WAWA COMMUNITY
BUSINESS PLAN

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EXECUTIVE SUMMARY
The Wawa Community is a software company that specializes in developing software to solve peculiar societal problems. Its new product, TroTroApp, is aimed at reducing the stress associated with transportation, especially with the use of commercial passenger vehicles, locally referred to as “trotro.” Most Ghanaians use trotro as the main means of transportation. A percentage of foreigners arriving in the country also make use of the trotro. The TroTroApp will offer tremendous service to these trotro users.

TroTroApp will be positioned as a web application that enables commercial vehicle users to get information as to the nearest trotro station, the best route to their stops, and the standard fares to pay. The application will also allow users to make reservations of trotro and taxis. There is currently no company that has produced this kind of web application with the features we’ve developed.

TroTroApp will be a free application, with respect to getting locations to stations and checking fares. However, taxi and trotro drivers would pay subscription fees in order for reservations to be made of their taxis and trotro respectively.

Then potential market for the application is very promising. The TroTroApp is expected to get to public notice through a number of ways. The first among them is through billboard advertisements. Billboards of the new application will be placed along major roads to every region in the country. Also, stickers of the application would be provided to both private and commercial vehicle drivers to be pasted on their cars. Links to the application would be provided on other frequently used websites, social media, etc. These, among others, are meant to publicise the application to a large extent.

The Wawa community is composed of able personnel who are experts in their respective fields of operations. The team is made up of individuals who are self motivated, passionate driven, cautious risk takers, profound marketers, programmers, among others. These diverse capabilities of the team make it a complete body, capable of meeting societal technological needs.

BUSINESS SUMMARY
The Wawa Community has produced an application that fills a gap in the transportation industry. More often, individuals, especially those new in town, find it quite tough moving from one place to another. The TroTroApp will ease the difficulty associated with locating trotro stations as well as bus stops.
The TroTroApp is composed of three main features to ease transportation constraints. First, it provides users with information as to the nearest trotro stations from their current locations. Users can, with this feature, avoid wandering about in search of trotro.

Another feature of TroTroApp is its ability to provide various routes to a particular destination. Users have the opportunity of knowing the various routes from one station to another. They can choose from the route options the most appropriate for their stop or destination.

The third feature of the application is the map that is displayed. This map displays the individual's current location to the destination station. This feature is most importantly advantageous to the user since it gives a visual representation of the direction to be taken to the user's destination.

The Wawa Community will be focused on new product development, as well as enhancements and upgrades to the TroTroApp. We will begin development of additional software packages to fill other needs based on our market research in the coming years. The Wawa Community is also investigating and staying on top of new technologies to enable us enhance and upgrade the TroTroApp.

**Current Situation**
The developers and visionaries of the TroTroApp have been working on the product since July of 2012. The first two weeks involved research into the TroTroApp and the transportation markets. The information gleaned from the research laid the foundation for the key features of the TroTroApp. The programmers of the product began work in mid July, immediately after the research.

**Objectives**
Our objectives are:
1. To get 20% of trotro users to access our application by July of 2013.
2. To get 10% of foreign tourists to access the application by December of 2013.
3. To see a positive return on investments by July of 2014.

**THE MARKET**

**Market Analysis**
Movement in cities like Accra, Kumasi and other regional capitals, as well as within certain densely populated towns, can sometimes be quite tiresome. The situation heightens when one is new in town. Imagine travelling to Accra for the first time, you
may be wondering how to get to your destination, the type of vehicle to be on board and even how fast you are going to get there.

Interestingly, individuals who have stayed in the capital city for quite a while still face difficulties locating certain areas. They might begin considering the nearest transport station, the shortest way to their destination and most importantly, how much they ought to spend on transport fares.

Based on our research into these transportation constraints, the Wawa Community took it upon themselves to develop an application that will serve as guide when navigating through the capital city and the country as a whole.

This application will not only provide people the services of easy movement but will also be a source of revenue and employment for members of the Wawa Community and commercial vehicle drivers whose vehicles will be reserved by passengers. For now, the four member Wawa Community is tasked with development, implementation and advertisement of the TroTroApp.

Market Trends
Census made by the Ghana Statistical Service reported that Ghana’s population was about 24,223,431 as at 2010 and reported a growth rate of 2.4% (www.ghanagov.gh/census/phc2010.pdf). However, about 32% of this population were mobile phone users (http://www.infoplease.com/ipa/A0933605.html). Taking into account the growth rate of the country from 2010 to date, we can conclude that the number has increased.

The Wawa Community therefore has put into account the fact that as the number of mobile phone users increase from year to year, so will the mobile internet market. Hence, most internet enabled mobile phone users will have access to the internet. With the expectancy of a huge traffic per month, we project 2% of this number to use our product in our first year and 25% in our fifth year. With these projections, companies will eagerly be wanting to advertise their products on our site.

STRATEGY INFORMATION
Positioning and Charges

Our primary charge objective will be to capture, build, and maintain market share. We will be entering the highly competitive midscale full-service search market. We are going to be sensitive to the expectations of our customers. We will, therefore, need to position our charges for reservations attract this middle-scale market niche tier. Our charging will also be margin driven.

While our charge floor will be determined by our break-even point, we will need to employ a flexible charging mechanism that will allow us to reflect competition and market conditions. At the same time, we will be selective in our delivery and information and services offerings. We will choose only those services that will allow us to support sound profit margins. This pricing approach has also been incorporated into our financial projections.

The Wawa Community has projections of getting 20% of trotro users to access our application by July of 2013, 10% of foreign tourists to access the application by December of 2013 and acquiring a positive return on investments by July of 2014.

Sales

The Wawa Community will make its sales through subscriptions made by prospective clients, specifically taxi and trotro drivers. Companies will also be charged for advertisements displayed on the website. The Wawa Community will also contact churches and organizations who will like to reserve buses for conventions and seminars. Arrangements will therefore be made with bus owners and transport corporations nearest to them. Both parties will be charged for the services provided.

The Wawa Community will provide users of the TroTroApp with free services. Such services include providing best routes and transport fares from one station to another. Maps displaying present to destination locations would also be provided as a free service on the application. We anticipate that the general public will love these services and rely on it for easy transportation.
Advertising and Promotions

Billboard, television and radio advertisements will be the major means by which the Wawa Community will make the TroTroApp known to the general public. There will also be recommendations and links to TroTroApp from other sites, blogs, social media, directories, etc. Users will have access to free user accounts.
THE BUSINESS TEAM

The management team for the Wawa Community is a diverse group with strong skills in technology, marketing and sales, finance and operations.

Key Players

Archibold Nana Acheampong - CEO
Mr. Acheampong brings marketing and executive management expertise into the group. He is self motivated, a team builder and best of all results oriented. He was the brain behind his group obtaining a relatively high price for the two chocolate bars that was sold as part of the MIT-AITI marketing project.

Kwaku Marfo - VP Finance
Mr. Marfo, a passionate driven person, keen on solving societal problems. He provides very useful financial advice to the management team. He is also skilled in appropriating the right amounts of funds to support various projects. Out of in depth expertise, he is able to reduce tension in times of financial difficulties through his efficient financial advice.

Samuel Asamoah Tekyi - VP Engineering
Being a cautious risk taker, he is responsible for the backend section of the product. He has been involved in the development of various products, among which include a jammer to prevent reception and making of calls in a given perimeter. His passion for programming makes him one of the best in the programming sector.

David Agbomadzie Kwashie - VP Marketing
Mr. Kwashie is the Marketing manager of the Wawa Community. He has such marketing capabilities that his inputs to the group with respect to his department is invaluable. He is a creative thinker, with adaptive skills.

Organizational Chart
PRODUCT AND SERVICE OVERVIEW

Product Description
The product is a web application which is aimed at helping trotro patronizing individuals and private vehicle users by enabling easy navigation through unfamiliar routes and informing trotro users on trotro fares between stations covered by this application. The application is called TroTroApp, which will be a multi-platform web application that can be accessed with any internet (browser) enabled device.

Because TroTroApp can be used on any internet enabled device such as mobile phone, laptop, etc., it is made easy enough to be used by both sexes, of all ages, who can handle any of these devices. On a laptop or a phone, a user has to open a browser and enter the uniform resource locator (URL) of TroTroApp or search from google for TroTroApp. The application page will show up, ready for use.

TroTroApp has several features like:

- A fare check
- A map visualization between stations
- GPS coordinate points for both stations and stops
- A search feature to enhance easy access to information on the site.

The fare check feature prints out the base cost of boarding a trotro from a chosen station to a destination station. This feature is particularly targeted at freshers in town who might have trouble knowing trotro fares between locations. TroTroApp gives reliable information so far as transport fares are concerned, specifically information
obtained from the Ghana Private Roads and Transport Union, to its users to help in planning for their outing.

More often than not, road users find it difficult with road mapping information. Google maps have usable mappings for certain areas in Ghana. However, the names given to locations on the map are usually not popular with the locals. The headache involved in identifying locations presented by Google maps is overcome by TroTroApp, with its additional feature of having a map with the names of locations being the local names used by trotro conductors and the natives as well.

Countless benefits of using the TroTroApp can be realized in the cases of

- A foreigner or a person unfamiliar with a particular area in town. TroTroApp saves him the pain of looking for another person and asking for direction, with the hope that this person gives the required direction.

- TroTroApp provides alternative routes from a source location to a destination with the mapping functionality. A user of the application can search for specific route stops and stations on the mapping with the GPS coordinate fields implemented in the database of the application. Apart from the search for locations on a route, the map also helps the user to view the entire outgoing routes from a chosen station to another. This functionality is most beneficial to users who have their stops on one of the provided routes. With this, they can select the appropriate route to use, which obviously will save time and money.

- The search functionality will be of greatest benefits to users who are unfamiliar with both the source and destination stations, but only know their stops. Whenever a user types a stop inside a search field, the TroTroApp returns the GPS location of the stop, the routes on which the stop can be found and their order counts on the route.

After a successful implementation of these features on the application, the TroTroApp will be equipped with a user account functionality where users of the application can create free accounts and participate in services such as taxi, trotro and bus reservation accessibilities. The application will also feature a couple of advertisements from affiliate marketing groups, which will provide users of the application prompt need for related services.

**Competitive Advantage**

Our primary market research was also successful in identifying some setbacks in products and services already available to the public. For example, Google maps provide users with information about their locations and destinations worldwide. However, when it comes to the local communities in Ghana, Google maps are not detailed with information concerning the towns and local bus stops.

There is a simple reasoning to our strategy in this area: tourists frequently visit the country and whilst in the country, our research revealed that most of these tourists use
internet enabled phones or personal computers. A greater proportion of these tourists being in the country for the first time are unfamiliar with their destinations and places of interest and therefore do need assistance. The Wawa Community is therefore targeting these tourists as well. We aim at branding our product services to be appealing to these tourists so as to get them excited about knowing their directions without going through the trouble of asking indigenes for directions. The Wawa Community’s TroTroApp is sure to meet this target.

The Wawa Community also possesses some other important competitive advantages that will better position it in the market and differentiate it from our competitors. We will cater for the locals by offering them detailed directions, maps and precise transport charges, as opposed to trotro conductors and other applications such as Google maps. Our projections are in line with industry averages and reflect our revenue goal relative to this local market opportunity. We feel our revenue projections for the business are well within our reach over the near-term.

The Nature of Technology

The TroTroApp project will be a web application that is supposed to be accessible by any web browsable device that has internet connection. The application will be designed to be compatible with all the popular internet browsers we know of today, like opera, explorer, chrome and mozilla.

As a user visits the TroTroApp application, certain actions like checking a checkbox and clicking on a submit button are proposed to be the two main forms of a user input to the system. Upon clicking the submit key, the database is triggered to respond to the input, interpret it and produce appropriate information based on the dataset already supplied to the system. This operating scheme of the TroTroApp does overemphasize the fact that the proposed TroTroApp is a dynamic website.

