

**ALGORITHM Inc.**

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**Concept Note****Introduction**

Algorithm Inc have 10 years' experience in regional health sector, we have built and installed all needed software mainly in Pharmacy. Which is Ishyiga software. we realized that our health institution lacks communication protocol among them with accurate data starting from a patient, hospitals, pharmacies, Insurances, Taxes and the Minister of Health.

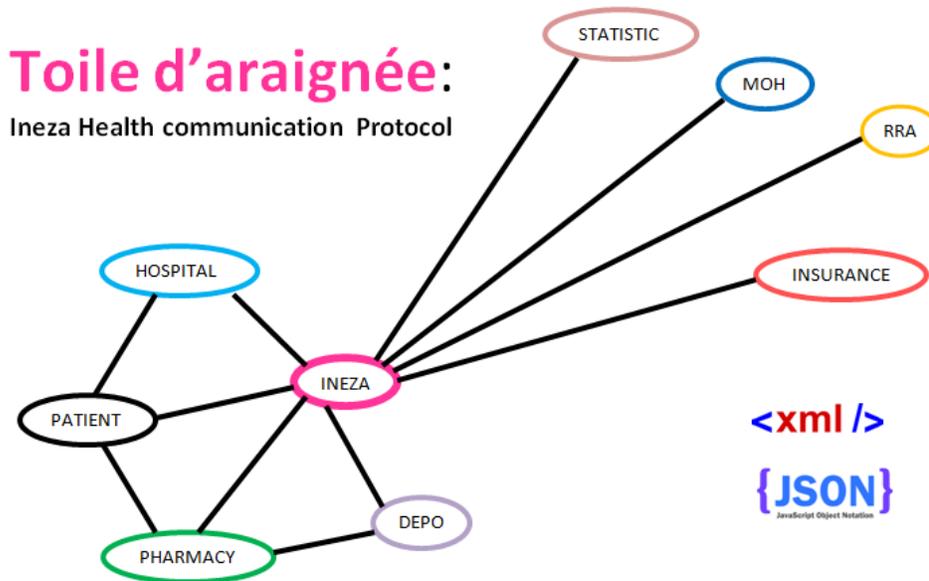
It's in that case that Algorithm Inc build a platform called Ineza Health Communication protocol which have innovative products to provide a full integrated and comprehensive communication protocol to Rwanda health Sector to connect all these entities, with an easy follow on them including COVID-19.

**Objectives**

Ineza Health Platform' objective is to provide quick, secured, and affordable healthcare by providing its users an electronic platform on which they will save for unexpected healthcare bills, from which they will be able to access affordable and timely medical services and drugs at the same time managing their electronic medical file

With technology, health services data can be recorded and shared in a secure way creating an ecosystem to link a patient with a doctor, a pharmacy, and an insurer. In addition to that, technology provides an opportunity to save for future medical expenses in order to prevent unexpected expenditure that might be catastrophic for the user. **Making the machine learning those patterns and enabling Artificial Intelligence algorithms,**

The figure down below shows the Ineza Health Communication Protocol



Where by the platform can collect data in all this institution:

- **Doctors** will be able to view and load all appointment, they can manage their timetable, make an electronic prescription and also can have access to the patient files containing all his/her medical records.
- **Pharmacist** will be able to track and secure price views, make online sales, publish his/her stock and prices, receive electronic payment but also will get an electronic prescription from the doctor in order to serve the patient.
- **Depot** will be able to track and secure prices views, be able make online sales to pharmacies, will be able to publish his/her stock and prices, trace his/her stock also received electronic payment.
- **Insurance** with the help of the VCDC (virtual claims data controller) will prevent fraud, abuse, ensure quick and quality services to partners (clinics,



hospitals and pharmacies) also access to data to be able to do accurate analyses.

