EcoCarrier





A Strategy for Any Business

A digital front door strategy offers any healthcare system or business organization unprecedented efficiency and access, and the patient or user of services the kind of flexibility and convenience they've never experienced before especially in the healthcare space.

### A Life Line to the SME

SME (Small Medium Enterprise) needs to adopt Digital Front Door strategy in order to survive competition from the Big Box and Online Giant Operations.



Today, virtually every business process is performed online through websites and apps, computers, mobile phones and other devices. At the same time, offline data is increasingly being digitized. And, the real world is being brought online with sensors.

Just think of examples from our own life, such as how we interact with friends and family, how we do our banking, how we buy music, how we decide where to go on vacation, how we get driving directions and how we monitor our fitness.

As a result of the digitization of virtually everything, vast amounts of information are being gathered and stored, which when appropriately analyzed, can drive huge business benefits.



Applied Analytics & Single Source of Truth (SSOT) for the cost of care across the continuum

- the lifeline for every health and healthcare hub will be actionable data
- healthcare providers are pushing for practical data sets presented in a simple, actionable framework
- many healthcare organizations have been focused on building data warehouse empires without doors to let anyone in
- TMUDFD provides a convenient and easily consumable way for information data to be made available to general population



TMUDFD is a cloud-based at-scale managed mobile digital service platform offering conveniently and instantly consumable business services online through a plug-in that is easily installable on any webpage.

It is "TeleMeetUp at Digital Front Door" for the business, catering to all aspects of a business efficiently & digitally as on-demand pay-per-use service.

TMUDFD is a speech-enabled, AI&ML-informed Conversational Chatbot integrated with virtual interaction video conference service enhanced with approximation to presence in Mixed Reality <u>www.mresence.com</u> <u>www.telemeetup.com</u>



When visitors or clients or patients are at a webpage or webpages of an enterprise, they are at its Digital Front Door.

That is an instant of Great Possibilities and maybe of Great Promises.



#### In case of a Business,

- Greet the visitors or clients
- Give them Help and Support Services
- Provide them with updates and Important Information
- Take them to your showrooms, your factory shop-floors or your labs in virtual interactions

- Give them demo and illustrations in Virtual Interactions
- Direct them to a Webinars or Training Sessions
- Promote and/or sell them your goods and services
- Build a business relationship with them



#### In the case of a Healthcare system,

- Greet the visitors or patients
- Give them Help and Support Services
- Provide them with updates and Important TeleHealth Information
- Take them to Virtual Waiting Room to wait for In-Office examination. Patient is to wait in vehicle to avoid contamination/infection in physical waiting rooms.
- Take them to Virtual Waiting Room for TeleMedicine appointment/examination
- Direct them to Triage Department of Emergency Ward
- Have Triage Nurse, Doctors, Specialists in a joint video conference session to examine Patient or discuss with CareGiver for Patient in a TeleMeetUp session
- Direct patients convalescing at home to get follow-up TeleMedicine consultation and examination
- Direct clients/patients seeking Mental Healthcare to specialists for interview & examination



#### TMUDFD consists of

(a) TMU - a virtual interaction and video conference service enhanced with features that help realize approximation of PRESENCE among participants who are geographically apart through the application of technology for Mixed Reality Production. <u>www.tmu.ai</u>

and

(b) an AI-assisted ML-enabled/informed Conversational Chatbot that is speech-enabled to support native language chat between the parties (30+ languages supported). The Chatbot may be enabled with the use of RPA software to read and voice data/information off of the Business' or Healthcare System's CRM and accounting system and certain spreadsheets for the purpose of information service provision accessible to clients/customers of the Healthcare System or be used in conjunction with Google Forms or SurveyMonkey to complete forms accurately and efficiently.

The Conversational Chatbot is able to deal concurrently with virtually unlimited number of visitors seeking/requiring information/service/advice of the healthcare system.

(a) + (b) = TMUBOT speech-enabled

(c) TMURGF (Revenue Generation Facility) – a facility that is ready for use for monetization of consultation service and/or for access to valuable chargeable information and/or services.

(d) Dashboard for real-time display of data relative to usage, billing, invoicing, orders, payment, network KPI, etc. Integration of the dashboard with RPA system employed by the Healthcare System would greatly enhance the productivity of work operation.



