HOWARD\_CRO: business plan

Business plan (CANVAS model)

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| Business idea | HOWARD |
| Value propositions: | HOw WAs youR Day? => HOWARD  This product is asking „How was your day“, but it’s modular and can be adapted to any need. Our HOWARD #euvsvirus variant asks few questions about patient health: „Do you have temperature ?“, „Do you live with someone who need to be in isolation?“ , „ Are you feeling tired?“ and so on based on typical evaluation questions.  The key idea of these questions is detecting that someone maybe has Covid-19 by removing input vector of personal contact.  There is thousands of persons entering hospitals for checkups, er, bloodwork, diagnostics or visits. They all should in current environment be kept out of hospitals, but if we’re to go to normal life – a phase will happen for undefined amount of time where each person could be a suspected case of covid-19 which must be checked. On a calculated 2000 only patient entries daily, it’s 520000 entries yearly during only during working days. With visits and weekends, this can raise to millions.  It is of crucial importance that detection happens before protected building entry (e.g. hospital, doctor’s office), so if there is a doubt that someone has Covid-19, person gets isolated before getting in contact with others in the building (or in fact with anyone and anything.  Of course, if person is not detected as critical, there will be some other medical proposals.  Detecting and isolating people contributes to smarter testing for Covid-19 infection suspicion and helps against spreading.  Why is this important, losing a nurse, doctor or many to a suspected infection (quarantine for 14days at least) is a cost that hospitals can’t allow or should be able to avoid at all costs.  Using HOWARD is easy. It is a touchless, interactive screen and user’s answer is yes/no/neutral by showing it with one’s hand. Other inputs include voice based control which is not part of PoC but in conception.  Answers are recognized by gestures: thumb up, thumb down or fist for neutral (this can be extended to showing numbers, using sign language, nodding, temporal gestures and similar UX techniques).  Time to answer these questions is well within a minute, so it doesn’t not make people anxious. Instead, system is helping shorten “the line” and can also serve as a gate for entrance by counting entries and exists.  In the future, HOWARD can change questions for other applications:   * Include FLIR based camera to also detect patient or staff temperatures * Counting number of people that are getting in/out * Act as an information stand * Evaluation of patient satisfaction   After some time of using this product, a data set starts to appear which can be used for some analysis.  Product is GDPR safe – detects only hand and in database saves timestamp and TRUE/FALSE values for the given campaign models, TRUE – doubt for Covid-19 infection suspicion and FALSE – there is no suspicion (in this case – the model is covid-19 infection suspicion questionnaire). |
| Customer segments: | Customers include all that would need entrance based checks:   * Medical establishments on the first line of exposure like hospitals, pharmacies and other facilities that needed to check their visitors for Covid-19 symptoms to remain clear of infection (incl. suspicion) * Government offices like police and fire stations, public offices which are not closed and have to work * Universities, schools, kindergartens that need to also remain safe of the infection in order to remain open (once they start to become open) * Military compounds to also include self-evaluations along with other methods like automated temperature detection * Shops, malls, markets given current or future measures which state reduced number of customers, disinfection on entrance, usage of masks and similar.   It is one device that is simple to use, scalable, deployable everywhere, modular with standalone capability (preprovisioned case) |
| Customer relationship: | Customers can have a simple one-time deployment with minimal or no building infrastructure changes (only a power cord is required).  Backend can be used or not, any number of stands/all-in-one devices can be deployed at a location – depends on number of entrances.  Customer edge system self-administration is possible at any moment and provided edge can be modified to fit customer needs (by the customer or remotely by Howard staff).  Customer has maintenance support up to 24x7x365 (depending on maintenance contract agreed).  Users will be satisfied with given information and with a simple user interface. User friendly product is not intrusive and gives useful information.  System is GDPR safe. |
| Distribution channels: | System is packaged as an edge application deployable on PCs, mobile devices, micro-devices. However, currently Atos is providing the system as a HW/SW bundle which contains an all-in-one machine with display, camera and mount incl. all material elements needed to mount it on a stand or wall.  SW updates are distributed digitally, SW comes preinstalled on a delivered HW platform. Android, micro-devices edge SW is distributed digitally but configured and activated centrally per installed instance.  Backend (BE) used for analytics and campaign management runs in the cloud and provided on SaaS principle, however it can also run locally in customer premises, it depends on the customer preference. |
| Revenue streams: | Revenues are coming from hardware and software sold.  Other ways of revenue are from modular HOWARD capabilities and options to extend existing Howard edge machines with other IoT detectors like FLIR camera and ML based modules.  Another stream is IT maintenance service and SaaS BE analytics and campaign management model.  Likewise, any self-installed android or micro-device edge SW installed is licensed and charged separately on activation (monthly/yearly license per used module). |
| Channels: | Facilities that will use it, country Atos subsidiaries  (Atos has a policy that local technicians take part in each country deployments all over EU and the world) |
| Key resource: | Developers, technical service, sales manager |
| Key activities: | Finding proper All in one PC, install software. Android and micro-device variants development. |
| Cost structure: | Existing PoC cost structure (no further development):   * Hardware = All-in-One machine * Monthly cost of power (<200W machine) * OS (for Windows10 variant) * HW purchase and commissioning/installation cost * Delivery organization (e.g. handled by PM)   Future Software development requirements:   * 4-6 developers * PO, PM, QM, sales, * Enterprise software license costs   Market evaluation (e.g. number of major hospitals running Howard):  Second part od 2020: 25 devices  2021 : 150 devices  2022 : 500 devices  (number of hospitals in EU 2014. is 2886 (<https://gateway.euro.who.int/en/indicators/hlthres_78-hospitals-total/>) and we feel all should have this preemptive triage capability, it is also our conclusion that a two-year 20% reach out of total facilities is a fair target)  For a given number of 520 000 average patient entries for a single hospital, automated triage over 5 entrances we calculated an example 0,1Eur CAPEX cost per patient yearly for a fixed solution variant without OPEX costs.  In Croatia, those numbers are higher and depending on country/hospital numbers can vary and be way less than 0,1Eur per patient, whereas costs of even a single outbreak can have significantly larger total expenses to governments and hospitals. |