

STI LESSONS FROM THE COVID-19 PANDEMIC

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On behalf of

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In any local or global unprecedented emergencies that require solutions, Science, Technology and Innovation (STI) play a major role in unlocking the much-needed solutions to reduce, prevent or terminate the causes of such emergencies. The COVID-19 Pandemic is such a health emergency and the STI lessons from its outbreak, associated incidences, preventive measures and the holistic responses aimed towards the termination of the COVID-19 pandemic are useful in the current fight against the COVID-19, preparation for such emergencies and provision of solutions for future pandemics. The STI lessons from the COVID-19 Pandemic as underscored by our organizations through practical experiences in solution provision, collaboration and professional information are as below;

- a) COVID-19 Pandemic making scientists, technologists and innovators to be promptly resourceful within their immediate environment to develop and provide solutions to fight or prevent spread of the COVID-19. Examples include using clothing materials to make face/nose masks, processing and recycling plastics to produce visors and face shields, among others.
- b) Corporate “Lean Start-up” strategies for production of new products/services within existing organizations to offer solutions to the challenges of the COVID-19 Pandemic using STI tools and expertise. Examples, Some Breweries starting to produce Hand Sanitizers and disinfectants, Car manufacturing companies starting to manufacture ventilators, visors and nose masks, and others alike.

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- c) The importance of partnering with professionals and others from different disciplines and areas of works to facilitate the change to R&D models that expedite the realization of solutions and its provision in fighting against the COVID-19 or such emergencies. Examples include methods and processes to manufacture Vaccines, and other prevents products.
- d) The benefit of keeping database of suppliers, networks, connections and partners so as to connect remotely via the internet, phones, etc to acquire needed resources – material and human, and working together to achieve solutions during lockdown. Examples include cloud computing and other database storage systems.
- e) The benefit of working with a focused team with effective communication and information gathering strategies from trusted sources that enable the proper understanding of such emergencies to update safety measures. