, as well as how I fell in love with the game, and the grit required to obtain this internship. The second will be a background on FastModel as a company. This will help provide context into what FastModel does, how large the company is, and how it coincides with communication. The third section will detail my experience in the internship, including struggles and what I learned. The fourth section is my literature review, which ties together organizational communication, user experience (UX), and affect theory. The fifth section details some of the issues with the FastDraw and FastTrade software. The sixth section outlines potential solutions to the aforementioned issues in section 5. The seventh section outlines problems with the lack of avenue for coaches to learn concepts, jargon, and terms, and The eighth section provides solutions on how to fix those issues.

## **Section 1: The Road to FastModel**

### **A Background On Matt**

My name is Matt Barnthouse, a graduate student at University of Cincinnati, and I worked an internship at a company called FastModel Sports, a digital playbook company that is used by 85% of Division I basketball teams, all of the National Basketball Association, as well as thousands of basketball teams around the world. Before we get started, I want to give a little bit



of background on myself, where I came from, as well as how I got this internship. It is a tale of hard work, grit, love, loss, and the pursuit of a dream.

### **Basketball: A Love Story**

The story begins in suburban Indianapolis, a place that is a storied hotbed for hoops. The stereotypes are true. The state of Indiana is in love with the game of basketball. Many Friday nights in towns across the state are spent by people filling high school gyms to watch their teams play a beautiful game. It is very hard to grow up in Indiana and not fall in love with the game. Even as a child, I would stay up past my bed time to wiggle the antenna and watch Reggie Miller lead the Indiana Pacers to several playoff appearances.

Basketball is a game I am objectively mediocre at on the court, at least compared to my peers that played a similar amount. I know the game, but I am just a terrible athlete. When high school rolled around, I had no chance at making the team. For reference, I went to a high school with over 5000 kids. Of the players that made the team: One played in the NBA, two more started at major Division I schools, another started on a national champion Division II school, another was a four-year starter at one of the better Division III schools in the country, and another played defensive end for Indiana University's football team. Long story short, if you aren't good enough to play at the college level, you aren't good enough to play for Carmel High School. As a result, I joined the team as a student manager, filming games and helping out with practices.

I continued student-managing into college where I was lucky enough to spend four years as a student-manager at University of Mississippi, which is more commonly known as Ole Miss. It was there where I decided I wanted to try breaking into coaching at the college level. I enjoyed

the relationships I built with my fellow players and coaches, enjoyed the recruiting process, and loved the discipline and passion required to build something bigger than yourself. Sure, it was basically an unpaid full-time job, but it also provided a lot of valuable experience that I used down the line.

### **After Ole Miss: The Grind Begins**

Following my time at Ole Miss, I promptly spent a summer in Wayne, Maine for my first ever coaching job at Camp Androscoggin, a summer camp for very wealthy boys. Granted, my job was to live with six nine-year-olds, teach basketball to kids ages 8-15, and coach the 12-year-old travel team. The hours were long (seven days a week, up to 17 hours per day), the pay was lousy (\$2150 for 11 weeks), but it was the first step to realizing a dream: to make basketball my career.

Becoming a basketball coach isn't like trying to become an accountant or other traditional "white collar" jobs, where one often goes from paid intern to a middle-class lifestyle. It is an industry that is very difficult to break into at the college or pro levels. Many times, people must work for free to even have a chance at breaking into a paid position. Boston Celtics head coach Brad Stevens started his career working nights at Applebee's while working as a volunteer at Butler University. Florida Gulf Coast head coach Michael Fly paid \$6,000 to take a graduate course so he could be eligible to intern with the NBA's Charlotte Bobcats. Trinity International University head coach Todd Abernethy spent a year working for free with Indiana University-Purdue University, Indianapolis before landing a paid job with Ole Miss.

Often, coaches are former players, or kids of former coaches. My boss at Ole Miss, Andy Kennedy, was the all-time leader in points at University of Alabama at Birmingham. His replacement, Kermit Davis Jr, is the son of former Mississippi State coach Kermit Davis Sr. My

high school coach is the son of another high school coach. University of Cincinnati head coach Mick Cronin is the son of a former high school coach, and spent his undergrad time at UC coaching at his father's high school.

The last category of coaches is the category I fall into, and that is "former manager" turned coach. Louisiana State University (LSU) head coach Will Wade was a basketball manager at Clemson. Former Indiana Pacers and Orlando Magic head coach Frank Vogel was a manager at Kentucky. University of Cincinnati assistant coach Greg Younts was a manager at Kansas. There are many more examples, including Georgia's Tom Crean, Auburn's Bruce Pearl, and others, but this is just a taste. Managers gain valuable experience working and building relationships with coaching staffs while also helping with practices, film, and other small tasks that put them into a position to move on to graduate assistantships, and even coaching jobs.

Unfortunately for me, there were not basketball graduate assistant spots available at Ole Miss when I graduated, so I had to figure out another way to keep the basketball dream alive. Thankfully, thanks to my performance in the classroom, University of Cincinnati offered me a graduate assistantship teaching public speaking in their communication department, complete with full scholarship and stipend. I knew somebody on the Cincinnati basketball staff and figured, "Why not? Maybe something will open up there, and if it doesn't, I'll still have a master's degree."

I decided to pack my bags for UC, and agreed to help out their basketball team with recruiting by using my graphics skills in Photoshop, in a similar vein where I helped Ole Miss. The job didn't pay, and I had to balance it along with my teaching duties and my rigorous graduate program, but it helps to solidify and maintain relationships, something that is so vital in keeping the coaching dream alive.

## Welcome to FastModel

That led us to FastModel. For my final project in my master's program, I had to intern 140 hours somewhere and write about my experiences, as well as suggesting improvements based on the literature I've read in my time at UC.

As it turns out, finding an internship is very hard. I initially tried making my volunteer role with Cincinnati Men's Basketball a praxis, but the coaching staff declined. Then, I interviewed with the Cincinnati Bengals, where I was a finalist, but also declined. I ended up writing a "cover letter" that I published to my website, as I struggled to find both an internship and summer employment that paid the bills, and that yielded some interest from a few companies, but still nothing definitive.

Finally, I cold-called FastModel, the leading digital playbook company in the basketball industry, and funny enough, despite not having a formal internship program, they accepted. The internship was unpaid, but it allowed me to gain more experience with the deeper strategic parts of basketball, learn a lot about the lingo and terminology that is essential for game planning, use school time as basketball time, and most of all, it is allowing me to finish my master's degree. This internship lasted from June 2018 through early January 2019. I am still a contributor there, but in a reduced role so I can focus on finishing this paper, as well as my master's degree.

First, we will discuss FastModel as a company. Then, the rest of the paper will talk about my experiences, how it ties to literature, some frustrations and struggles when it came to avenues to learn new basketball concepts, ambiguous language in the software, and struggles with organization within the software.

Potential solutions to those frustrations and struggles occur in the second half of the paper. Some of those solutions include creating a glossary for basketball concepts, a strengthening of the language in the software, and an allowance for a “tagging” system within the program for multiple categories of plays.

## **Section 2: FastModel Sports as a Company**

FastModel Sports is a company that specializes in software to help basketball coaches and their teams. They are the industry’s most popular choice for basketball-related software, with clients that include every professional team in the United States, 85% of college teams at the Division I level, as well as over 8,000 high school and youth teams in over 75 countries.

### **Products**

FastModel has three main products:

- FastDraw
- FastScout
- FastRecruit.

*FastDraw* is a software designed to create digital plays and playbooks. *FastScout* is designed to help teams scout their opponents by helping teams make “clean, professional scouting reports” that are customized to their team. *FastRecruit* is a service available to higher level teams at the college level, which helps organize staff travel plans, game schedules, maps for each gym, and other helpful tools to help coaches recruit on what is known as the “summer circuit.” I did not work closely with any one team in scouting opponents, nor helped any one team with recruiting schedules on the fabled “summer circuit,” so this Praxis only focuses on the FastDraw software.

In addition to selling their software, FastModel also has a content side where authors, known as #TeamFastModel contributors, use the software to create content that coaches can use, and even add to their own “PlayBank.” Ideally, people that enjoy the content purchase the software themselves or for their team, and make the company money. FastModel contributors also write articles, break down film, among other content to provide “proof of concept” for the FastModel software library.

### **Social Media Presence**

FastModel heavily utilizes social media, mainly Twitter, to showcase the capabilities of their software. Their verified Twitter account has 28,400+ followers (as of March 21, 2019), and their main audience is coaches, myself included. I did not know what FastModel was until I saw their work on social media. As you will see in Figure 1 Figure 2, FastModel has a diverse approach to attracting eyes to their website using Twitter posts, from showcasing individual basketball concepts to providing links that “tease” knowledge on the other side of the link.

FastModel Sports® Retweeted

**Radius Athletics** @RadiusAthletics · 14h  
Motion Weak #SBSo offense off the break

**Radius Athletics**  
**Motion Weak**

Sprint to primary break spots  
3 passes ahead to 2 then sprints their cut to the rim

2 may need a dribble or two to shorten the centering pass to 4  
On 4's touch, 3 sprints out to wing (they may not even stop from their original cut) and 3 "sprints screens" for 5  
This is an Interchange for 1 and 3

4 reverses to 1  
5 comes to ballside block off the sprint screen.

After 4 reverses to 1, they downscreen for 5 (STS)  
If 1 is unable to enter to 5, they make the

From there the team can flow into spread ball screen with 4 turning into the ball screen

2 13 88

Show this thread

Figure 1: FastModel retweets @RadiusAthletics, a person that used the FastDraw software to create a play.

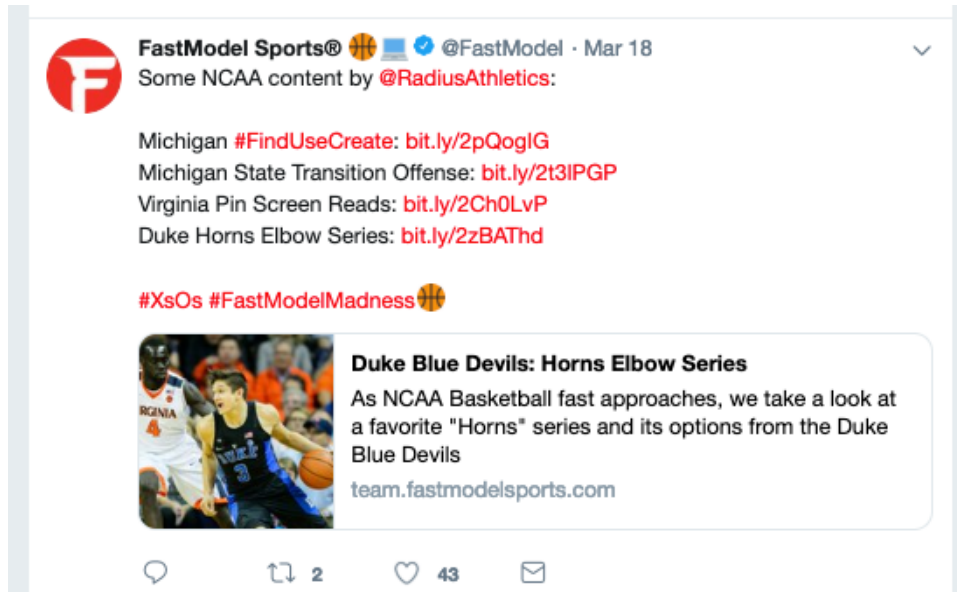


Figure 2: FastModel curates content by sharing multiple links into one tweet.

### The Game of Basketball, and the Phronetic Gap

Before we get started, there are several concepts that need to be outlined that will help guide this section of the praxis paper. These concepts will be further discussed in the literature review.

Table 1 shows four major concepts outlined by Tsoukas (2011), that will help guide our discussion on basketball plays, as well as something FastModel lacks: An avenue to help coaches learn the necessary cultural knowledge to coincide with the synoptic knowledge available through playbooks.



<i>Term</i>	<i>Definition</i>	<i>Example</i>
<b>Synoptic Knowledge</b>	Abstract representation of a real life event.	Visual directions on how to put together furniture from IKEA.   A drawn up basketball play.
<b>Cultural Knowledge</b>	Knowing what the abstract representations represent, or how processes work.	Understanding what the visual directions on the IKEA manual mean; being able to connect jargon with concepts.   Understanding what the symbols, abstractions, and jargon in a basketball play means and how to apply it.
<b>Phronetic Gap</b>	When there is no abstract representation, or there is not sufficient cultural knowledge to solve a problem.	Having a basketball play, but not knowing what the jargon in the title refers to, or not knowing what the symbols on the play mean.  OR  Having insufficient (if any) abstract representation of a play, but only having to go by what you know culturally.
<b>Improvisational Knowledge</b>	Taking what one does know synoptically and culturally to attempt to close the phronetic gap.	Using what you know to try to find a solution that isn't "by the book." Basically, one uses what they know both synoptically and culturally to try to "wing" a solution that isn't explicitly there.  The larger the phronetic gap, the more improvisational knowledge necessary, and the higher chance for error.

Table 1: Organizational communication concepts from Tsoukas (2011),

The game of basketball is relatively simple. There are five players from each team on the court. The team with the ball attempts to get the ball into the other team's basket, while the other team attempts to get the ball back by stealing the ball, or rebounding the ball on a missed shot. The team without the ball is called the defense. It is easier to make an open shot than it is to make a shot that is defended, so offenses need to find ways to get players open.

In basketball, there are five positions. The point guard is called the 1, the shooting guard is called the 2, the small forward is called the 3, the power forward is called the 4, and the center is called the 5. Each position plays a different role and occupies a different space on the court. Then, once a play begins, players move according to where the play designates them to move.

This is where plays come in. Plays often involve all five players moving in rehearsed formations, blocking the paths of other defenders to free up a player, or a ball-handler dribbling the ball closer to the hoop. It is important for basketball teams to have a variety of ways to confuse and break down a defense to help create open shots, which once again are easier shots to make, and thus create an easier path to achieving the goal of scoring more points than the other team. Because plays require timing and proper spacing to work, pre-drawn and rehearsed plays are important so that each player knows what they are supposed to do, and open shots are created.

That is, the physical draw up features abstract representations, such as one seen in Figure 3 of what players are meant to do on the court. In order to read these plays, people must have a large amount of cultural knowledge to interpret what the symbols and diagrams mean. For the untrained eye, it is a bunch of scribbles with numbers that have no apparent meaning.

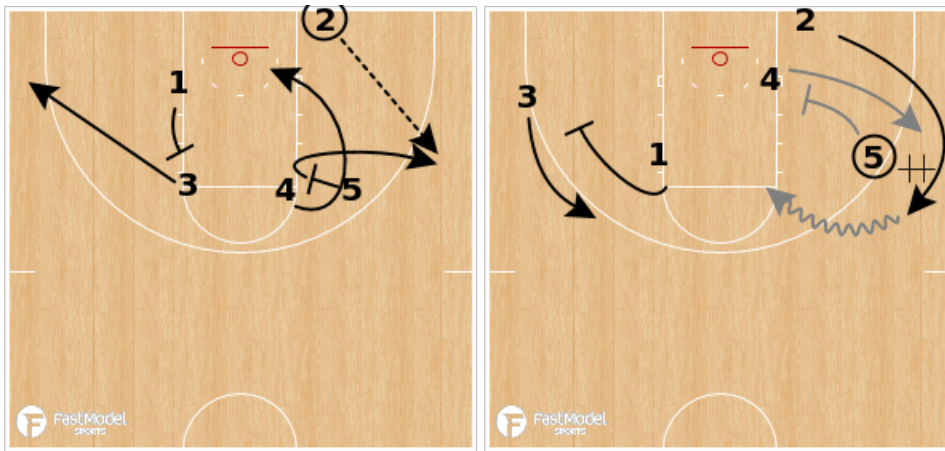


Figure 3: The lines and numbers are abstractions, or representations, of real-life basketball plays.

However, to the trained eye, that is, somebody with a large grasp of the cultural knowledge of basketball, this diagram shows the role of every player, and gives specific directions for what each player needs to do in each action. Of course, this is just one play, and a basketball team needs many plays in order to be able to counter anything a defense may throw at it, so that is why it is a play “book.” A playbook houses many plays.

A playbook is an important part of a coach’s repertoire. Looking back to communication concepts from Tsoukas (2011), a playbook is a large bank of synoptic knowledge. Players and coaches need playbooks to know what their role is on a given play.

In the pre-digital era , prior to the existence of online companies such as FastModel, the playbook may have been physical marker drawings and diagrams of each play, and it would be housed in an actual book. With FastModel, as well as several other software available, now coaches can store their playbooks digitally. This is convenient, because it allows for coaches to be able to access their playbooks in more places, as well as share plays faster than ever before.

Playbooks can also be used to store “drills” which are different than plays. A drill is rehearsed training designed to isolate and train certain skills. Many of these “drills” may involve

1, 2, or 3 players, and then train skills that are translated to certain in-game situations. Much like plays, putting drills in a playbook is a way of storing synoptic knowledge, and is duplicable, so that all players and coaches may have access to it.

There is a high degree of cultural knowledge needed to understand the context of a play. Playbooks are littered with basketball jargon that may make it difficult for the non-trained basketball mind to understand.

For instance, this play seen in Figure 4 ran by the Michigan Wolverines is called “Handoff to Stagger BLOB.” In order to understand what this play entails, it is necessary to know what a “handoff” is in the context of basketball, what a stagger is, what BLOB means, as well as how they pertain to what is on the diagram.

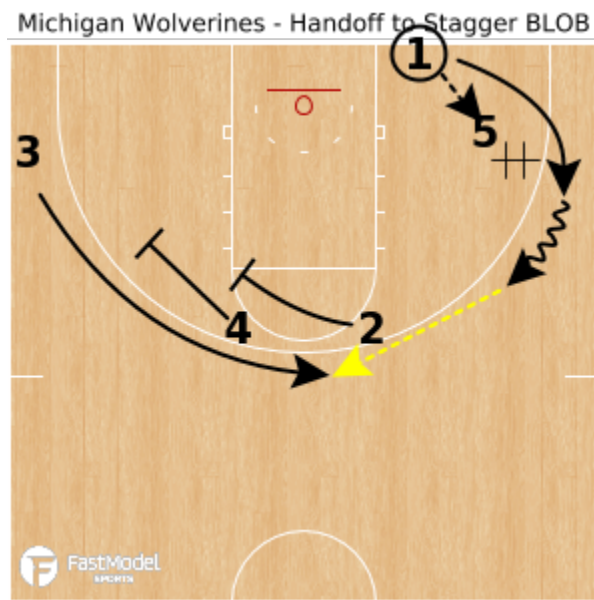


Figure 4: Basketball plays are of little use if one does not understand what the lines and numbers mean, as well as the jargon in the title of the play.

For context, a handoff is exactly what it sounds like. A player hands the ball off to another player. The handoff is represented by a hash near the top right corner of the image. “Stagger” means there are two players setting screens, which effectively blocks the defenders trying to defend the “3” player. BLOB stands for “baseline out of bounds.” Some plays begin with a player, known as the inbounder, passing the ball inside to start what is called the “action.” In this particular play, the one is the “inbounder” that passes to the 5, and then runs around the 5, and has the ball handed back off to him (represented by the hash.) After that, the squiggly line represents the 1 dribbling until the yellow dotted line. The dotted line represents a “pass.” As you can see, the play starts from the baseline out of bounds (BLOB), goes into a handoff, and then the ball is passed to the 3 who comes off the “stagger screen” set by both the 4 and the 2. This is why the play is called “Handoff to Stagger BLOB.”

However, even with the play knowledge, more cultural knowledge is needed to effectively understand what is going on. The person looking at the diagram must know that a squiggly line means a player is dribbling, a hash mark means the ball is being handed off, a dotted line means that the ball is being passed, etc. The diagram itself only represents synoptic knowledge, or a visual abstraction of something.

These concepts will be explored further in the literature review. However, it is necessary to have a general idea of what these concepts are beforehand, because they will help connect some of the struggles with the internship back to these communication concepts. Now, it is time to look into my experience as an intern for FastModel Sports.

### **Section 3: Matt's Role at FastModel**

My role with FastModel was relatively fluid. I mostly helped to produce content for the website, whether it be via articles, putting together playbooks, or scheduling weekend tweets using HootSuite, a popular social media app. I talked to coaches, watched film, diagrammed plays, and did my best to keep creating content that helped coaches learn and grow their knowledge of the game.

That being said, there is no formal internship process at FastModel. I got the job by cold-calling after a previous internship fell through. A lot what I did was specifically defined; it mostly revolved around creating content for the website.

In the next section, I will outline some of the struggles I faced as an intern, especially in regards to working remotely. In my recommendations, there will be a section revolving around recommendations for future interns, should FastModel ever try to adopt a formal internship process.

#### **Struggles as an Intern**

Unlike many internships, where an intern will go into an office for a summer, do all of their work at said office, and then go home for the day, my internship was more fluid. I put in hours when I could, and when I reached the 140 hour limit, the internship was effectively over. This presented many challenges that interns in more traditional environments may not have to face.

First off, I had no office. All of my work happened via my laptop, and that means I had to make do with whatever location I was in. On one hand, this added flexibility was a blessing, since I did not have to commute, or have to adhere to a set schedule. On the other hand, it could be a curse. For the first few months of the internship, I lived at my parents' home in Indianapolis

due to financial struggles. My parents' home only have one table in a very public space. This table is in the kitchen, which faces the family room, as well as the living room. Basically, it is the least private room in the home. That made it very difficult to get work done when my brother was watching TV in the family room, and my parents saw any work on the computer not as work, but "screwing around" and an excuse to give me more chores.

That is not to say I was not grateful for being able to live at home for the summer. This being an unpaid internship, it is the only way I could both work on this while also work for my various labor-intensive jobs. I would come home after a long day of digging ditches with a landscaping company, or covering over 12 miles of ground pushing trash at IKEA to help pay my rent on the apartment that I could not sublet due to it being "graduate housing."

My best suggestion to anybody working remotely is to find a quiet space to work. This could be at the public library, a basement, your room, anywhere that is free of people. I personally did not go to the library that often because hours of working often left me hungry, and I wanted the option of being able to eat without spending money. In retrospect, I probably should have packed a sack lunch and went to the library for the day to get work done.

Second, there is a struggle in not having a set office is finding ways to get hours in. Every hour I put in is actual productive work hours. Now, for an internship, one should be pleased that all hours are productive hours, but it is difficult to realistically expect an intern in a traditional office environment where they are continuously "on the clock" to be productive 100% of the time. Once again, putting in productive hours can be difficult.

Third, a difficulty faced during the summer was that it was the basketball offseason. Basketball season is typically from October to early June. This is the case for most leagues

around the world. One of FastModel's main draws is their "PlayBank," where volunteers draw up plays that they watch in a game, either in person or on TV, and then submit them to be published so that coaches from all over the country can add it to their "PlayBank" and potentially use it for their team. With little basketball being played, there is little to be added to the PlayBank.

Fourth, a major difficulty is one that has no easy solution as FastModel is currently structured. FastModel only has one communication worker, Robbie Lehman. Robbie is so focused on day-to-day processes, such as sending out tweets and curating articles, that he often has little time to edit new content, come up with long term plans for the future, or even breathe.

I had several articles that I wrote, including one that ties organizational core values to basketball concepts, an article about the potentially educational use of the video game NBA2K, one on there being no "correct" answers on how to play basketball, none of these pieces saw the light of day. Robbie just has so much on his plate that he could never get around to fully editing them. As a person, I could not be mad at Robbie because he does his best to maximize each day. As a contributor, those past experiences made me feel hesitant to put in effort to continue making long-form content, as I did not believe it would get published.

This got worse as Lehman became diagnosed with carpal tunnel syndrome late in 2018. As the only paid communication worker, he literally could not do his job effectively because his hands could not type a sufficient rate. With no people to pick up the reduced output, FastModel could not maximize their ability to make content.

Not to mention, with no second communication worker, content can sag at important times in the college basketball season. For instance, during the week of the Final Four, which is a



time in college basketball when the entire world is paying attention to the sport thanks to “March Madness,” Robbie had to make a ten hour drive to Minneapolis, Minnesota. Sure, he had scheduled tweets ready to go while he was on his drive. However, that is a lot of missed opportunity to edit and churn out more long-form content during a week that the eyes are on the basketball world.

Basically, having only one paid communication worker stymies the ability for Lehman to handle anything more than day-to-day tasks, and also creates very little margin for error in regards to workplace injury, travel, and other issues that keep FastModel from reaching their maximum communicative potential.

However, even with all of the struggle, FastModel provided an avenue for me to use already existing products to create content. One of the main products I used is something called “NBA League Pass,” a product that allows a user to watch any NBA game at any time, regardless of location.

### **NBA League Pass**

As I previously mentioned, I began my internship during the summer, which is a dull period for basketball. If there is no basketball being played, there is nothing new to be added to the PlayBank. Luckily, I received a subscription to NBA League Pass for my birthday, so my role expanded in mid-October when the NBA season started. It is much easier to get hours in when there is basketball to be watched and plays to diagram.

For those that do not know, NBA League Pass is a service that allows paying customers to have access to every NBA game during the regular season. Normally, availability of games is separated by market. For instance, somebody in Cincinnati may only have access to the Indiana

Pacers or Cleveland Cavaliers, since they are the closest teams to the Cincinnati market.

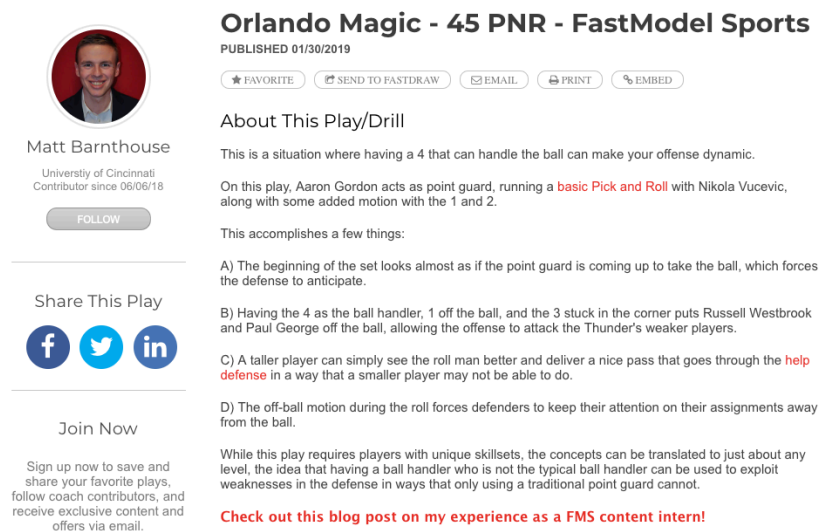
However, without NBA League Pass, a person living in Cincinnati would not have the chance to watch regional broadcasts of the other 28 NBA teams. With NBA League Pass, the viewer can watch every minute of every game, including replays. This is particularly important to me because diagramming plays often takes multiple re-watches, and the ability to rewind and re-watch plays is imperative to providing an accurate diagram for coaches to use for their own teams.

That is not to say I was not completely unproductive during the summer. Many of my jobs were to put together playbooks of previously diagrammed plays, which FastModel then released to the public as a “free playbook” available for download. I produced a “March Madness” playbook, which featured all diagrams from the 2018 NCAA Men’s Basketball Tournament, an NBA Playoffs playbook, which featured all diagrams from the 2018 NBA Playoffs, as well as a yet-to-be released “#PlayerDevelopmentWeek” playbook, which features drills from all collaborators during a special week that was used to fill a very slow part of the offseason.

As stated before, once basketball season started, my role changed once again. It went from only sorting playbooks to watching basketball and drawing up plays to be showcased in the PlayBank. Having a NBA League Pass allowed me to watch past games at any time, so I would spend my mornings closely watching basketball games, looking for sets and plays that may be useful to other teams. Another great thing about having access to NBA League Pass is that because I do freelance work for college teams, it allows me to publicly showcase my ability to draw up basketball plays, without causing tensions with potential clients, who may not want their plays publicly available to the public.

Once I saw I play I liked, I drew it up using the FastDraw software, then sent it to the main server and wrote a description for the play. While many coaches have different philosophies, I usually tried to explain each action, or part of the play in as simple terms as possible, as well as showcase situations that coaches may be able to use similar sets or plays with their teams.

As you can see in Figures 5 and 6, this play has two parts<sup>1</sup>. First, a few paragraphs of exposition, that explains what happened during the play, as well as how concepts from that play can be applied to other teams. Following that is the diagram of the actual play that has descriptors at the bottom to help describe the actions going on.



**Orlando Magic - 45 PNR - FastModel Sports**  
PUBLISHED 01/30/2019

★ FAVORITE   SEND TO FASTDRAW   EMAIL   PRINT   EMBED

**About This Play/Drill**

This is a situation where having a 4 that can handle the ball can make your offense dynamic.

On this play, Aaron Gordon acts as point guard, running a **basic Pick and Roll** with Nikola Vucevic, along with some added motion with the 1 and 2.

This accomplishes a few things:

- A) The beginning of the set looks almost as if the point guard is coming up to take the ball, which forces the defense to anticipate.
- B) Having the 4 as the ball handler, 1 off the ball, and the 3 stuck in the corner puts Russell Westbrook and Paul George off the ball, allowing the offense to attack the Thunder's weaker players.
- C) A taller player can simply see the roll man better and deliver a nice pass that goes through the **help defense** in a way that a smaller player may not be able to do.
- D) The off-ball motion during the roll forces defenders to keep their attention on their assignments away from the ball.

While this play requires players with unique skillsets, the concepts can be translated to just about any level, the idea that having a ball handler who is not the typical ball handler can be used to exploit weaknesses in the defense in ways that only using a traditional point guard cannot.

**Check out this blog post on my experience as a FMS content intern!**

**Share This Play**

**Join Now**

Sign up now to save and share your favorite plays, follow coach contributors, and receive exclusive content and offers via email.

Figure 5: The first part of the play explains the context to which the play occurs. It is also possible to give suggestions onto what contexts the play may be used.

<sup>1</sup> <https://www.fastmodelsports.com/library/basketball/fastdraw/283199/play-Orlando-Magic--45-PNR>

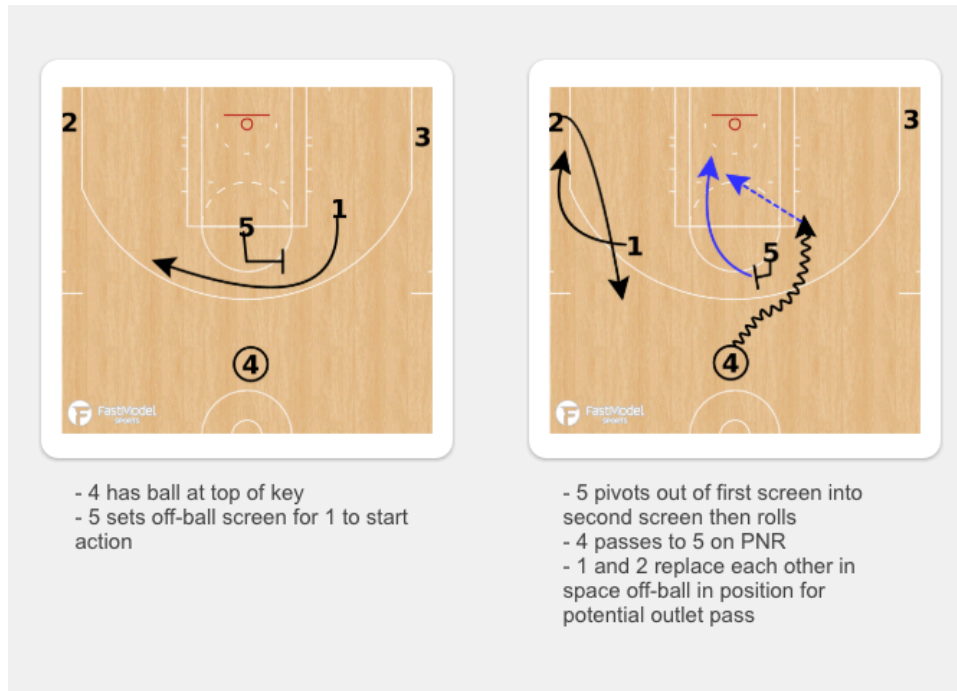


Figure 6: The second part of the play shows the actual diagram, and gives context to what happens in each frame.

Subtle, yet important parts of the webpage are designed to keep people on the site. For instance, and the end of the exposition paragraphs, there is a link to a blog<sup>2</sup> I wrote about my winter break travels visiting coaches, which opens a link in a new tab, keeping site visitors on the FastModel website consuming FastModel content. The concept of “gold coins” or subleitems to keep somebody coming back to a webpage is discussed later in the paper, and further elaborated on in the recommendations section as one way to improve the FastDraw software.

#### Section 4: Literature Review

In order to better understand the concepts that we will be looking at in this praxis paper, it is important to review some key literature that helps outline the core concepts covered. There are three main areas of literature that this praxis paper will explore: The phonetic gap, User

<sup>2</sup> <http://team.fastmodelsports.com/2019/01/11/coaching-development-intern-networking/>

Experience (UX), and affect theory. As Chart 1 indicates, these three concepts help provide a basis for recommendations to improve the company.

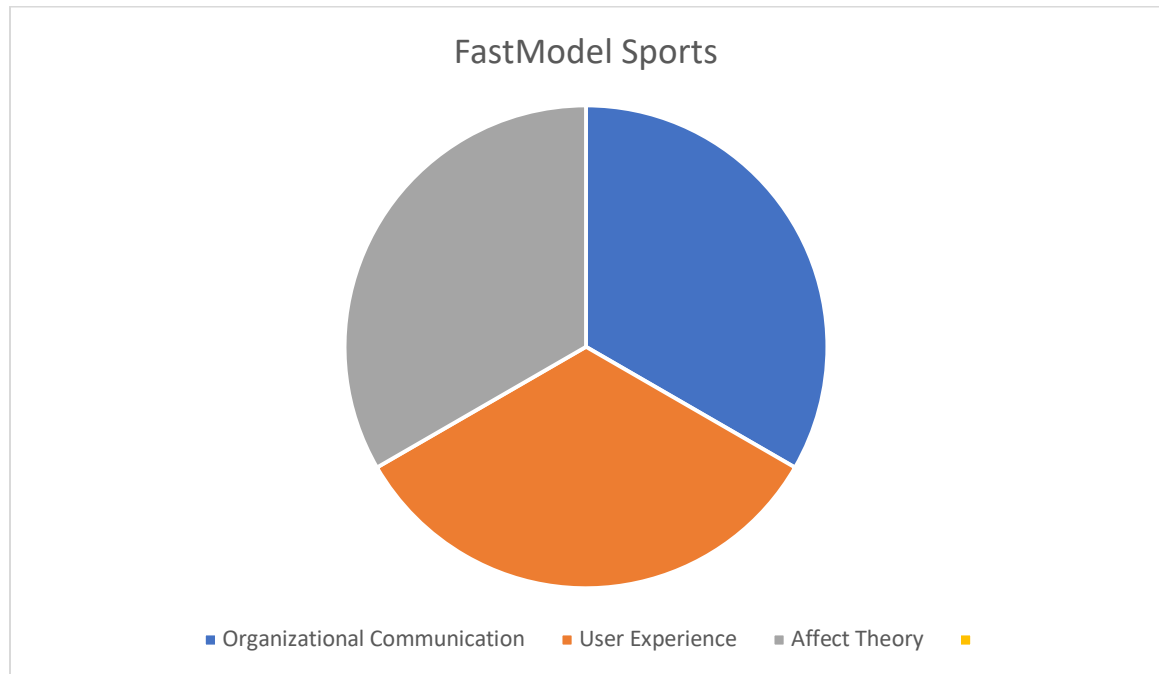


Chart 1: This paper will use literature from three areas to create a complete picture on how to improve FastModel.

### Role of the Phronetic Gap

First, we will talk about the phronetic gap. In order to discuss the phronetic gap, one must be able to outline three kinds of knowledge: Synoptic knowledge, cultural knowledge, and improvisational knowledge.

Tsoukas (2011) describes synoptic knowledge is knowledge that is recorded and abstracted. To put in another way, Tsoukas uses an example of a copy machine, and a manual that has pictures to show common fixes to common problems. The photos on the page showing how to fix common problems is an example of synoptic knowledge because rather than having

somebody physically show you how to fix the copy machine, it is only represented in an abstract photo. In the case of FastModel, playbooks are examples of synoptic knowledge because each play is representative of something that goes on to the basketball court.

However, synoptic knowledge is of little use if the people in the organization do not know how to use the synoptic knowledge to understand or fix organizational issues, or understand the jargon and symbols are associated with drawn up basketball plays. This is where the term “cultural knowledge” comes in. Cultural knowledge is the understanding of how a process works, or what the synoptic knowledge represents. Going back to the copy machine example that Tsoukas uses, the photos and abstractions are of little use if the person has no idea what a copy machine is, and what those photos represent. One can have all of the tools in the world, but if they do not know how to use the tools, they are of little use. In a similar sense, a team can have the best playbook in the world, but if they do not know what the jargon means, or what the abstract symbols on the drawn up play mean, all of that synoptic knowledge is useless.

This brings us to an issue: Not all problems have abstract representations. In life, one will come across obstacles that have no synoptic knowledge, and one must rely on what they know from both synoptic knowledge and cultural knowledge to use what is called “improvisational knowledge.” Basically, somebody is using what they know both synoptically and culturally to try to fix a problem that has no clear set of directions to fix. For example, that copy machine may have a unique problem that is not explicitly outlined in the manual. However, one can use what they know about copy machines, as well as what they know from the diagrams of the copier, to improvise and come up with a fix that may not necessarily be “by the book.” They take the synoptic and cultural knowledge they do know, and use it to the best of their abilities to find a solution.