- **Patients** will have first an account in Ineza to be able to book an appointment, search drugs, compare prices, get access to his/her medical file

the platform contains the following products:

1. **Ineza Momo:** Algorithm Inc. has integrated with Mtn Mobile Money (MOMO) platform to manage Ineza health saving sub-account, Every MOMO user will have the option to save for their health, transferring funds from MOMO current account to Ineza MOMO saving sub account with a fee; when Ineza user get sick he/she will go to any Health Service Provider (HSP); Pharmacy, Clinic, Hospital; and pay using Ineza MOMO money without any fee, HSP will be encouraged to give discount to Ineza users so they can beneficiate a wider market, wider market data, e-commerce, deliveries and pharmaceutical care.
2. **Ishyiga trade:** it's an Algorithm Inc. platform which enables all citizens to consult useful and reliable information in real time and free of charge. The application offers the list of services and medical facilities and more in Pharmacy, Clinic and Hospital; The application also allows you to order your medicine/service whenever and wherever you are and make an online payment using Ineza.
3. **Delivery:** Algorithm Inc paid partnership with DMM.HEHE for delivery services whereby any request or demands form Ishyiga trade platform will be delivered to the customer.
4. **Traceability (Stock accuracy):** This is one of Algorithm Inc product which controls the batch numbers within the stock by generating automatically QR codes referring on the Supplier name, purchase invoice number, item code, quantity, expire date and the batch number to each item entered in the stock. This is a designation that is printed on the drug label that allows it history to be traced because it is unique on Rwandan network.
5. **VCDC(virtual claims data controller):** Algorithm Inc has worked working on a system which can automate the insurances claims management system



therefore all invoices passing through it will be verified, accepted and payable within 30 days.

6. **Circle** (interconnection between HSP): This cloud product serves to route all online orders and its responses.
7. **UDLH** (Unified Drug List Harmonised): created by Algorithm Inc by combine two list of one from RHIA and another from ishyiga software for Drugs identification
8. **ODT** (Online Data Transmission): it's an ishyiga software platform which allows Doctors to make an electronic prescription(E-prescription)
9. **Symphony** (data collection and storage): it monitors all pharmaceutical Invoices

Therefore, we believe if we take all needed information of all stakeholders in health sector on the right time building an accurate, robust, fast, scalable and secure platform can be done in the best way lather than using one isolated app for specific people.

The platform database will have all data of:

1. Appointments
2. Consultations
3. E-prescription (attached to a disease)
4. Dispensed drugs
5. Patient info (location, phone, weight, temperature)

Minimum Needed settings

1. Diseases Unified master database (ICD10)
2. Drugs Unified master database
3. Matching drugs with diseases
4. Personal unique Identification
5. Health servants Unique Identification
6. Health facilities Unique identification
7. All major players in the health sector has to use a certified software (integrated) by the platform

The platform will be able to show:

1. Analyze trends of diseases and sent alert by region, national.
2. Live dashboard of diseases versus drugs taken
3. Live map of any disease cases on the territory
4. Query people who have been in contact with an infected person
5. Live dashboard of prescribed drugs versus available stock on the market
6. Tracing fake drugs

Needed tool for the platform to run

1. Smartphones
2. Laptop or desktop
3. Ishyiga eRX 1.5 for hospitals
4. Ishyiga POS 8.1.3 for Pharmacies
5. Ishyiga ERP 7.0.2
6. Mobile Money account
7. Ineza account

### Challenges

1. Data security: Ineza will endeavor to protect data as much as possible adapting to new cyber security technologies.
2. Network: in some area's internet is not as good as in urban areas, Ineza will engage his partner MTN to increase internet accessibility in rural areas.
3. Smartphone penetration is still low; however, Connect Rwanda Initiative will improve the situation.
4. Mindset; the potential users are not aware of the advantages offered by the platform. There is therefore need to raise community awareness.

### Conclusion

For the last decade, Algorithm Inc and MTN Rwanda have been developing this ecosystem to offer to its users a powerful tool that will enable them to access quality and affordable healthcare, and more importantly, to save money for unexpected medical expenses. Ineza user will receive the best services in the shortest time, at affordable prices, with a possibility of instantly borrowing in case his savings cannot cover the medical expenses.