### TMUBOT is very versatile and may be configured to cater to meeting various service requirements including but not limited to the following:

#### **Administrative Functions**

- General information provision Q&A
- On-boarding a new customer/vendor/service provider or registration of patients
- Provision of Account Specific Information
- Collection of overdue payments
- Payment gateways

#### **TeleHealth Information & Education**

- The information/education materials may be provided in text and graphics with voiceover and/or in video
- It can be in Webinar or Blog formats



#### Virtual Waiting Room - in 2 versions

#### (i) for a patient arriving for an in-office medical appointment

In this context, a virtual waiting room is the process in which a patient can do check-in from their mobile device and remain in their vehicle until an examination room is available. This allows the patient to bypass the traditional waiting room, reducing the risk of exposure to both other patients and germs and viruses present on surfaces, shared devices and other materials such as magazines, books, papers, clipboards, and pens.

(ii) for a telehealth appointment

In the context of a telehealth appointment, a virtual waiting room is a process used by

- patients to indicate they are ready for their TeleMeetUp (TMU)
- staff who are viewing and managing a patient's TMU experience
- providers who are indicating they are ready to initiate the telehealth appointment with the patient or caregiver



#### TeleCare Service Provision to Rural Areas for TeleMedicine & TeleHealth Service

TMUDFD or TMU for Digital Front Door is installed in a webpage owned and operated by an urban hospital or the Ministry of Health.

In this use case, the participants are required to use TMU Native App (instead of TMU Web App) which they can easily download from Google Play Store (for Android-OS version) or App Store (for iOS version).

TMUDFD as TMUBOT is configured for this use case with a menu that suits the application such as

- Triage
- Mental HealthCare
- Education for Public Health
- Routine & Incidental Reporting
- Hygiene & Clean Water



The concept design of the TeleCare Service Provision is for medical care services to be provided to rural parts of a country by utilizing the medical facility available in hospitals in the urban part of the country through the application of TMUBOT services.

Typically a CareGiver, who is an adult with minimum high school education, in a Community Center is required to operate a Tablet or a Smartphone and to use the Chrome browser in the Tablet or Smartphone to open the Homepage of the urban hospital or the Ministry of Health where TMUDFD has already been installed and is prominently on display.

The CareGiver is greeted by TMUDFD and presented with the following Menu:

- Triage
- Mental HealthCare
- Education for Public Health
- Routine & Incidental Reporting
- Hygiene & Clean Water

When the CareGiver clicks "Triage", a TMU Session is instantly launched to connect the CareGiver with a Triage Nurse in the urban hospital.

The CareGiver then talks to the Triage Nurse and discusses the condition of the patient at hand.



Virtual interactions among the Triage Nurse, the CareGiver and the Patient will help to determine what course of action to take for medical treatment of the Patient.

The CareGiver brings the back camera of the Tablet or Smartphone near to the Patient for the Triage Nurse to see and examine the condition of the Patient.

The Triage Nurse uses a Tablet or Smartphone running TMU Native App (Android or iOS) during the interaction so that the back camera of the Tablet or Smartphone can capture the Triage Nurse's hands, and the image of the hands is merged with the video of the Patient. The use of the Tablet/Smartphone running TMU Native App enables the SWISTWIT (See What I See Touch What I Touch) function to be used by the Triage Nurse to pinpoint or finger-point a particular body part or place or object as required during discussion/interaction for greater clarity in explanation.

During the TMU Session, upon determining what care the patient needs, the Triage Nurse will reach out to the appropriate doctor or specialist to further examine the Patient and to deal with the Patient's condition.



During the conversation and interaction among the CareGiver, Triage Nurse, Doctor/Specialist and Patient, they can make use of the excellent functional features of TMU to effectively and efficiently explain and demonstrate ideas and actions to take so as to determine the Patient's condition and to prescribe treatment.

(Note that the Doctors/Specialists should also be equipped with a Tablet or Smartphone running TMU Native App if they want to be able to use the SWISTWIT function.)