This brings us to what we call the “phronetic gap.” The phronetic gap is the metaphorical space between one’s synoptic and cultural knowledge, and the amount of improvisational knowledge necessary to achieve an organizational goal. Ideally, there should be as little improvisational knowledge as possible, because life would be a lot more convenient if there was an explicit solution to every problem. Improvisational knowledge is like fixing a crack in a car bumper with duct tape. It may work, but the larger the crack, the more chance it won’t work. Little synoptic and cultural knowledge means that there is a larger phronetic gap, and more improvisation is needed. Having lots of synoptic and cultural knowledge requires less improvisation, and therefore there is a smaller phronetic gap.

For instance, Figure 7 shows the first play I ever published with FastModel. Even though I had a lot of basketball experience in regards to positions, skills, and how the game is played, I lacked the necessary cultural knowledge to fully understand the jargon that many coaches use, as well as the cultural knowledge to put together a play that made full sense. Notice that every large-numbered player has a circle around their number. When I made this play in June, I thought that a circle meant “that team had the ball.” In reality, a circle around the player number means that particular player has the ball. This figure, to somebody culturally trained in basketball, shows that there are five balls on the court at the same time, since there are five players circled. Since I had a general idea on how basketball plays worked, but not all of the cultural knowledge, I had to improvise when drawing up this play, and used improvisational knowledge to try to show which team had the ball. Unfortunately, the phronetic gap was too large for me, and I made an error, making it look like five players had a ball at the same time.

Sure, a coach may look at the play and be able to use their synoptic and cultural knowledge of how plays work to eventually figure out what the drawn up play is meant to show,

but because I did not follow the standard, a coach reading the play will also have to close a phronetic gap by using improvisational knowledge to figure out who has the ball.

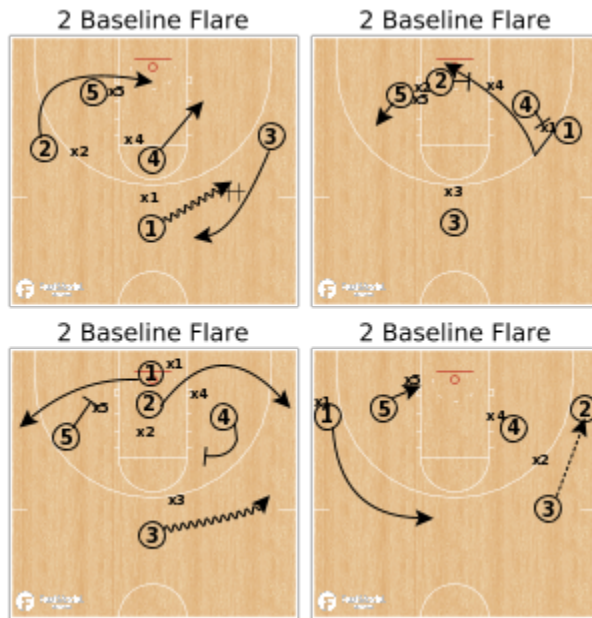


Figure 7: I lacked the cultural knowledge to understand that a circled number meant “player has the ball,” and my use of improvisational knowledge was incorrect, creating a confusing play.

### No Avenue to Learn

Unfortunately, as of now, there is no avenue within the FastModel website or FastDraw software for coaches to be able to learn these concepts, and close that phronetic gap before their work is published. In my solutions section, I will propose that FastModel create a glossary for basketball concepts to help close the phronetic gap. This will help young coaches, such as myself, learn to correct their mistakes and learn the jargon, concepts, and other basketball strategy necessary to be able to better communicate what is going on in each play.

The problem with the phronetic gap is highlighted in a case study by Leonardi (2009), where a major automotive company (pseudonym Autoworks) attempted to implement a new



piece of software called “CrashLab,” in order to help their engineers more efficiently do their jobs. CrashLab was meant as a complementary software to already existing pre-processing and post-processing tools.

The greater purpose of CrashLab was to automate key processes that would allow engineers to spend less time on actual “model building” and more time on analysis. Initially, the employees were optimistic that CrashLab would improve their ability to do their jobs. However, social interactions that led employees to believe CrashLab was a preprocessor (it was not), along with the lack of on-site developers to help with technical difficulties led to CrashLab being rejected by the employees of Autoworks, even if the technology would help if used via its original intention.

To connect with previous literature, the developers and managers had a key cultural misunderstanding with the term “speed” and what it is associated with among Performance Engineers (PEs.) To PEs, speed is associated with *preprocessing* and *not postprocessing*. In this case study, developers and managers emphasized CrashLab’s “speed” when describing the program, which led to many PEs to believe it was a preprocessor. Once again, CrashLab was meant to be used in complement to preprocessing and postprocessing, and not as a preprocessor. Naturally, CrashLab was a poor preprocessor, and through continued actions with the software, employees grew frustrated with CrashLab and began to reject it.

Since there were no developers on hand to guide the workers as they worked with CrashLab, the workers who felt most comfortable with the software had to teach the workers who were least comfortable with the software. The major problem is that neither the most comfortable nor least comfortable had near the sufficient amount of cultural or synoptic knowledge to use CrashLab for its intended purpose. This lead to heavy use of improvisational

knowledge, since low cultural and low synoptic knowledge leads to a larger phronetic gap. When there is a large phronetic gap, there is a greater chance for error, and continued interactions with people that claimed CrashLab was a preprocessor, and continued interactions with the software in its attempt to be used as a preprocessor led employees to believe CrashLab was a preprocessor, and since it was not a good preprocessor, Crashlab was ultimately rejected.

This case study highlights the importance of continued training, as well as access to knowledge-havers to help employees who may have issues with low cultural knowledge, synoptic knowledge, or both. When there is a large phronetic gap, there is greater chance for error, since just about every situation is considered “situationally unique.” When every situation is unique, and there is not enough cultural knowledge to supplement the synoptic knowledge, there is a high likelihood of confusion, frustration, and mistakes in interpretation of what something is supposed to be.

CrashLab was never meant to be used as a preprocessor, but employees, thanks to their association of the term “speed” and “preprocessing,” incorrectly used cultural knowledge to close a large phronetic gap, thanks in large part to a lack of access to developers of the software. Repeated interactions with the software as a preprocessor (which will be explored more in-depth in the affect theory section), led PEs to believe that CrashLab was merely an ineffective preprocessor, which led to PEs being hesitant to use the software, until ultimately the software was rejected, even though the software itself would have helped them if they used it in the intended way.

This ties into my experience with FastModel in that some of the features are not clearly described. For instance, after adding a play from the PlayBank to your FastDraw library, there is no notification that says “play successfully added.” Figure 8 shows that the only way to exit the

widow is through a button that says “close.” In my experience, “close” is associated with “exiting” a program or window, ending any progress one made in the task of that window. One never “closes” a window without being completely finished with the task at hand. Since one of my jobs was downloading dozens of plays at a time, I needed to know that the task was successfully completed before hitting “close,” out of fear that I would lose all of my data and work. However, there is no notification that tells the user that the task is completed, and the only way to exit is via the “close” button. After about ten minutes of anxiously looking for an alternate way to “end” my task, I resigned to hitting the “close” button, only to find out that my plays successfully downloaded, and I had nothing to worry about. So much time wasted because I associated “close” with exiting out of a task, and I did not believe the task was finished thanks to no “task completed” notification.

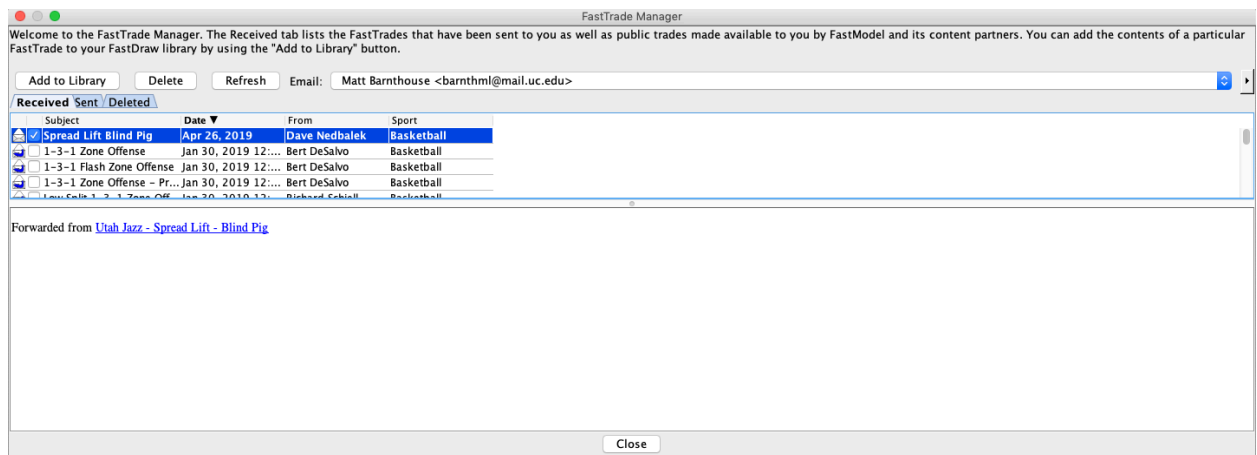


Figure 8: After pressing “add to library,” there is no notification that the task is completed. The only way to leave the screen is to press “close,” which is often associated as a button to only press when one explicitly knows a task is completed.

## UX Literature

Next, we will dive into literature on user experience, or what is more commonly known as “UX.”

The first question to ask when talking about user experience, is to be frank, what is UX? Stull (2018) describes user experience as “knowledge gained by doing something” (p.4) in his textbook *UX fundamentals for non-UX professionals*. In this particular instance, our user experience is using the program “FastDraw” by FastModel Sports.

I relied on two main sources of literature for this aspect of my paper. The first book is the aforementioned 2018 textbook *UX fundamentals for non-UX professionals: User experience principles for managers, writers, designers, and developers*, which highlights UX concepts in a way that is palatable for non-UX professionals to understand and use. The other main source of literature is the Ferreria (2017) textbook *Universal UX Design: building multicultural UX experience*. As basketball is a global game, and FastModel a global product, it is important to understand UX from a global perspective, because this software needs to be accessible and understandable to a global audience.

For the purposes of this paper, we will be using Stull’s (2018) definition of user: “A user is a person having an experience.”

As simple as this sounds, user experience is the core of what makes up the entirety of the experience with the FastDraw software. Every time one pushes a button, or gains a new experience with the software, the expectations change and the expected outcomes change, affecting the future actions and reactions of the user for future experiences. These expectations and experiences will be discussed in further detail in the “Affect Theory” section.

UX, much like the early stages of Communication, is a mash up of a variety of disciplines, including anthropology, human-computer interaction, engineering, journalism, psychology, and graphic design (Stull, 2018). Stull (2018) suggests UX practitioners could have many kinds of degrees, such as library sciences, engineering, psychology, among many others. (p. 4). There are two major areas of UX design: User Experience Design, or UXD, and User Experience Research (UXR) (p. 4). As implied, UXD goes into the design process of user experience, and UXR uses both primary and secondary research methods to learn about consumer behavior. Ferreria (2017) says user experience design is meant to both create clients and promote an “engaging and relevant experience for the user” (p. 3).

When using a digital product and designing a UX experience, one must consider dimensions of the actor, the afforded interaction framework (software), and context or ergonomics involved. The actor does not have to be a person. They can be a person, a system or a combination of both. The actions of the actor triggers a response in the digital network, from pressing a button to installing new software.

Stull (2018) suggests the concept of “gold coins” as a way to keep users engaged in a product. Gold coins are basically small things that keep the user engaged (p. 95-96). That can range from a leaderboard at a local arcade, to a digital medal that says “good job, you tried your best” in the popular webgame QWOP. Gold coins give the user something that breaks away from the mundane, a novelty, something that will be explored more as we look into affect theory.

UX literature also stresses the need to consider past experiences to decipher new information (p. 37), a concept that will be looked into further in the review section on “affect theory,” as well as a few others that will be outlined in the following paragraphs.

Past experiences helping shape future experiences is reflected in Stull (2018) in that users collect experiences, and the context matters in helping design the user experience. Stull uses an example that a mobile app that works in an office setting may not work as well when riding a bicycle (p.37). When designing applications, it is important to understand the context in which users will experience the application, and be mindful that those past experiences will shape future experiences, and that as seen in Leonardi (2009), poor communication of an application's intended use may cause it to fail, even if the app itself is useful.

In UX design, Stull (2018) mentions there are many user needs that have to be met in order for the user to continue using the product. These can range from simple visual cues, such as a museum website having a direct link to “hours” on their front page, (p. 102), to unique features for those who have accessibility issues due to disability, such as a text-to-speak function for the hearing impaired (p. 117-118).

Stull (2018) also mentions that users are inherently lazy. They want the path of least resistance. Therefore, when designing UX, it is important to create a product that does not confuse or frustrate the user, as already noted with Leonardi and CrashLab. That often means it is important to keep things as simple as possible, as too many features or menus can confuse a user (p. 30). This is backed up in a study by Ferreira (2017), in that the study shows that American and European users will abandon a video sharing website if the video does not load in 2 seconds . Quick load times make the user able to accomplish what they wish to accomplish (watching the video) with little resistance. It is a simple task, but if one cannot handle the simple tasks, such as quick load times, the user gets frustrated and abandons it.

Another relevant UX idea from Stull (2018) is that if somebody finds a way to accomplish their goals better, they will move on to a different product. For some niche

industries, having a poor product may not affect it as much, where a certain software may be the only option for a business to use. However, as soon as a superior product comes to the market, people tend to move to that superior product. (p. 98-99) That is why it is important to continually push to optimize the product for user experience, to make sure the company's product is the top of the line, and that people will not look for other solutions to their problems.

Wrapping up the UX portion of this literature review, it is important to remember a few rules of thumb. First, UX is the core of any interaction with a computer, whether it be pressing a button or gaining a new experience within the software. Second, UX is a mashup of many disciplines, including including anthropology, human-computer interaction, engineering, journalism, psychology, and graphic design, but it has yet to break away as its own field of study. Third, good UX has metaphorical “gold coins” spread out to keep the user involved. Fourth, users want the path of least resistance to accomplish their goals. That means it is important to be as simple and easy to use as possible. Lastly, people will move to a different product if the current product does not help them achieve their goals best. UX design may be a variety of disciplines mashed together, but its interactions are communicative in the sense that humans and computers are interacting together in search of shared meaning, and will be further explored in our look at “affect theory.”

### **Affect Theory**

Next, this paper will explore affect theory, a concept in visual rhetoric that ties in well with UX literature, otherwise known as affect theory. Affect Theory has a variety of definitions, but for the sake of this paper, we will focus on Massumi (2007), and the idea of past meeting future without ever touching the present. For instance, the first time a program glitches out and crashes, I feel a jolt of frustration, and for about a half of a second, I do not consciously realize I am

feeling frustrated. However, that memory of feeling frustrated will help determine my future interactions with the software. If glitching out and crashing is a frequent issue, every time I think about using that software, I will feel frustrated, and a hesitation to try to open up the software. This feeling of frustration, dictating future frustrations, happens without ever meeting a present feeling of frustration.

To put into better terms, think about the classic tale of the “boy who cried wolf.” The first time the boy cries wolf, the town goes into a frenzy to try to save the boy, only to find out there is no wolf and the boy is lying. The next time the boy cries wolf, the town still tries to help, but in less of a frenzy, only to once again find out there is no wolf. Past experiences of the townfolk make the boy out to be a liar. Later, the boy cries wolf a third time. This time there is actually a wolf. However, thanks to past experiences associating the cry to wolf as a bluff, the townsfolk do not react, nor try to help the boy. The boy is eaten by the wolf.

In a vacuum, every time a boy cries wolf, people should be rushing to help, because crying wolf means there is imminent danger. To put into other words, thinking only in “present” terms, one should expect the townfolk to help every time. However, the past experiences of the boy being a liar dictated the belief that future cries of wolf are not real cries for help. The past experiences (trying to help, then finding out the boy is a liar) dictate the future experience (no longer rushing to save the boy when he cries wolf). The future experience was determined in the past when the townsfolk determined he was a liar, not in the present moment of crying wolf a third time.

Tomkins (1962) describes affect as a “modulation” of the drive system. For instance, when one is hungry, they feel hunger. When somebody becomes physically hurt, they feel pain. However, if somebody is faced with great physical pain, but only a small amount of hunger, a



person will “forget” about the hunger and focus on the pain. Drives are that subconscious reactions that hits a person before they realize they are feeling something, and affect modulates those subconscious reactions to give them a certain amount of intensity.

To go more into what Massumi means, Massumi speaks of tendencies, as well as a split-second physical reaction before the human mind can register that it is being affected. To put into better words, past experiences form tendencies to how the body will react subconsciously. Past experiences are forming potentials for future outcomes without ever touching the present.

In other words, my reaction to a problem that happens once will probably be less severe than a reaction to a problem that has happened several times before. This can occur the opposite way too. If I have a positive experience, such as successfully publishing a play, my association with the software is positive in that split second, and future experiences will use that positive feeling to create future outcomes.

This is important to tie into both Leonardi and the UX literature, because they both speak of past experiences helping form future outcomes. In Leonardi, the previous experiences of misusing CrashLab as a preprocessor, as well as the negative interactions with coworkers about the software, led the PEs to hesitate to use the software, and then altogether abandon it. The software itself was fine. It just wasn't a preprocessor. However, the perception that it was a preprocessor lead workers to use it as a preprocessor, and the negative experiences with the software lead to negative association with the software, which dictated future negative interactions with coworkers about the software, and once again, lead to the abandonment of said software.

Not all affective elements are negative. Positive affective elements, such as a positive experience using a software, or positive association with someone or something, will lead one to have future positive affective encounters with that thing or person. Think about the last time you had a crush on somebody. The minute you walk into a room, you smile. You don't realize you're smiling, but you are. The half-second after you see your crush, you can't help but smile. As soon as you consciously realize you're smiling, you may become self-conscious and stop. However, for that split-second, you had no control over your reaction because past experiences determined that you had feelings for that person, and it helped determine that future encounters would lead you to have that smile when you see them.

At FastModel, there are some positive affective elements in the software, as it is relatively easy to use, and sending individual plays is a breeze. I enjoy drawing up plays using their software, and being able to easily convert plays into PDFs, and sending them into fellow coaches makes me want to come back and use the software again. When I had positive experiences, I felt compelled to go back, which falls in line with affect theory.

However, there are some issues, particularly with the website and email systems, that have negative affective experiences, almost to the point where I did not want to go through the hassle of using the website or create content because of the difficulties they caused. For instance, the PlayBank itself is very unorganized. There is a search function, but one can only search by directly searching in the search bar, or by "published date" or "popularity." When publishing, one can set tags such as "man offense," "need a 2," "need a 3," etc. However, there are no buttons in the search function that allow one to actually search those tags. Bringing this back to affect theory, the more I tried organizing plays into playbooks from the PlayBank, the more negative experiences I had, and the more hesitant I was to use the PlayBank.

For instance, as will be exemplified later, one cannot send multiple plays at a time from the PlayBank to the FastDraw software. It is a process that involves sending plays one at a time. Every time a play is sent to your FastDraw software, you get an email receipt. That means when one has to put together a playbook with dozens of plays, there are dozens of emails sent to the user's inbox. Since one of my jobs was to put together playbooks from preexisting plays, my inbox became cluttered. The more cluttered my inbox got, the more frustrated I became. These negative experiences made me feel hesitant to use the PlayBank unless I absolutely had to. The disorganization, along with the frustrating "one at a time" play sending interface had affective influence. In other words, the my past negative interactions with the website and software lead to future discomfort using the software, and almost abandoning using the website unless I had to use it for my internship.

My experience confirms both affect literature and the UX literature in that my past experiences helped form my perceptions in future experiences and overall desire to continue use of the software. Stull (2018) mentions that users collect experiences, and context matters when designing an application (p.38). Because misuse of the app may cause users to collect negative experience, and hesitate to use the app, even if there is a context in which the app is "supposed" to be used by the consumers.

Speaking of context, FastModel and FastDraw do a very good job at communicating what the purpose of the software is (create plays and playbooks), and the PlayBank is very clearly meant to be a bank of plays. FastDraw also does a very good job at keeping the interface relatively simple, and drawing up plays is a breeze. It is easy to collect positive experiences when making plays with FastDraw, because the software is so good. I do not believe I ever had a single issue drawing up a play. The ability to choose between high school, NCAA, NBA, and

FIBA courts is something that makes the experience positive to coaches at all levels, and the ability to have a full court, half court, as well as choose whether or not to have the out of bounds areas shown is something that is wonderful and easy to navigate. While there is customization with those court dimensions, it is simple customization that most people with basic basketball and computer knowledge can figure out easily, thanks to the options for court dimensions being readily available at the start of any new play. These are positive aspects of the software included in the ux experience that made me want to come back and continue using the software.

The negative experiences only begin when it comes time to organize or move around multiple plays at a time. This was already mentioned briefly earlier when talking about frustrations involving trying to send multiple plays at a time, adding to that hesitation to try to download plays from the PlayBank, or attempt to sort plays into playbooks.

For instance, a small, rare, issue in the FastDraw software, or one's cultural knowledge of the software may be a minor setback, but nothing that derails the experience. Or to put into better words, if my main goal is to create a play, and I accidentally copy and paste the wrong information, my drive to complete the play is stronger than my frustration with copying and pasting the wrong formation. However, if there is a major glitch in the system that keeps me from drawing up anything, or the program runs very slowly to the point where I cannot adequately draw up any plays, my drive to restart the program will overtake my drive to finish the play, hence aligning with Tomkins' idea that affect is a modulation of the drive system, and the drive with the greater affective modulation will take precedent over any other drive at that moment.

## **Bugs**

Merriam-Webster (2019) defines bug as “an unexpected defect, fault, flaw, or imperfection.” All bugs are not created equal. Some programs have bugs that do not affect user experience that much, but some bugs can crash software, destroy memory (Bramwell 2004), and even lead to death (Lee 2018), as was the case in a software bug in Uber’s self-driving cars. A bug that is a minor inconvenience may be frustrating, but may not cause as great of a negative affective response as a bug that completely crashes the software.

Not all software bugs are bad. A glitch in the popular video game “Pokémon Red and Blue” allowed gamers to face a glitched Pokémon named “Missingno”, which leads to the player getting 128 of whatever item is sixth in their item slots (Hernandez, 2016). This bug can be a positive experience that enriches a software, and can lead players to come back, perhaps even as an unintended “gold coin,” as it adds a wrinkle to an otherwise familiar game.

As far as I know, there are no bugs in FastDraw that have a “Missingno” effect, but it is still worth noting that all bugs are not bad, in case there is a bug in the future that unintentionally benefits the experience rather than causes detriment.

Some negative bugs exist in the software, especially when trying to upload a play to the PlayBank using Google Chrome, and it only works on my computer when I use Safari. Thankfully, I am computer-savvy enough to understand this, and can work around it. Other coaches may struggle with understanding why their plays will not upload, and this kind of roadblock may be something that makes people hesitant to use the software. Occasionally, the FastDraw software would close unexpectedly, then open up in a very tiny window on restart that was very difficult to see. This is a more minor issue, since it only required the use of hitting the “plus” button on the window, but for non-computer savvy coaches, this can also be incredibly

confusing and frustrating. Tying back to affect theory and UX, collecting negative experiences made me feel less enticed to use the software.

The idea of a “wrinkle” adding to the novelty is expressed both by Stull (year) when referring to gold coins in software, as well as Tomkins (1962) when describing human affect, in that human stimuli is attracted to the human organism if they possess both sufficient familiarity as well as sufficient novelty.

Granted, computer software is not a human organism. However, Tomkins wrote this piece before computers were in widespread use by people around the world, so perhaps he did not consider the idea of technology having similar affective attributes, as demonstrated with the idea of “gold coins” providing novelty in a familiar software.

An important takeaway of affect theory is that it is important to build positive experiences in regards to people using a company’s software. Sometimes, it is not enough to just have software that can do a job well. As Leonardi’s case study shows, a software, if not communicated properly, can lead to a larger phonetic gap, and people may experience software in a way that it is not intended to be used. A collection of bad experiences in an otherwise good software can lead to people not using, and even outright rejecting a software, even if the software has capabilities of helping the user accomplish their tasks. This ties to affect theory because it is the past helping determine the future. The past negative experiences created tendencies for PEs to associate CrashLab as a “bad” software, and so there was less tendency to use it.

In my own experience with FastDraw, the more emails that flooded my inbox, the more issues I had publishing plays to the PlayBank, the less I wanted to go back to the software. The mere thought produced a reaction of annoyance. Once again, the drawing up plays part of

FastDraw process is great. It is the publishing online part that brings negative affective experiences, thanks to the buggy publishing system.

Overall, the FastDraw software from FastModel is very good and easy to use. FastModel does a very good job of promoting the potential uses of FastDraw on social media, and I have little trouble using the software as a virtual playbook. Once again, the negative experiences occur when attempting to transfer plays to the PlayBank, using the PlayBank to find specific concepts, rather than specific plays, and downloading multiple plays from the PlayBank at a time.

It is also important to have things like “gold coins” and other novelties to keep long-time users engaged in an already familiar software. The combination of familiarity and novelty helps draw positive affective responses, and provide more reasons for the user to keep using the software.

Bugs have affective properties, both positive and negative. As affect is a modulation of drive responses, a minor bug can cause a minor inconvenience that has negative affective consequences, but not necessarily ruin the user experience, but a major bug can completely ruin a user experience, as well as potentially lead to death, as seen in the Uber self-driving car fiasco.

## **Section 5: Challenges faced with Software**

### **FastDraw is not perfect**

While FastDraw as a whole is a very responsive and useful software for basketball coaches, there are several communication issues prominent that are worth noting. Leonardi (2009) talks of organizations that reject technologies that they are in favor of due to communication issues in understanding how the specific type of software is to be used. If those working do not understand the purpose of a technology, and use it in a different way, they may reject the technology, even if it is a technology they want.

This issue of negative experience, or affect comes into play with how some of the features in FastDraw. When importing a play taken from the PlayBank, one must hit “close” to get the play to import. “Close” is a term often associated with exiting out of an application, and is very confusing, similar to a way that “speed” being associated with something different than intended confused the engineers of CrashLab in the Leonardi piece. I spent 10 minutes trying to figure out where the “import” button was, then got frustrated and pressed “close,” only to find that “close” is the final step to importing a play.

### **Crashes**

Other issues that plague the import play process include importing too many plays at once leading to software overload, and crashing the program. This is not a problem for those only attempting to import one or two plays, but can be a major problem if one is attempting to import a playbook’s worth of plays. One of my roles included making public playbooks featuring large



amount of plays transferred to my FastDraw software, and I experienced numerous frustrating crashes due to the software's inability to import many plays at a time.

It is worth noting that a crash is different than a bug. A bug is a mishap in the software that does not keep the software from running. A crash is a complete failure of the software. Everything closes out. Everything quits. One has to completely restart the application after a crash.

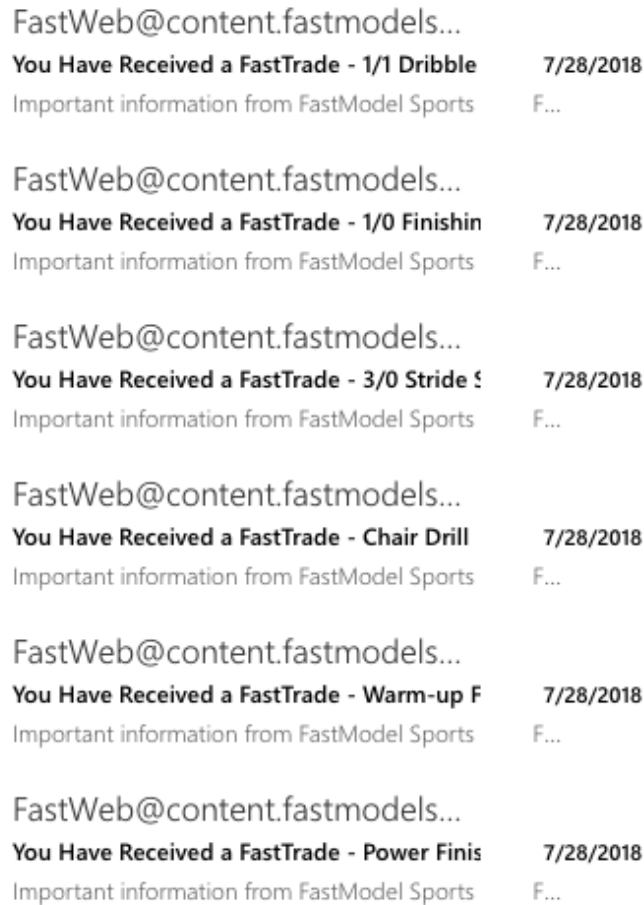
Once again, these are negative experiences collected over time. UX literature suggests that users collect experiences, and affect theory explores the split-second unconscious feeling brought by previous experiences, and those previous experiences added up. The more crashes I had, the less I wanted to use the software.

### **FastTrade Frustration**

Another technological frustration faced with FastDraw is the system called "FastTrade," which I previously mentioned. When sending a play to one's FastDraw software via "FastTrade," every single play one sends is sent an email receipt. I had to make playbooks that often featured hundreds of plays, so my email got clogged up by receipt after receipt, as seen in Figure 9 . I imagine that if a coach wanted to import a large amount of plays, they would be frustrated with their email servers being clogged up by receipts, because I sure know I was.

Research by Fuller, Vician, and Brown (2006) backs this up. "Email anxiety" is a real thing. They define email anxiety as the "fear or apprehension associated with real or anticipated use of a computer to communicate via email." While FastTrade emails are mostly one-way communication, as one does not need to reply to the email that notifies that they received a

FastTrade, one can reasonably expect a little bit of anxiety of the anticipation of hundreds of emails flooding their inbox.



FastWeb@content.fastmodels...	<b>You Have Received a FastTrade - 1/1 Dribble</b>	7/28/2018
Important information from FastModel Sports	F...	
FastWeb@content.fastmodels...	<b>You Have Received a FastTrade - 1/0 Finishin</b>	7/28/2018
Important information from FastModel Sports	F...	
FastWeb@content.fastmodels...	<b>You Have Received a FastTrade - 3/0 Stride</b>	7/28/2018
Important information from FastModel Sports	F...	
FastWeb@content.fastmodels...	<b>You Have Received a FastTrade - Chair Drill</b>	7/28/2018
Important information from FastModel Sports	F...	
FastWeb@content.fastmodels...	<b>You Have Received a FastTrade - Warm-up F</b>	7/28/2018
Important information from FastModel Sports	F...	
FastWeb@content.fastmodels...	<b>You Have Received a FastTrade - Power Finis</b>	7/28/2018
Important information from FastModel Sports	F...	

Figure 9: Sending plays individually to my FastDraw library clogged up my emails. I often sent up to 50 plays in a day, making pushing any other emails far down my inbox.

Sending plays to FastDraw can also be tedious because there is no way to send multiple plays at a time. Every single play must be sent individually. Once again, when only choosing one or two plays, this is not much of a problem, but when trying to put together an actual playbook, it is a hard-to-keep track of mess. There is no indicator if you've already sent the play unless you click on the "send to FastDraw" button and then enter your email.

## Sorting Issues

Sorting plays into playbooks also has some issues with the way that nominal measurement scales are used. Frey (2000) describes nominal measurement as scales used by words, and those words are used to represent categories. These categories must be mutually exclusive (p.85-87).

To put into different terms, Think of the popular TV quiz show “Jeopardy.” In Jeopardy, as seen in Figure 10, contestants select “answers” six different categories. Each category has five different “answers” to choose from (J!effect, 2017). Every answer under each category will only feature answers from that category, because they are mutually exclusive. Answers under “self-portrait of the artist” will only feature answers related to “self-portrait of the artist,” rather than any of the other categories listed.

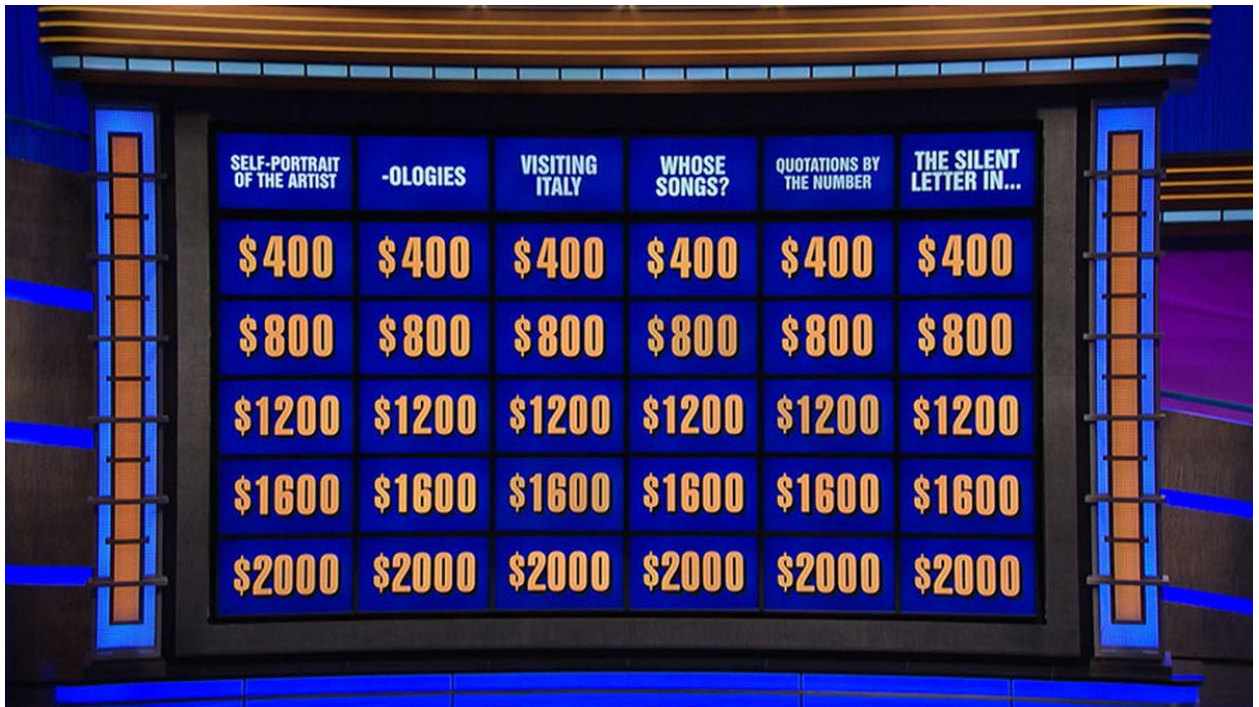


Figure 10: Jeopardy! features “answers” separated by nominal categories. The categories are represented by words, and the answers will relate to the category they are under.

Much like a Jeopardy board, playbooks are a nominal sorting method of plays for various situations, although an issue is that the situations are not always mutually exclusive. A play that is designed to create a three point shot may also have a secondary option for a player that cuts towards the basket. A drill may promote both shooting and dribbling skills. Basketball is a game that involves many categories, and while it is possible to isolate aspects of the game into categories, it is difficult to sort a play with many moving parts into one category.

Unfortunately, FastDraw forces the user to create playbooks using nominal categories, which is consistent with Frey’s scales, and rather than have the ability to place a play or drill into multiple categories, one must drag the play over into the folder every single time. This can be difficult because the software does not let you know if your play is already in that folder, and it

one cannot see the diagram of the play they are dragging over. Since it is necessary to view the diagram to know how the play can be used, one must memorize a play before they can even put it in a playbook.

Another issue is that the folders only go one layer deep. One cannot create subfolders within folders. Therefore, if a user wanted to create a “late game situations” category, they have to put every late-game situational play into one folder. This is not effective because late-game situations involve a variety of scenarios that need to be categorized further. Perhaps the team is down 3 and needs a quick hitting 3 point shot. Or maybe, they’re only down 1 on the final possession, so they just need to find a way to get as close to the basket as possible.

Unfortunately, there is no ability to create a “need a 3” or “need a 2” subfolder within the “late game situations” folder, and thus creates a disorganized mess, and negative affect and frustration from the user.

Once again, if Stull and Tomkins taught us anything, it is that past experiences help determine future experiences. For those trying to create comprehensive, dynamic playbooks that allow for versatile play selection, not just “one size fits all” nominal selections, sorting the play books into these nominal categories is a negative experience, and makes me hesitant to want to use FastDraw to create my playbook.

## **Section 6: Solutions to Software Problems**

Luckily for both the reader and FastModel, I do not come here with only problems, but have potential solutions with many of the small, yet important problems that lies within the FastDraw software. This section will help outline potential solutions to the previously mentioned problems.

**Solution 1: Let the User Know When They've Already Sent a Play**

First, in order to help users know when they have already sent a play to their FastDraw library, I make two suggestions. First, there should be a notification that you've already sent the play before pushing the button may help speed up the process. Second, users should be able to select multiple plays to send to "FastDraw." The ability to send multiple plays could also clean up the email process, requiring only one email for every imported play, rather than one email for every single play one imports. This cleans up the email box and eases anxiety about email overload.

