TAGALO

RIDE MORE 🐎 WORRY LESS

Abdullah AlMuhaideb

Ademide Ajose

Pratik Vijay Toshniwal

Praveen Kumar Venkatesan

Sandheep Sridar

EXECUTIVE SUMMARY

Our team performed a Quick look assessment on an application primarily centered around promoting the safety of horseback riders. The purpose of our research was to assess the commercial viability of the technology, its scope in the current US market and its future prospects. The application is powered by a fall detection algorithm and sends automatic alerts to pre-selected individuals in case of an event when the rider falls off the horse. As part of our primary research, we have interviewed horse trainers, coaches, professional riders and equestrian academies to understand how the application can help improve the safety of horseback riders.

Market and Market Segments

Speaking with Tagalo's co-founder, Ms. Ann De Mot we were informed that the people most likely to be interested in the Tagalo are horse riders who tend to travel alone and not in a group. Tagalo could prove to be a very useful tool for such riders in case of an emergency. But upon further research and interviews, we realized that riders usually travel in groups and in very rare case are they allowed to ride alone. In such a situation Tagalo viability is questioned.

Market Interest

As part of our Primary Research, we interviewed prominent folks and we would point out that the technology seems like a nice to have but does not seem to be very compelling. As a result, our interviewees did not seem very confident that there were people who would pay to have the application.

Barriers to Market Entry

There are several barriers that could impact the ability to commercialize this technology. These include:
- A High level of substitutes that preexist in the market
- It is very streamlined and caters to a very small customer segment
- Concerns surrounding the development of the actual application

Development Status of Technology

Tagalo developed two main algorithms that are ready to be used. First, the fall detection algorithm with 96 % accuracy. The second is the horse gait analysis algorithm and has a 97% accuracy. However, according to Ms. Ann, the company that develops the algorithm was not the right partner to develop the app. At this stage, the two algorithms are ready but the phone application is still under development. The co-founder is evaluating whether to continue developing the app or to just sell the Intellectual Party which is basically the two algorithms.

Recommendation

Based on our extensive market research, our recommendation is that there is no substantial market for Tagalo in the United States, and it would be challenging to commercialize the technology. The technology in itself is good and has potential but needs to be tweaked as per market and customers demand to make it profitable.

There is a big risk for Tagalo in the United States market. If Tagalo does enter the United States market, it will be an uphill battle for them to make money out of this application. There will be limited users and to raise awareness about their application and find customers especially that according to our analysis users would be scattered. They will have to invest money in marketing, which might be very difficult to recover. As a result, one option to consider is to sell the two algorithms and stop developing the application.

CONTENTS

LIST OF FIGURES

1. TECHNOLOGY DESCRIPTION

Tagalo is a mobile application created by a Belgian company for horse rider's safety. The mobile application sends an automatic alert to pre-selected individuals in case of a fall of the rider. The alert will include the real time location of the rider, thus calling for help immediately and help the rider as soon as possible.

The mobile application works on an iOS and Android smartphone and does not need any additional device. The company will rely on the mobile phone manufacturer for technical upgrades on the device, they will just try to make the most of the available features and keep updating the app. Tagalo has developed 2 algorithms using GPS and motion sensor present in the smartphone.

1.1 Algorithm 1: Automatic Fall Detection

This is developed keeping in mind the horse environment. In case a rider falls, the rider has an option to cancel the alert on Tagalo mobile app after a pre-set lapse of time. In case the rider does not cancel, the riders' real time location is sent as an alert to a list of people predefined by the rider in the app.

1.2 Algorithm 2: Gait Analysis

This enables the rider to track and review their work of the last few days, showing different gaits on the map. This is useful for riders to track their route and possibly share with friends. This also helps to see how much the horse has ridden in the past few days and also do performance analysis. There is a dashboard with analytics present in the app.

The algorithms are designed specifically for horse riders and can differentiate between a fall and an impact of the horse landing on the ground after a jump. The algorithms take out the false positives
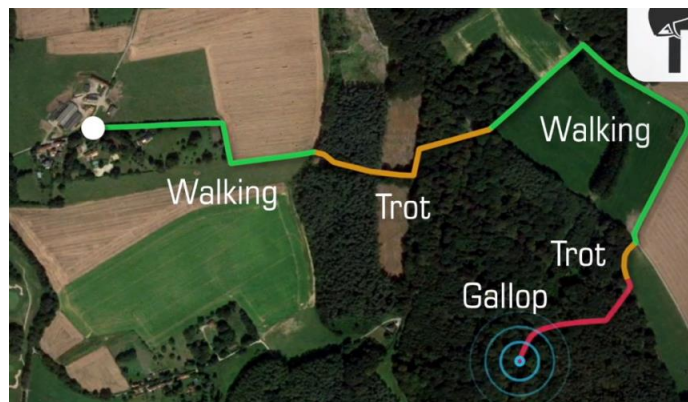

Figure 1: Gait analysis snapshot of a ride.

The above 2 algorithms are designed based on 2 years of research and analyzing 900 falls made by stuntmen to ensure high reliability. They have gathered data by testing on different types of horses, different types of riders, with location of mobile phone at different places on the body.

Here were 150 parameters considered for developing the algorithm accurately.

There is a panic button present in the app which enhances the safety of the rider especially for riders riding alone or in the rural environments. The app will also send notifications of possible dangers in their surrounding areas.

The statistics provided by Tagalo based on their research are:

- Correct detection of falls: 96%;
- False positive (alerts avoided when the event is not a real fall): 99%;
- Correct analysis of gait: 97%
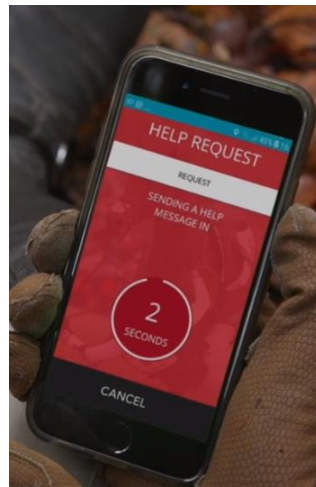
Figure 2: Snapshot of the automatic alert option

Market Size, Interest, and Potential Commercial Markets

After speaking with the co-founder of the Tagalo application, Ms. Ann De Mot, and studying the nature of the technology, we believe the commercialization strategy would be to sell directly to customers. With this in mind, we spoke to a number of potential customers in order to understand three key things:

1. Market Size: How large is the market for Tagalo
2. Market State: How are equine-related falls handled
3. Market Need: How needful is Tagalo in the market

1.3   Market Size

To understand the size of the market for Tagalo, we tried to understand how many people ride horses in the United States. A study found that in 2013, there were approximately 8 million horseback riders.

Number of participants in horseback riding in the United States from 2007 to 2013 (in millions)*
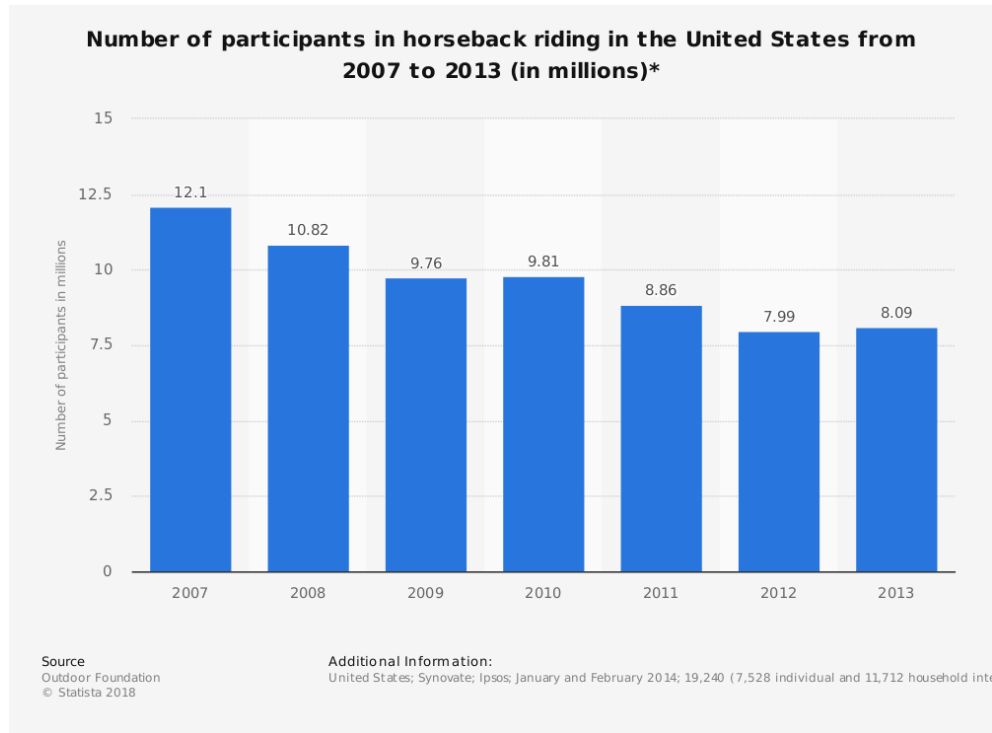
Figure 3: Number of riders per year

Speaking with Ms. Ann De Mot and Ms. Darolyn Butler who worked in the rodeo industry for some time, an endurance race champion, and the owner of Cypress trails ranch in Houston, helped us understand that the people who might be interested in the Tagalo are those who ride horses while trailblazing. Ms. Butler, said, *"One of the people who might need this technology are people who ride alone -- trail blazers"*. As a result, it was imperative to understand what percentage of horseback riders actually ride for pleasure or trail blaze. We found that, according to a study, about 73% of horseback riders use their horses for trail blazing.
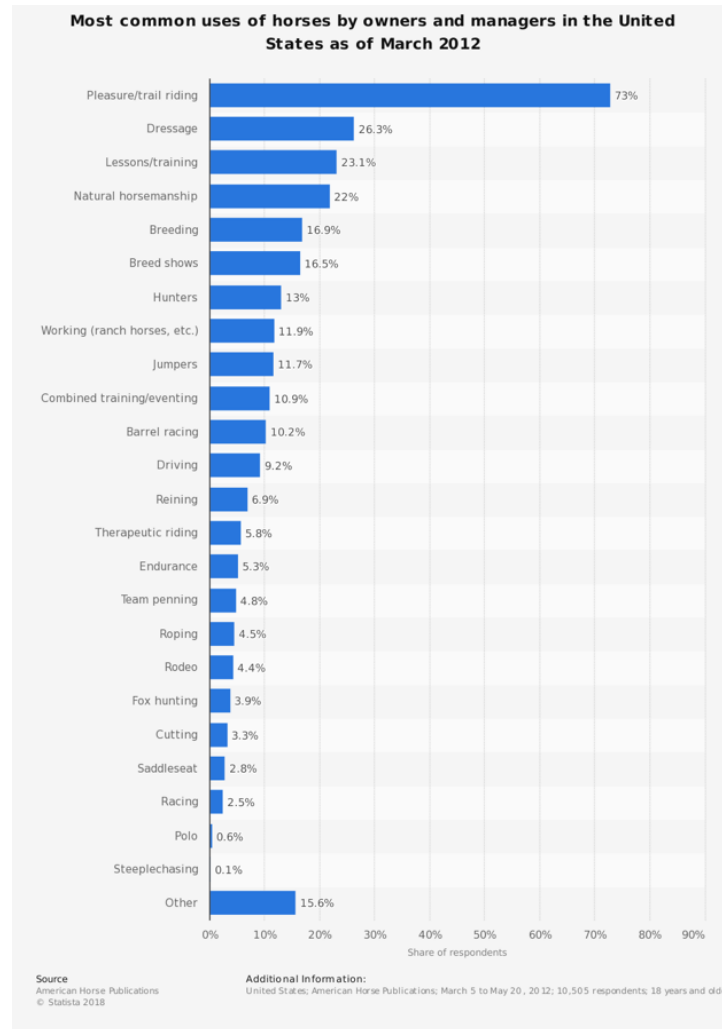
Figure 4: Use of horses in the USA

These two studies help us understand that the total market size for Tagalo in the United States should be around 5 million people.

1.4   Market State

In order to study the market we reached out to different segments of the market in the US to see if there is a demand for such a technology. We started with Mr. Bob Byrns who is the Cavalry site manager at Texas A&M. He shared with us that as a policy they will not allow people to hit the trail alone. He said "*If someone falls I will know and I will be there*". Mr. Byrns added that to the best of his knowledge, no one sends riders out in the woods alone. He was convinced that riders travel in at least twos and threes. We spoke about the possibility of a market where people travel (trail blaze) alone or couples on one horse back and he said there is a very low likelihood of that. We considered that his stance

might be due to the fact that he runs a public establishment for a public university. We also asked him about ranchers and if they would be interested in such a technology. His reply was "All of them have their four wheels trucks nowadays".

Another big segment of the market would be equestrians. We spoke with two key people in Texas A&M equestrian Ms. Tana McKay, the head coach and Ms. Kimmy Saul, the director of operations for the equestrian. Ms. McKay was clear that as a policy there should be a coach or a trainer with the trainee at all time and such s technology is not needed for them. Ms. Saul response was "*the equestrian team does not do any trail riding and all of our practices are group lesson*". As for the second algorithm for the horse gait, Ms. McKay told as that coaches are tracking the horse usage manually and it would be more convenient to stay that way.

To understand the private sector we spoke with Ms. Darolyn Butler who worked in the rodeo industry for some time, an endurance race champion, and the owner of Cypress trails ranch. She shared a sad story about a life that was lost two years ago in the ranch because of a fall. She thought that such a technology would help people who are riding alone and their loved ones a piece of mind. She also suggested that horse endurance races might be a good place for this technology. As for her years in the rodeo, she thought that there will be always more than two people during the training.

We spoke to Ms. Heather Gilfillan, the head of mounted patrol in the East Regional Parks District in California and she said that they have many volunteers who would do the mounted patrol but they are usually in a group. When we asked about their protocol to ensure their safety she replied that people will call whenever they are to start their patrol as well as at the end of it. They tend to act when they do not receive that second call stating a ride had finished with their trails. She also shared that some people might be interested in this technology but not her.

1.5   Market Need

The interviews quoted in the section above pointed to the possibility of a market for Tagalo, although, we would point out that the technology seems like a nice-to-have but does not seem to be very compelling. As a result, not very many of our interviewees seemed very confident that there were people who would pay to have the application especially in a subscription based model. We would conclude the market would be for a person who is riding alone and would like to make sure that he/she is tracked and can get help if something happens. Also, loved ones like parents or spouses might encourage the riders to have this technology. One difficulty with this marker is that these people are scattered and it is difficult to find them in one place. So the marketing will be a challenge.

2. DEVELOPMENT STATUS OF THE TECHNOLOGY

According to Ms. Ann De Mot the co-founder of Tagalo app, the idea came to her when she fell from her horse while she was riding alone in 2016. She thought that many people might have been in this situation and how difficult it was to handle the situation. She started the research and didn't find an available solution for the problem that is using the mobile phone. Ms. Ann and Mr. Axel Dewitt co-founded Tagalo.

Tagalo developed two main algorithms that are ready to be used. First, the fall detection algorithm with 96 % accuracy. The second is the horse gait analysis algorithm and has a 97% accuracy. However, according to Ms. Ann, the company that develops the algorithm was not the right partner to develop the app. At this stage, the two algorithms are ready but the phone application is still under development. The co-founder is evaluating whether to continue developing the app or to sell it as algorithms. If she decided to go to the market, she is interested in following the monthly subscription model.

2.1 Patent Status of the Technology:

According to Ms. De Mot, the technology and the algorithm couldn't be patented in Europe. Tagalo is assessing the patent option in the United States. After a discussion with US lawyers, there is the option to apply for a provisional patent in the US that will grant a date of anteriority for a year. Ms. De Mot didn't like to idea of publicly disclosing the algorithm in the regular patent.

2.2 Potential Benefits and Drawbacks

To assess the application better, it is necessary to analyze the benefits and drawbacks of the product. Following are some of the important benefits and drawbacks of the application:

2.2.1 Benefits

i. Improved Safety for Riders:

Tagalo uses the app in the phone to improve the safety of lone horse riders, the panic and SOS features allow the user to quickly get help in case of emergency. Tagalo differentiates itself from competitors by providing all these features through the user's smartphone and no extra hardware. The co-founder mentions the following about the application

"Tagalo can recognize falls and gaits and the user can press the panic button in case of emergency"

ii.   Monitor Horse Workload:

Tagalo can track the movement of the horse along with certain valuable parameters such as "Walking", "Trot", and "Gallop" etc. This information can be valuable to monitor the health of the horse and can also supplement its training. The co-founder says

"The app uses a proprietary algorithm powered by the phones in-built GPS and motion sensors to analyze the horse movement and records precise information"

iii.   No extra hardware:

One of the benefits of the application is that it uses the phone's in-built motion sensors to detect the falls with 99% accuracy. This triumphs all the existing products such as ridersmate which requires an extra hardware component like shown in the below image.
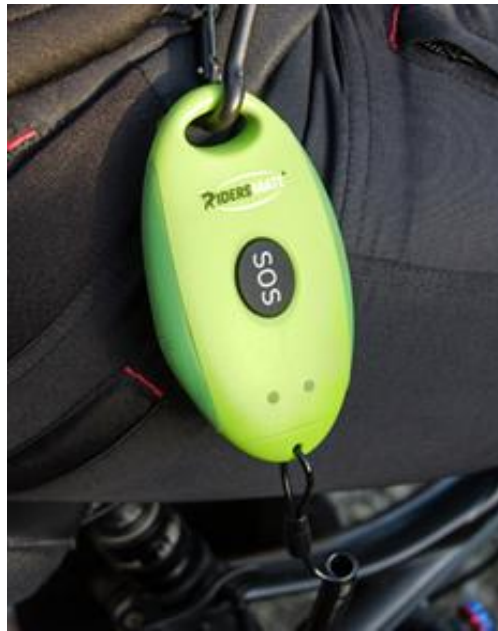

Figure 5: SOS panic external device

Since there is no use of extra hardware cuts extra manufacturing costs, reduces false positives by use of intuitive algorithm. The panic button option in Tagalo gives the users the option to call someone like shown in the below image.

Figure 6: Alert message screen

2.2.2 Drawbacks

i. The application targets a very specific group

People often ride in groups and hence there is seldom need for its use in training camps. When we interviewed the manager of a horse training facility at Texas A&M University, he said

"In theory, this application would help people riding alone but we have 4 miles of trails and we do not let people ride alone ever. When people ride in groups we have GPS points and topographic maps to help us locate the riders"

Also, when we interviewed Ms. Heather Gilfillan (Head of Mounted Patrol, East Regional Parks District, CA) she mentioned

"We have many volunteers who would do the mounted patrol and they are almost always in groups of two or more. There might be rare cases where someone would patrol alone."

ii. False positives:

Despite multiple training models there is still a possibility of broadcasting emergency SOS calls which could be false positives. Even though there are

options to roll back and emergency call, there is a definite possibility of a wrong call which could decrease the confidence in the application.

iii. Need for a network coverage:

A good internet and GPS coverage is important for the application to work seamlessly. Horse trails can be very remote and the user might not be in areas with good coverage. Even though this is out of the developer's control, it should be considered as a drawback from a user's perspective.

3. COMPETITORS AND COMPETING TECHNOLOGIES IN THE USA

3.1 Ridersmate: https://www.ridersmate.com/horse-rider/

With Ridersmate, you can ride anywhere, with the security that comes from knowing your loved ones will automatically be notified about the location of you, and your horse, in the event of an accident. Ridersmate uses a wearable device as shown in the below image. This app is not specific for horse riders and can be used in a variety of adventure sport riding.

3.2 Equilab: https://equilab.horse/

This application helps the users to train with their horse and has all the features of Tagalo except for the fall detection. It has sophisticated horse rider profile management and adds a social component to the horse training experience. It has more than 350,000 registered users.

3.3 Horse Riding Tracker: https://apps.apple.com/us/app/horse-riding-tracker/id1245716679

Similar to a human athlete's Garmin app or Strava app that tracks your workouts using GPS technology, the Horse-Riding Tracker uses the GPS on your smartphone to track detailed statistics from your riding session. Data points such as distance and duration are graphed on a satellite map that allows the user to compare past riding sessions and improve each ride. This application is not built for Android users, so it is unlikely that they have a large number of users. Notable mentions are:

1. Equisense
2. TransLoc Rider
3. Horse & Rider

4. Ride With Me
5. Road ID APP

4. POTENTIAL BARRIERS TO MARKET ENTRY

4.1 High level of substitutes

There are wearable devices in the market currently that perform similar fall detection. One such device is the Apple Watch. The Series 4 and 5 Apple Watches ship this feature as part of the product with no additional costs. While Tagalo promises to be more accurate to detect falls off a horse's back, it could face severe competition if Apple is working towards optimizing the fall detection and achieve a model which offers similar or better accuracy than Tagalo.

4.2 A very small customer segment:

The initial customer segment that Tagalo targets in the words of Ms. Ann Dot are "Pony club riders where the application would equip parents in knowing the current whereabouts of their children riding the horses". But upon interviewing multiple horse trainers we understood that it is very rare that riders are allowed to ride alone. There would always be a group of riders with at least one experienced individual. In such a case, the application would not prove useful.

4.3 Developing the application:

Given that the application is primary built for smartphones, there seems to be some technical debt over the usage of the phone's sensors and integrate it with the fall detection algorithm. In our conversation with Ms. Ann De Mot, she mentions that they started working on the algorithm and the application back in 2017. They have not been able to successfully release a working version of the application in the given time. The longer the delay, higher are the chances that big firms like Apple would optimize their algorithm and render Tagalo superfluous.

5. FUTURE SCOPE

Tagalo is a mobile application, thus it is not restricted by the country or location where it can be downloaded from iOS or Android Play store. However, it needs to create

awareness and needs to know the customers interest. Tagalo needs to make money out of this application and there are few ways they can make money in the United States:

1. Make the application free to download and include ads in the app: this option would need a large number users to make a profit since advertisers would need see the reach for the app and its impact in order to pay.
2. Make the application paid. Something like $5-10 for download as a onetime payment.
3. Make the application free to download, but include premium features in the application like sending SOS to pre-listed contacts. These premium features can be bought by the user as an add-on.
4. Keep the app subscription based. The user can use all the features within the app as long as their subscription is valid. Once the subscription expires, users will have access to limited features. This option will have many challenges as subscription model is not ideal and people tend to prefer free applications.

These are the traditional way of making money from a mobile application like Tagalo. However, the big question is are there enough users in the United States of America interested in using and paying the application. Based on our research and market analysis, it seems that not many are worried about their riders falling off the horse since they do not allow riders to ride alone. But they did show interest in trying to track their horses, and do more with horses.

They have earlier tried other technologies which is focused on horses, including a chip inserted in the horse. But either the technology falls off the horse or does not track efficiently.

Tagalo needs to focus their application on horses if they want to make money from users in the United States. They might have a good market in Europe, but our analysis was constrained within the USA.

If the application manages to do well in the United States, Tagalo will have to keep their application updated and compete with other players in the USA. They will have to take into consideration all the updates in the mobile devices and operating systems. They will have to update their application regularly to make it compatible with the latest updates in mobile technology.

6.   RECOMMENDATION

Based on our extensive market research, our recommendation is that there is no substantial market for Tagalo in the United States and it would be challenging to commercialize the technology. The technology in itself is good and has potential but needs to be tweaked as per market and customers demand to make it profitable. As per the interaction with coaches, trainers, equestrian academy, their main point was that in the United States, riders are rarely on their own. They are accompanied with other riders, or trainers and are in a secure location. They were more interested in knowing about their horses than riders. Because riders are expected to fall and learn and there are other riders who will be present for immediate help in case of a fall.

There is a big risk for Tagalo in the United States market. If Tagalo does enter the United States market, it will be an uphill battle for them to make money out of this application. There will be limited users and to raise awareness about their application and find customers especially that according to our analysis users would be scattered. They will have to invest money in marketing, which might be very difficult to recover. As a result, one option to consider is to sell the two algorithms and stop developing the application.

As next steps, our suggestion is that Tagalo should focus on horses rather than riders if they want to be successful in the United States market. Their best option would be to look at market in Europe where there are already similar applications present and have a good number of users.

APPENDIX

In-Person interview with Ms. Ann De Mot (Co-Founder of Tagalo) "Oct 25 2019"

What is the current status of the development of the technology?
The two algorithms that support the fall detection have been developed and tested. The algorithm has a reliability factor of 96% and a false positive detection rate of 98%. The technology is currently being transformed into an SDK (Software Development Kit) for easy integration into handheld devices.

What is the business model that Tagalo would employ?
It has a subscription package of 9.90 Euros per month and 99 Euros per year.

Who are the expected end users of the application?
The initial customer base that we plan to target are Penny Club riders. This would help provide a way to ensure that parents of riders know that their children are safe and have not encountered a fall on their way. Also, it provides a way for the club to monitor the activity of the horses.

Apart from detecting a fall, does the app provide any other features to riders/owners?
It provides a way of protection for the horse as well. This is important for horse owners and clubs that want to identify problems if there is a fall. They can get access to this data from the application data that they would receive from the rider's application. Since the app collects live data about the ride, this data can potentially be used as a standard to measure the rider's riding capability and help in standardizing insurance premium rates.

Are there any direct competitors?
Equisense - produce wearable connecting helmets and phone to monitor fall activity. We started our research as per market research, connected devices were expensive and the technology space surrounding it was ever evolving. It is a separate piece of equipment that needs to be purchased and has to be synced with a smart device. This entire system would require a very high initial cost which is undesirable.

Has the technology been patented?
In Europe the technology is not patentable but in the US the technology can be patented. Although a patent would protect the IP, the US Patent Laws require that the algorithm be made public if it is to be patented. We are not willing to share the algorithm, hence patenting the technology is still something we have not decided on.