These include

- Native language chat with automatic language translation in real time which enables a Doctor/Specialist who is a foreign language speaker to speak and write in his/her preferred language in discussion with the CareGiver
- Screen-sharing of documents and images on any of the participants' screen during discussion
- Whiteboarding for drawing and sketching out ideas and illustrations to help explain ideas and designs with greater clarity

- SWISTWIT (See What I See Touch What I Touch) function for pinpointing and finger-pointing on certain part of a document or some design or some body parts of the patient
- The entire virtual interaction among the participants is automatically captured and recorded in multimedia for use for various purposes in posterity.



Resources N

How it Works v Imagination v



Virtual Interactions & Video Conference in Multi-Media

in MRESENCE for approximation to PRESENCE with SWISTWIT & FWIF \* for greater clarity in explanation and expression of empathy among people geographically apart

#### Anywhere and in Any Situation



Everything you want to be able to do In One Continuous Session !

Pricina

Application Space



**MRESENCE™** 







# TMUDFD TMU for Digital Front Door

#### TMUBOT

TMU + AI-assisted Conversational Chatbot

A Chatbot is a virtual assistant with artificial intelligence with which a human can dialogue. It understands human language and answers various questions. It learns from its interactions and also learns from a live agent. It can perform some tasks like sending emails.

#### TMUDH TMUBOT + Digital Human

#### **Digital Humans**

Speech enabled AI-assisted ML-enabled Conversational Chatbot to talk to Clients

- Able to learn from conversation between Client & Live Agent
- Able to provide hints and info materials to Live Agent in dealing with Clients
- Able to do speech-to-speech translation in real time that allows Client to elect to have conversation / dialogue in language of choice



## TMUBOT (TMU + AI-assisted Conversational Chatbot)

TMUBOT incorporates all the functionality of Chatbot and additionally enables users/clients to

- do Virtual Interactions & Video Conferencing with live agents
- choose a preferred foreign language translation to use for conversation with a live agent
- use the whiteboard feature to draw for illustration
- share their screen with a live agent and vice versa to show details
- when using TMU native apps for iOS or Android, a live agent or the client can use SWISTWIT function (virtual hand) to pinpoint on the content of a video stream from another participant
- for ease of integration, TMUBOT can be added as a widget on one or more pages of any website



### TMU-DH TMU + Digital Humans as a Widget

### TeleMeetUp

Virtual Interactions & Video Conference

- SWISTWIT + FWIF
- Whiteboarding
- Screen-sharing
- Native Language Chat with automatic language translation in real time
- Multimedia Recording of TMU session

### **Digital Humans**

Speech enabled AI-assisted ML-enabled Conversational Chatbot to talk to Clients

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TeleCare by TMU with MRESENCE enables healthcare providers to support and treat patients in their homes and whenever they need assistance.

This increase in support helps to bring about early intervention for diseases and illnesses, providing ongoing care to patients with chronic conditions, and increasing patients' access to available healthcare professionals.

Distinct Benefits of TeleCare by TMU with MRESENCE:

- Reducing re-admissions
- Improved patient access and retention
- Optimized resources
- Reducing re-admissions: With the ongoing COVID-19 pandemic, it's important to limit hospital visits for patients. Such limitations include preventable re-admissions for patients that have been discharged. Through TMU with MRESENCE, the medical team can educate patients, coordinate their care requirements, and improve their medication adherence.
- Improved patient access and retention: TeleCare / TMU with MRESENCE enables the medical staff to consult with more patients in less time, regardless of
  location. Hospitals and other healthcare institutions can provide virtual consultations with patients over TMU virtual interactions no matter where they are. This
  accessibility increases engagement levels and ensures patients get the assistance they need when they need it.
- Optimized resources: The healthcare providers can also become more efficient by carrying out virtual triage and expanding the level of access patients have to their doctors and consultants.

NASESENICE



### Applications & Use Cases

#### TeleCare with MRESENCE

- <u>TeleCare Brochure</u>
- <u>TMU with MRESENCE Brochure</u>
- <u>TeleMeetUp Brochure</u>
- Budroid Brochure
- TMU with MRESENCE for Mental Healthcare Brochure

#### **Medical Tourism**

MRESENCE for Medical Tourism Brochure

Routine Reporting among various unit locations of a hospital; incidental reporting

<u>CJ MRESENCE Brochure</u>

Authenticated execution of legal documents during COVID-19 Lockdown with the use of TMU with MRESENCE

<u>TMU Authenticate Brochure</u>



MRESENCE song



### Demonstration / Showroom and Virtual Exhibition TMU with MRESENCE overcoming language barriers

Video for illustration: Pottery business across borders and language barriers

MREXHIBITION – Exhibition in Mixed Reality is a democratized, convenient and economical way of doing Exhibition with distinct advantages:

- Elimination of the high cost of physical venue, exhibition booth space
- Elimination of the tedious work and high cost relative to exhibition display transportation/construction of show display – the setting up & tearing down
- Elimination of costs of travel, per diem expenditure of the personnel involved in working on the exhibition
- Enhancement of the efficacy and time and cost efficiency of showing products and operation in existing showroom and in manufacturing facility and even operation in situ and in progress with live interaction – interview and discussion – with people at work operation

MRESENCE

• Greatly reduced carbon footprint relative to traditional, physical in-person exhibition and conference











# Video of typical Conversational Chatbot in operation

#### Chatbot for triage







### TMU – Key Features



Videoconferencing



Mixed Reality

Native Language Chat

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Confraction Chall

nn. Bakat commerce after-result

Q W E R T Y U I O P A S D F G H J K L ' Z X C V B N M C

0

0



Whiteboarding



TMU

### Video to show SWISTWIT in operation

#### SWISTWIT used by doctor







For a quick illustration of TMUBOT in use, please view the following footage for a proposed application to provide TeleHealth & TeleMedicine services to rural community by utilizing the resources of urban hospital.

Video for TMU Widget for Amref



Excerpts <u>Widget on website</u> <u>TMU session among patient, caregiver, and nurse</u> <u>SWISTWIT used by nurse</u>





### Revenue Generation Facility TMU-RGF in Service Provision

- TMU Widget in general, TMUBOT and TMU-DH in particular offer TMU Virtual Interactions & Video Conference Service in an easily consumable form that is very easy to set up.
- Any Business can use TMU Widget, TMUBOT or TMU-DH to interact with Clients and Visitors to their website or webpage and, if necessary, impose an admission fee or a pay-per-use charge for accessing/attending an event or availing themselves of services provided by the Business who owns and operates the website/webpage.
- TMU-RGF is an essential tool for eCommerce that is complete with Order Form, Invoice Creation and Payment Gateway.



# Typical Dashboard Display

- Calls
- Minutes •
- Data transfer
- Translation characters •

0.5

0.4

0.3

0.2

0.1

- Participants •
- Registrations •
- Etc. •







### Strategic Partnership with Hospital

#### Strategic Partners as Service Providers

TMU Service Platform caters to the needs of Clients/Strategic Partners as Service Providers with OSS facility to do business of service provision in their respective markets/regions:

- Various kinds of Pricing Models: Pay-per-use; Subscription; Service Bundles
- Granular Billing/Invoicing for various billable elements
- Order Form / Shopping Cart & Payment Gateway
- Dashboard for easy visibility of service/network performance
- Heat Map display, etc.

#### Business Models of MRESENCE Services

• B2B

Integration with other service packages through SDK Integration with other devices through USB Type C

• B2B2C

As cloud-based managed service provision of services that cater to consumers

• B2C

Direct service provision to consumers in worldwide markets



#### Compliance & Global Cloud-based Operation At-Scale

- TMU-Switch is HIPAA compliant
- GDPR Compliant Service Provision
- Software written in GO for robust resilient operation
- Multiple Redundant Servers running in AWS Cloud in various regions:

- USA/Canada
- India
- Europe
- Africa



# ECOCARRIER INC.

Cloud-based Managed Service Provision In Telecom & Mobile Digital Space The Making of a Global Social Enterprise