**Solution 2a: Form a Tagging System**

Next, it is time to address issues with only being able to send one play at a time, as well as the frustrating "drag and drop" system on FastDraw. This has an easy fix: Implement a "tagging" system similar to what is on the website used to publish plays to the PlayBank (seen in Figure 11). Rather than be forced to drag and drop a play multiple times, being able to send the play into each folder by "tagging" it into that category can save coaches time and frustration and enhance user experience and time of use. This can also work on the PlayBank, with checkmarks signifying that one wants to send multiple plays at the same time.

**Title:**

**Contributor:**

**Publish Date:**  (This play has not been published yet)

**Tags:**

MAN OFFENSE; EARLY OFFENSE; NEED A 2; PICK AND ROLL;

Actions	Drills	Offense	Situations
<input type="checkbox"/> BACK SCREEN	<input type="checkbox"/> BALL HANDLING	<input type="checkbox"/> BLOB	<input type="checkbox"/> AFTER TIMEOUT
<input type="checkbox"/> BALL SCREEN	<input type="checkbox"/> CHAIR	<input type="checkbox"/> FLEX OFFENSE	<input checked="" type="checkbox"/> EARLY OFFENSE
<input type="checkbox"/> CROSS SCREEN	<input type="checkbox"/> COMPETITIVE	<input type="checkbox"/> HORNS	<input type="checkbox"/> LATE GAME SITUATIONS
<input type="checkbox"/> DOWN SCREEN	<input type="checkbox"/> CONDITIONING	<input type="checkbox"/> LOB	<input checked="" type="checkbox"/> NEED A 2
<input type="checkbox"/> DRIBBLE HANDOFF	<input type="checkbox"/> DEFENSIVE	<input checked="" type="checkbox"/> MAN OFFENSE	<input type="checkbox"/> NEED A 3
<input type="checkbox"/> ELEVATOR SCREEN	<input type="checkbox"/> DR. DISH	<input type="checkbox"/> POSTUP	<input checked="" type="checkbox"/> PICK AND ROLL
<input type="checkbox"/> FLARE SCREEN	<input type="checkbox"/> FINISHING	<input type="checkbox"/> PRESS BREAK	
<input type="checkbox"/> STAGGER SCREEN	<input type="checkbox"/> PASSING	<input type="checkbox"/> SLOB	
<input type="checkbox"/> UCLA	<input type="checkbox"/> REBOUNDING	<input type="checkbox"/> ZONE OFFENSE	
	<input type="checkbox"/> SHOOTING		

Figure 11: A tagging system, similar to the FastTrade online publishing system, allows coaches to select multiple categories for a play, rather than force them to drag the same play multiple times to different folders.

### **Solution 2b: Create a separate email for FastModel**

Advice to future interns: I suggest having a separate email that is just for FastModel, especially if the “mass email” issue is not resolved. If a future intern has to put together playbooks for the company, their email will be clogged with receipts. Because of that, it is for the best that there is an email dedicated to those receipts. That way, the intern’s primary email is not clogged up, but they can still transfer plays the old-fashioned way, as tedious as it may be.

### Solution 3: Allow for Multiple Subfolders

The solutions to issues with “one layer deep” folders cannot be fixed with merely a tagging system. FastDraw needs to have the ability to create subfolders, along with the previously mentioned tagging system to help coaches save time and better organize their plays. By being able to create subfolders, coaches will be able to better specialize their playbooks and use the software more effectively, creating more positive experiences outlined in affect theory, and give coaches more reason to continue using the software and come back.

Table 2 will summarize problems and solutions in this section.

Problem	Solution
Not knowing when one has already sent a play until after pressing the “send” button.	A notification when user has already sent that play before somebody presses the button.
Can only send one play at a time; can only drag one play at a time.	Implement a “tagging” system that allows multiple plays to be sent at a time, as well as move plays to multiple folders via the same tagging system.
Email gets clogged when sending multiple plays from PlayBank to FastDraw.	Either <b>A)</b> Implement the tagging system so multiple plays can be on one receipt or <b>B)</b> Have a separate email for FastModel so primary email does not get clogged up.
Playbook subfolders only go one layer deep; makes it hard to categorize for special situations.	Allow playbooks to have more than one layer of subfolders.

Table 2: Outlines software problems and software solutions.

### Section 7: Problems with Jargon and the Phronetic Gap

As established before, the phronetic gap is the amount of space needed to fill with improvisational knowledge when synoptic and cultural knowledge are not sufficient. Basketball



is filled with jargon, especially on the “X’s and O’s” side, which is jargon in itself referring to strategy. Let’s go back to a play shown earlier, but seen in Figure 12. Take a look at the title and deduce what goes on in the play.

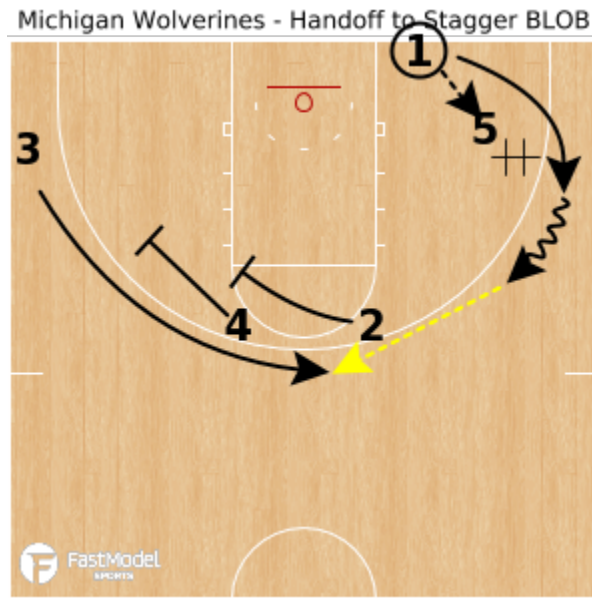


Figure 12: Basketball plays are filled with jargon that requires a high degree of cultural knowledge to understand.

**Problem: Too much cultural knowledge needed; no avenue for solution**

In order to understand what is going on in the play, people must not only understand what BLOB, Stagger, and Handoff means, but they also must understand what the numbers, circles, and lines mean on the court. The literal abstractions, or visual representations of the play is the synoptic knowledge, and the knowledge of what each of those shapes, numbers, and symbols mean, as well as how they connect to the title, is cultural knowledge. A problem arises when a young coach who may not be as well versed in all of the jargon attempts to learn and digest the play: there is no place on the website to learn these terms and what they mean. There is no glossary or “help” section. The user is on their own.

From my own experience, this proved to be a great struggle. While I am well-versed in general basketball strategy, what makes a good player good, and what a good shot looks like, I am less well-versed in the jargon-filled “actions” and what exactly those “actions” are. That means when making my own plays, I often had to fill in that phronetic gap with a lot of improvisational knowledge, which leads to more potential errors. This is coming from somebody who has studied the game for years.

With no avenue for young coaches to learn, FastModel is cutting out many potential clients. Right now, this is for seasoned coaches only, but this could be a great tool to help young coaches, or aspiring coaches to learn the game. Luckily, there is a fix in the solutions section.

### **Section 8: Solution: Close the Phronetic Gap with a Glossary**

The fix is a relatively simple one, but one that will take a lot of time to resolve. FastModel needs to create a comprehensive glossary of every action and set, explaining what they are and what they accomplish. Luckily, FastDraw the software is already well-equipped for the visual aspects, since it is an easy-to-use software, and the website’s ability to embed video also can help showcase real-life examples. Another nice thing about the easiness to use the FastDraw software is that as the game continues to evolve and change, people can use FastDraw to add that synoptic knowledge to reflect said changes, and create new spaces in a glossary to add cultural knowledge to the basketball lexicon.

The hard part is finding the time to put the initial glossary together. This may require use of a paid employee, since most contributors are unpaid and only draw up plays in their free time. As indicated earlier, Robbie has no time for a long-term project like this. Having somebody that has the sole job to jump in and create a glossary may be the best move. Originally, this was

going to be my project when I came up with the idea late into my internship, but I could not balance my studies, job, and other duties with creating a comprehensive glossary, and was better off making day-to-day basketball content. This is the kind of job an intern can do, but it may be best suited for a paid intern, since they can focus their time and energy on the internship, rather than focusing on making ends meet with side jobs.

### **Section 9: Other Suggestions**

I also bring a few other suggestions to the table, ones that are not necessarily “problems” in the software or the culture, but areas that may be unexplored, underexplored, or just not thought about. The main suggestions will relate to translating the software for more markets, as well as making the software disability-friendly.

Currently, FastDraw is only available in English and Spanish. While that covers a wide range of potential clients, it also leaves out large markets that are passionate about basketball. For instance, the NBA is now China’s most popular sports league (Minter, 2017; Saiidi, 2018), and many Eastern European countries are passionate about the game, with non-English countries Latvia, Montenegro, and Croatia producing more NBA players per capita than the United States (Sports Media Group, 2019). While it may require investment, the potential untapped clientele in China alone may be worthy of at least exploring a Chinese translation, both linguistically and culturally. While Latvia, Montenegro, and Croatia are significantly smaller markets, it still makes sense to try to explore the idea of making the software available to places so passionate about the game of basketball.

If FastModel goes this route, it is important to take into consideration not just translations, but global consumer habits and culture to make sure that the terms and actions share

the same meaning as it does in their English and Spanish counterparts. After all, if there is anything to learn from affect theory, it is that past interactions help shape future interactions. If FastModel wants to succeed in new markets, it is important to create those positive experiences early (i.e., by speaking the same language) so that consumers are more likely to come back for future experiences.

### **Add more “gold coin” elements to FastDraw and “FastTrade”**

Adding some “gold coin” elements to both FastDraw and the FastModel website may also entice contributors to come back to make content. For instance, perhaps a leaderboard of “most downloaded users,” or “highest rated users” could entice people to continue contributing to the PlayBank. Even within the software, a ranking system for plays made or playbooks made, or a medal system that gives feedback when a user interacts with the software can be something that keeps users coming back. For instance, when a user creates their first playbook, perhaps they get a little trophy that says “Created First Playbook.” Maybe there is a trophy room, and perhaps a friend system where coaches can compare their trophy room with other coaches. Perhaps each trophy can have a stat with “percent of users with this trophy.” Not only does it add “gold coins,” but it may also provide valuable data into how people are interacting with the software and improve the user experience.

### **Make Software more accessible to those with disabilities**

Another idea to explore is making the software more disability-friendly. With companies like Microsoft building adaptive controllers for gamers with physical disabilities (Microsoft, 2019), it may be in FastModel’s best interest to see if they can make the FastDraw software compatible with adaptive controllers. Not only does this look good as a company to make an effort to reach

out to those that may not be physically able to use the standard version of FastDraw, it also opens up new markets for those that are passionate about the game, but may not be able to participate on the court due to physical disability.

### **Address bugs**

Several previously mentioned bugs need to be addressed create a negative affective experience, and may make users hesitant to return to the software. There are issues when trying to upload a play to the PlayBank using Google Chrome, and it only works on my computer when I use Safari. Once again, I am computer-savvy enough to understand this, and can work around it. Other coaches may struggle with understanding why their plays will not upload, and this kind of roadblock may be something that makes people hesitant to use the software.

Occasionally, the FastDraw software would close unexpectedly, then open up in a very tiny window on restart that was very difficult to see. This is a more minor issue, since it only required the use of hitting the “plus” button on the window, but for non-computer savvy coaches, this can also be incredibly confusing and frustrating. Shoring up some of those minor bugs will help create more positive affective experiences that keep people coming back to the product.

### **Hire a Second Communication Person**

With only one communication person, FastModel has little safety net should something occur to the communication person, and can only focus on day-to-day tasks, rather than also work on larger projects. Robbie Lehman is trying his best, but he is also a human. Humans get hurt. Humans get sick. Humans can only fit in so many tasks in a day. With no second communication person, there is a lot of potential content that fails to be edited and published, including my own articles. If affect theory and UX literature taught us anything, it is that past experiences help

determine future outcomes. There already is little incentive to work as a contributor thanks to the lack of pay. The idea that people may work hard on an article, only to never see it published not because of quality, but because of lack of time is frustrating and disincentivizes contributors to continue producing content.

Not to mention, FastModel has a relatively large basketball-centric audience, and being able to have somebody that can help with day-to-day processes so that Robbie can focus on long-term goals can help FastModel come up with new and engaging content ideas that may bring revenue to FastModel. The glossary is something that Robbie definitely does not have time for, and I do not have time for since I had to spend most of my time in this internship working other jobs to make ends meet.