Due the fact that dynamic database driven websites involve significant amount of complexities right from their development face to maintenance, the group has chosen to develop the TroTroApp web application on Django and Heroku platforms. Web-frameworks like Django have been designed to cater for the complexities mentioned above. Django does this by providing all the necessary components in a single package and taking care of the integration as well. Django is a python based web framework that helps a developer to come up with new and highly dynamic web applications quickly. It also saves time and effort by providing a code and entire application reuse flexibilities where applicable.
Some salient features about Django that influenced the decision of the group were because of its rapid development, code generation flexibility, reusability and their development cheaply available development practice. This applies to the fact that the group has very short time to implement the proposed web application and therefore we as a group decided on using the Django web framework.

Web applications vulnerable to cross-site scriptng attacks like sql-injections, XSS, etc. will definitely not survive the test of time in hostile internet environment. Django turns out to be the right defender against these attacks because it provides built-in protection from these types of attacks by adopting a template system that automatically "escapes" the contents of any variables to be displayed.

Among all the cloud application platforms, Heroku presents a new way of building and deploying web easily through the use of git commands like git push. The good thing about Heroku deployment system is that, it is not dependent on the size (big or small) of the application.

**The Use of the Technology**

The internet technology accepted by the group to be used as the building framework for the application will consist of Django and Heroku. These technologies will be used for database system management to manage the data acquired on every trotro route, their fares and potential bus terminals or stops along this route.
DISTRIBUTION AND SALES

Financial Plan-Expenses
There are two forms of expenses, namely:
1. Start-up
2. Operating

Since heroku and django are the main technology involved in the building of TroTroApp, there will not be the need for huge capital to start-up. Also with the availability of github; we can work on the project in our homes without the need to have an office. Hence the group will have a start-up and operating expenses as in tables 1 and 2 respectively.

### Start-up Expenses

<table>
<thead>
<tr>
<th>Internet bundles</th>
<th>GH₵ 100.00</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>GH₵ 100.00</strong></td>
</tr>
</tbody>
</table>

Table 1

### Operating Expenses

<table>
<thead>
<tr>
<th>Internet bundle per month</th>
<th>GH₵ 20.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Materials &amp; Strategy</td>
<td>GH₵ 80.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>GH₵ 100.00</strong></td>
</tr>
</tbody>
</table>

Table 2

Operating expense × 6 months = GH₵ 100.00 × 6 = GH₵ 600.00
Operating the business for six months will thus cost GH₵ 600.00

Therefore for complete start-up cost:
Start-up expense + Operating expense = GH₵ 100.00 + GH₵ 600.00
= GH₵ 700.00
Hence, the company will have to raise a capital of GH₵ 700.00 to start-up and remain operational for at least six months.

**Revenue Model**

The TroTroApp will generate revenue from the following:

- Advertisements run on the website
- Taxi and trotro reservation.

With respect to advertisements on the website, charges will depend on how long the advert(s) is run or per click. We will start offering advertisement spaces once we hit the 3000-5000 traffic per month, which can easily be attained with proper marketing of the application. With such traffic, we can attract lots of advertisements, especially from affiliate markets like hotels, restaurants, inter-city transport companies and basically, individuals in the transportation industry. The cost per click on Facebook (Ghana) is $0.3 but that of our website will be $0.5 for standard image (jpeg, png, gif) file flash banners, since our website is narrower and have specific users. Also, we will charge cost per impression for adverts; this costs $0.2 on Facebook (Ghana) but we will charge $0.3, with page refreshing inclusive.

From our market research, we observed that about 80% of Ghanaians are mobile phone users and about 60% of this percentage use browser enabled phones. Also, about 19.3% of computer owners in the country are internet users. From this observation, the group expects a traffic of 12,000,000 per month and half being unique visitors.

The taxi and trotro reservation will also generate revenue since per customer we provide for the drivers we will charge 5% of cost for taxis and 10% for trotro. Hence, the more customers we provide the more the group earns. These figures will change as the group attains its goal of 120,000 that is 2% of our unique visitors (i.e. 6,000,000.00) by the second year of operation. We project that by the second year of operation we will make enough profits to be able to make returns to investors.