### **Corporation & Background**

- Ontario Corporation formed in 1997. Founded, owned, managed and operated by Canadians.
- Ecocarrier designs, develops, produces & supports cloud-based IP telephony managed services as MVNE (Mobile Virtual Network Enabler) that caters to Resellers of Retail Telecom Services (Prepaid Calling Card & Mobile TopUp Services, Mobile Dialers, etc.) & Telephone Companies and Mobile Network Operators & Tier2 Wholesale Service Providers for Wholesale Carrier Voice Service for low-cost Call Termination/completion in 20+ countries in MEA handling <u>daily</u> 300,000 – 500,000 minutes Voice Traffic
- A leading telecom service provider in EMEA since 2003
- Ecocarrier is exceptionally rich in intellectual property: having developed Intelligent Dialers, IP PBX, VoIP Softswitch and Billing Software and applications for CallShop service provision, Prepaid Calling Cards service provision and Mobile Credit Recharge (Mobile Credit TopUp) service provision and Inbound & Outboard Call Center service provision for telephony services for wholesale and retail operation
- In 2016, Ecocarrier began diversification into design, development and production of cloud-based managed mobile digital services in AR/VR/MR/XR space and Games for children (age 4-10 years), under the brands
  - MRESENCE for MRESENCE Enablement Platform <u>www.mresence.com</u>
  - TeleMeetUp (TMU) with MRESENCE a features-enhanced video conference service <u>www.telemeetup.com</u>
  - PizzzAR for global cloud-based digital platform for AR/VR/XR-IoT-enabled apps <u>www.pizzzar.com</u>
  - W5Go Games <u>www.w5go.com</u> and RogoCoder Games <u>www.rogocoder.com</u>

### Vision & Evolution & COVID-19 Pandemic

- In 2015, we recognized the paid-minutes voice business would be greatly reduced by free services such as Skype and WhatsApp and the rapid build-out of high-speed mobile data service networks
- In early 2016, Ecocarrier began making significant investment in the design and development of mobile digital technology and solutions to ensure the continued success of the company in the ICT space. This development has been funded with cash flow from the wholesale carrier voice service provision business and the SR&ED tax incentive program
- The accelerated paradigm shift from the pay-per-use voice call business to all-free IP voice services like WhatsApp has disrupted the planned transition of Ecocarrier's business from IP telephony voice business to mobile digital services
- Our sales revenue derived from the voice business sharply declined in 2018 and continued until the second half of 2019. Sales revenues are now stabilized at about 30% of 2017 level
- Our mobile digital technology solutions and services are now ready for commercial production
- Over the past 18 months, Ecocarrier has been actively developing relationships in the ICT space to launch of our mobile digital services, including in Africa, South Asia, South America and Mexico
- Since January 2020, the COVID-19 pandemic has hampered the business development effort for the promotion of Ecocarrier mobile digital services internationally but has also created a unique opportunity for our services with the need for social distancing and dramatic increase in video conferencing

### **Ecocarrier Mobile Digital Services**

- Dramatic expansion and increase in demand for multimedia (audio/video/text) communication services
- Ecocarrier's business is evolving with this paradigm shift with our multimedia mobile digital services
  - MRESENCE multimedia videoconferencing platform uses unique mixed reality technology to "approximate presence" between users
  - MRESENCE is being deployed first through TMU, our advanced videoconferencing app, and will be available on a white-label basis for various use cases
  - singularly topical and relevant during COVID-19 pandemic and new normal post-COVID-19 for remote, collaborative communications<sup>1</sup>
- Ecocarrier's Games Division (W5Go & RogoCoder) have projected annual revenue of \$20 Million+ within three years
- PizzzAR Service Provision Platform and AR/VR-enabled Apps for building and running cloudbased managed mobile digital services for advertising campaigns complete with facility for deployment in a multi-level reseller /distribution structure
- Ecocarrier's MRESENCE & PizzzAR Divisions have projected combined annual sales revenue of \$83 Million+ within three years

<sup>&</sup>lt;sup>1</sup> Refer to <u>Atos Report "What the world will look like after the COVID-19 crisis</u>"

### Building a Global Social Enterprise

- Ecocarrier promotes social edification. Our projects are purpose-designed to
  - raise the digital consciousness of general population
  - contribute to meeting the United Nations' Sustainable Development Goals
  - build a kinder, more equitable, more enlightened society
- MRESENCE and PizzzAR services support AHA Solutions in rural Kenya to provide clean water, toilets, feminine hygiene products for girls attending school and telehealth services with hospitals in Nairobi and other cities
- Working with charitable and humanitarian organizations in various countries in partnership with large corporations investing in CSR initiatives
- Refer to presentation on <u>Ecocarrier's Social Edification Projects</u>