### **Suggestions for Future Internships**

FastModel still does not have a formal internship process. I believe that having a content intern each semester to help with the day-to-day processes of FastModel will help both the company and the interns involved. Interns that can work on some day-to-day processes can help Robbie at least somewhat attempt to accomplish long-term goals, and also give valuable experience in the basketball industry to somebody that is hungry to learn. After all, as indicated early in this paper, basketball is a monstrous industry to break into, and a new avenue to gain basketball-related experience could be invaluable to a person early in their coaching career.

I also recommend that this intern is paid, and able to be in the FastModel offices in Chicago for the internship. In the four days I spent with FastModel at the National Basketball Association of Coaches (NABC) convention in Minneapolis this past April, I learned so much about the culture of the company, which I would not have been privy to without having that

experience mostly working on my own remotely. Also, having a paid intern allows the intern to focus completely on FastModel, rather than only work for FastModel in the spare moments outside of the jobs they have to make ends meet.

## **Discussion**

Several streams of communication research are not addressed in this paper, but could be of value to FastModel. First, organizational communication scholars may be of interest to look at the power dynamics of Robbie Lehman and the rest of the company. As it appears now, he has very little power in decision making, and often is not made aware of complete corporate overhauls. For instance, FastModel decided to have a complete rebrand the week before the NABC convention, all without telling Lehman. This shows some major communication issues that needs to be sorted out.

Another stream of research that may be worth discussing is the tensions between sales and high school basketball coaches. In my four days with FastModel at the convention, it appears that the sales team outwardly despised talking to the high school coaches because they are not able to buy the more expensive software, and they appeared to treat them as if they were a waste of time. This is based on several conversations I've had with many different representatives at the convention. Once again, having an intern that is able to be in the offices may help with uncovering those cultural issues, since I only became aware once I spent time with FastModel at the NABC convention.

## Conclusion

Overall, this was a fantastic experience that was worth all of the pain, heartbreak, and rejection along the way. I am grateful FastModel presented me with the opportunity to contribute, and it helped me become a better basketball mind, as well as a better communication scholar.

FastModel as a whole is a company poised to keep their position as the market leader in basketball software, but still has issues in their company that need to be addressed. These issues include that of ambiguous language in the software, lack of adequate staffing on the communication end, no avenue for basketball coaches to learn new concepts and terms, issues with sorting playbooks, and clogged emails, among countless others.

I suggest a tagging system to help streamline the play organizing process, the ability to make playbook folders go further than “one-deep,” interns potentially having an exclusive “FastModel email,” the addressing of bugs, hiring a second full-time communication person, and adopting a formal internship process that allows a paid intern to help with content for the website.



## Works Cited

- Bramwell, T. (2004, November 22). American PS2 demo disc wipes save data. Retrieved April 17, 2019, from <https://www.eurogamer.net/articles/news221104ps2demodiscusa>
- Ferreria, A. (2017). 1.1 Digital to Human Experience. In *Universal UX Design: Building multicultural user experience* (p. 3). Cambridge, MA: Morgan Kaufmann.
- Frey, Lawrence R. (2000) *Investigating Communication: An Introduction to Research Methods*. - 2<sup>nd</sup> ed. / Lawrence R. Frey, Carl H. Botan, Gary L. Kreps. (p. 85-87). Needham Heights, MA: Pearson.
- Fuller, Robert M; Vician, Chelley; Brown, Susan A. (2006) E-Learning and Individual Characteristics: The Role Of Computer Anxiety And Communication Apprehension *The Journal of Computer Information Systems*; Stillwater Vol. 46, Iss. 4, p. 103-115.
- Hernandez, P., & Hernandez, P. (2016, February 04). Pokémon's Famous Missingno Glitch, Explained. Retrieved April 17, 2019, from <https://kotaku.com/pokemons-famous-missingno-glitch-explained-1653929141>
- International Basketball Federation. (2019). Facts and Figures. Retrieved April 18, 2019, from [http://www.fiba.basketball/presentation#/tab=element\\_2\\_1](http://www.fiba.basketball/presentation#/tab=element_2_1)
- The J!effect. (2017, November 1). Ever Made Your Own Jeopardy! Board? Retrieved April 26, 2019, from <https://www.jeopardy.com/jbuzz/jeffect/ever-made-your-own-jeopardy-board>
- Lee, T. B. (2018, May 07). Report: Software bug led to death in Uber's self-driving crash. Retrieved April 17, 2019, from <https://arstechnica.com/tech-policy/2018/05/report-software-bug-led-to-death-in-ubers-self-driving-crash/>
- Leonardi, P. M. (2009). Why do people reject new technologies and organizational changes of which they are in favor? Exploring misalignments between social interactions and materiality. *Human Communication Research*, 35, 407-441.
- Massumi, B. (2007). The Autonomy of Affect. In *Parables for the Virtual: Movement, Affect, Sensation*(pp. 23-45). Durham, NC: Duke University Press.
- Merriam-Webster. (2019). Bug. Retrieved April 17, 2019, from <https://www.merriam-webster.com/dictionary/bug>
- Microsoft. (2019). Xbox Adaptive Controller | Xbox. Retrieved April 17, 2019, from <https://www.xbox.com/en-US/xbox-one/accessories/controllers/xbox-adaptive-controller>
- Minter, A. (2017, September 28). China Is Hoops Country. Retrieved April 17, 2019, from <https://www.bloomberg.com/opinion/articles/2017-09-28/basketball-not-soccer-is-china-s-game-of-choice>

- Saiidi, U. (2018, November 20). The NBA is China's most popular sports league. Here's how it happened. Retrieved April 17, 2019, from <https://www.cnn.com/2018/11/20/the-nba-is-chinas-most-popular-sports-league-heres-how-it-happened.html>
- Sports Media Group. (2019, March 4). Which countries have the most NBA players per capita? Retrieved April 17, 2019, from <https://www.msn.com/en-ca/news/newspolitics/which-countries-have-the-most-nba-players-per-capita/vp-BBUIINwe>
- Stull, E. (2018). *UX fundamentals for non-UX professionals user experience principles for managers, writers, designers, and developers*. New York, NY: Apress. doi:10.1007/978-1-4842-3811-0\_1
- Tomkins, S. (1962). Drive-Affect Interactions. In *The Affect Imagery Consciousness* (Vol. 1, The Positive Affects, (p. 46-50). New York, NY: Springer Publishing Company.
- Tomkins, S. (1962). The Primary Site of Affects: The Face. In *The Affect Imagery Consciousness* (Vol. 1, The Positive Affects, (p. 204-222). New York, NY: Springer Publishing Company.
- Tsoukas, H. (2011). Representations, Signification, Improvisation—A three-dimensional view of organizational knowledge. In H.E. Canary & R.D. McPhee (Eds.) *Communication and organizational knowledge: Contemporary issues for theory and practice*. New York: Routledge, p. x-xix

Appendix A

Breakdown: Kermit Davis Morphing 1-3-1 Zone Defense

Coaching Tips Defense FastModel Sports Featured Film Room PlayBank Zone Defense September 11, 2018

By Matt Barnthouse



Go inside the action of coach Kermit Davis' morphing 1-3-1 Zone Defense that has led to multiple NCAA Tournament runs. First-year Ole Miss Head Coach Kermit Davis is famous for using an aggressive style of 1-3-1 Zone Defense that helped his Middle Tennessee State squads to multiple NCAA Tournament appearances. This post outlines the principles of the defense, as well as the personnel needed to execute it effectively. Scroll down to view the FastDraw diagram showing the basic rotations along with frame descriptions, and download it to your library.

This video, courtesy of Championship Productions, shows the action in more detail.



Personnel:

- 1 and 2: Defend the wings
- 3: Most athletic wing player
- 4: Long, athletic, and around 6'6" or 6'7"
- 5: Always stays between ball and rim

Goals:

- Early traps; force the offense up and out away from paint.
- Aggressive defense forcing mistakes.
- Prevent easy straight line passes, force offense to make lob passes that allow time for recovery.

Principles:

- TAKE UP SPACE.
- Active, high hands (once again, trying to force lob passes).
- Force lob passes, avoid giving up straight line passes.
- Play with constant energy and make the offense panic.

Morphing 1-3-1 Zone Defense (click to download to FastDraw)

- Goal from beginning: Pressure from half court, force ball "out and up." 2 and 4 trap early.

- 5 man ALWAYS between ball and rim.

- 3 man fights over screens; keeps one foot in the paint on ball side.

- 1 man's responsibility is to prevent passes to weak side.

- 2 and 4 trap 1, 5 must remain active at all times, making court look "tuff".

- Goal is to force lob passes over the top.

- Allowing straight-line passes KILL the 1-3-1 defense.

- As pass is lobbed, 5 moves to stay between ball and rim.

- 1 moves out and up with offensive player at his back (to prevent lob.)

- 4 Moves over to play similar role on other side.

- Ball handler may try to "split" the defense, only to find 5 ready to attack ball until ball is under control.

- 3 Moves over the top of any screen to help ball side.

- 2 May be a bit deeper on weak side to prevent easy pass off of baseline cut.

Appendix A: Piece I wrote on Kermit Davis' morphing 1-3-1 zone.

## Appendix B



Matt Barnthouse

University of Cincinnati  
Contributor since 06/06/18

FOLLOW

## About Matt Barnthouse

Matt Barnthouse has experience working at the youth, high school and Division I levels of basketball. He is currently a graduate student and instructor at the University of Cincinnati. Barnthouse also assists various Division I programs with recruiting and analytics while on sabbatical from coaching, and plans on returning to coaching following the completion of his master's degree in organizational communication and leadership in 2019.

Previously he spent four years as a student-manager with the Ole Miss Men's Basketball team, helping them to four winning seasons, as well as an NCAA Tournament appearance in 2015. Barnthouse's assisted in all basketball operations, including recruiting, on-court drills, analytics, and film.

Follow Matt on Twitter: @MattBarnthouse.

### MATT'S PLAYBANK (15 TOTAL)

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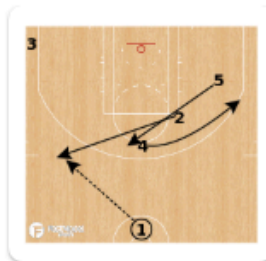
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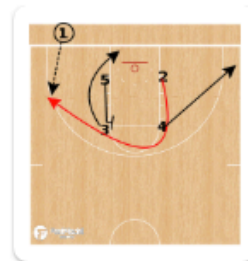
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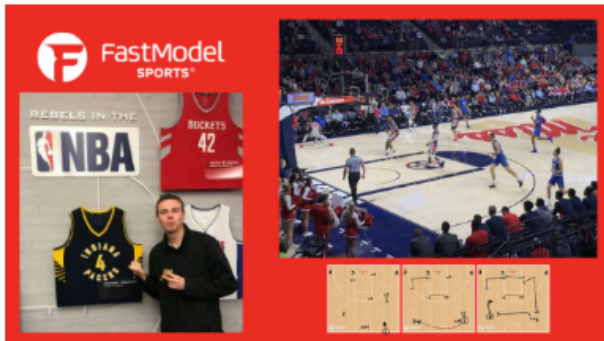
Appendix B: Small sample of plays I drew up for PlayBank.

## Appendix C

## Coaching Development: How to Spend Winter Break as an Intern

Career Development | Coaching Tips | FastModel Sports | Featured | January 11, 2019

By Matt Barnthouse



*How does an intern invest in coaching development? Hit the road to build relationships, learn the game, and embrace the process.*

Hello #FastModelFamily!

It's your favorite intern, **Matt Barnthouse**. To be upfront with you, it's my dream to work in basketball, particularly at the college level. At the moment, I am a graduate student that has been in and out of the game over the last two years. I am going to tell you the story of how I spent my winter break trying to get all the way back in.

I've learned that the two most important things to succeed in the coaching business are relationships and basketball knowledge. My goal was to improve both over this period.

Before we get to that, let's go through a quick background check for context. I grew up in Carmel, Indiana and went to Carmel High School where I was a student manager for our varsity boys team. We won two state championships, and I learned how to be a part of a winning culture, one where every player and manager is held accountable for their actions. After Carmel, I spent four years as a student-manager at Ole Miss, then coached basketball in Maine in the summer after undergrad. Next it was off to graduate school where I am in the final year of my master's program at University of Cincinnati, studying Organizational Communication. My original goal was to earn a graduate assistants position with a team, and although that didn't happen, I feel lucky to have accepted an academic scholarship for my current program.

Instead of coaching basketball, I teach two classes at the undergrad level, while also interning with FastModel for my Master's completion project. Once that is over, I am well... unemployed with a Master's degree. That is, I *will* be unemployed if I do not find a job this spring. That is why I decided to be proactive and visit a few schools during winter break to get my name out there and continue developing relationships before I hit the job market.

Here is the tale of my travels as I aimed to **develop my network** and increase my **understanding of the game**.

Appendix C: Part of article I wrote about life on the road meeting coaches.