Can you share some insights on the testing strategy for the algorithm?
The data sample consists of 900 falls. We used a 50-50 strategy where the initial 50% of samples were used by the algorithm for optimization and the rest of the samples were used for testing. The results yielded 96% accuracy for this dataset.
What is you take on the Apple Watch Series 4 and Series 5's Fall Detection feature? How different or accurate is it as compared to TAGALO?

Our testing strategy included placing the phone in various parts of the body, hand, legs, and tummy pockets. TAGALO's fall detection algorithm is highly optimized for detecting falls while riding a horse. The Apple Watch in this case has a very high false positive value where it detects galloping and dismounting a horse as a fall. While the Apple Watch feature would work in any other scenario it will not be suitable for horse riders.

As compared to a usual fall, a fall from a horse is considerably different. There could be multiple scenarios and outcomes from a fall, he could have a concussion, could injure his back which would prevent the rider from standing straight, or his leg could get caught in the stirrup which would again prevent him from standing up straight. We cannot rely on a classic fall detection mechanism to detect all sorts of falls, hence the fall detection feature provided by Apple devices will not completely solve the problem. The algorithm that powers Tagalo is superior to the classic fall detection algorithm and is very specific to horse riding.

Are you willing to sell the algorithm and license the technology?
The algorithm is the engine that runs the application. It is a second strategy that we are looking into and we are open to allowing a larger firm to license the technology. We have not taken a decision on whether to patent the algorithm because as per the US Patent Law, the entire algorithm should be available publicly by the time the patent comes out and there is a possibility that a second company can use it to optimize their product.

Did you use different phones for developing/perfecting the algorithm given that different could employ different sensors and they could respond slightly different for the same input?
It is true that older generation phones definitely have weaker sensors and hence we set a baseline on the iPhone and Android model that would support proper working of the application.

How would the application respond to a situation when the phone coverage is really low?
Yes, we have thought about scenarios when the signal coverage is weak to nonexistent. The application would record a fall in such a case but would not be able to send an emergency alert. Some of the ways we have identified to overcome this is through the use of connected devices on the horse, as the horse is bound to move and at a certain point and would eventually come across a location with better network strength. Also, an idea that has just been a thought is the use of satellite Sims for a luxury segment of users. This would ensure 100% reliability of the application and transmission of the emergency signal.

How do you plan to showcase Tagalo to your immediate customers?
The Apple App Store places a high percentage of commission to publicly release an application on the market. We plan to attend 5 Show Jumping fairs and attendees of the fair would be the target customers to whom we would showcase the application. In order to minimize any delays with marketing the product once it is released, we have started reaching out to potential customers already and educating them about the application.

In-person interview with Mr. Bob Byrns (Cavalry Site Manager for Texas A&M) "Nov 15 2019"

Having seen the basic features of Tagalo, do you find the features useful?
One of the features that we are very interested in tracking the distance that a horse cover. We have had no luck, although we've used a variety of technologies such as Pedometer, Neck collars sensors. But they tend to get worn out very quickly and are not sustainable.
I'm interested in tracking the horses not the riders and it is very common that they fall off the horse but it's a known thing.

In the case of customers who tend to ride alone, do you think the application would prove useful to them and their safety?
Yes, in reality for riders who ride alone this would serve as a very useful application, we have 4 miles of trail in the woods. We have GPS Maps and Topo maps where they could be. Tracking them would be easier with such an app.

As a Horse owner who lends horses, do you think this application would instill more confidence in the person's safety?
I personally know a world champion horse rider who owns a public stable. Even she never sends riders alone because it is always safer to send them along with another seasoned rider.

Assuming a situation if you were to lend horses to riders, do you think the app would help ease your work?
Although the application would increase the chances of safety, in case of an emergency it would require an officer or help to be on continuous vigilance and this dependency can be a difficult ask. We try to avoid the situation by not allowing them to ride alone in the first place. We never ride alone, any professionally run organization does not support riders to go out alone.

What are some of the liabilities surrounding Horse riding?
As per statistics, Horse riding is inherently more dangerous than Motorcycle riding.
The liabilities in the horse business is so high these days, that it is very rare that horses are allowed to be ridden outside of a designated arena. If they do allow people outside the designated area, they ensure that they have professional riders riding alongside them to help in case of an emergency.

As a professional horse rider, do you carry your phone device on your person or do you place it in the saddle? (Since the phone sensor is key to detecting a fall and this scenario prohibits that)
We have our phone in person almost all the time. It is very very rare that a rider would carry an extra pouch or leave the phone in the saddle. I can certainly say that it is a very small minority of the horse-riding population that would not keep the phone on their person while riding.

How else do you think application could prove more useful?
It can be used to track wildlife, campers, hikers, adventure enthusiasts, climbers. There is a high probability of these people to be travelling alone and in dangerous situations. The fall detection and emergency distress alert could prove helpful to them as well.

Phone Interview with Ms. Darolyn Butler, endurance race champion and owner of cypress trails ranch. (Nov 22 2019)

We sent her an email with the technology description and a link to the company's website before the interview.

Does the idea seem interesting to you?
The idea is interesting. Sure, some horsemen would be interested. I actually show it to
Some horsemen and they liked the idea.
Then she asked. If you drop the phone will it detect a fall?
I replied that I wasn't sure and it is a good point to raise to the inventors.

Do you ride alone?
Yes, I ride alone sometimes in our ranch and trail qualified rider can ride alone in the ranch. These people are in need for such a technology.
In fact, we lost a life in 2017, one of our wranglers in a slow day decided to ride in the trail with two men. One phone died. The wrangler who was a lady fell down once and then continue riding. Unfortunate, she fell down again and her condition was critical. Her ride mates couldn't tell the location and the ambulance went the wrong side of the creek and she has passed away.
The main feature that I like about the app is that if you fall and ping your location.

Would you pay subscription for the service?
There are people who would pay. The auto detection would help people to feel that they are safe. There was a hiker who got hurt within a mile from the range. Close to cypress trail. When he called 911 and provided the location they couldn't locate him. In fact, the ambulance rang the door on cypress trail and asked about the injured. Then Ms. Butler showed them the location based on the street name.

Who do you think might be interested in such a technology?
I think that the technology would be wanted in:
1. Endurance race. In this kind of races, you can be alone if you are way ahead of people or if you are behind. Especially in the US
2. Trail riders who ride alone. Although it is not common but there are people who prefer to ride alone.
3. Competitive tail ride (Long distance). Might be alone.
4. Parents who have teenage children who might want to be alone.

Would the rodeo people need it?
Almost always there would be somebody in the training.

How about ranchers?
They have four wheelers now and if they still use horses they won't think that they can fall off them.

Phone interview with Ms. Heather Gilfillan (Head of Mounted Patrol, East Regional Parks District, CA) "Nov 22 2019"

Do rangers patrol alone?
We have many volunteers who would do the mounted patrol and they are almost always in groups of two or more. There might be rare cases where someone would patrol alone.

What is your current method of tracking the mounted rangers?
They are required to call in once they started their patrol and to call back once they finished.

What would happen if they didn't call back?
We have a protocol that we would initiate. We start by calling them in their cell phone and then their home. We would call their emergency contact. If we couldn't reach them we will start looking in the trail.

Have you experienced any incident for a mounted patrol ranger?
No, we haven't had any incident and we hope that we don't face it.

What is your opinion on the technology?
I think there are people who might use it. I myself won't since I don't like to ride alone.

Would people pay for $10 subscription?
It depends whether they see the need for the app.

Phone interview with Ms. Tana McKay (Head Coach Texas A&M Equestrian) "Nov 25 2019"

After describing the technology to her these were the questions:

Is there a use for this technology at your facility?
No, I can't see us using it since there should be a coach with the trainee at all times.

Who do you think might be interested?
Trail riders might be interested in such a technology

How about the gait tracking feature, can it benefit you to track the horses?
Coaches are doing the tracking manually and since we have many girls. It would be easier to keep it this way.

Emails with MS. Kimmy Saul Director of operations Equestrian | Texas A&M Athletic "Nov 18 2019"

Good Morning,

Thanks for your reply.

We are assessing the market a technology app called TAGALO. It detects the fall of the horse rider from the horse using the mobile phone sensors. We would like to discuss the applicability of the technology and whether such a technology is needed. We would like to learn about the current situation in the equestrian and to have an insider perspective from the head coach.

Here is the website for the technology that we are assessing:

https://tagalo.com/?lang=en

Due to the short time frame required to carry out this project, we would appreciate it if the meeting can be within the next two days.

Kind Regards,

Abdullah

Reply

Unfortunately the coaches will not have time to meet in the next 2 days. If you'd like to send a list of questions I can do my best to give you any insight on the app but I'm not sure we would really be the best people to evaluate it.

The Equestrian team does not do any trail riding and all of our practices are group lessons so notification of fall wouldn't apply. Hope that makes sense!

Kimmy Saul '16 | *Director of Operations*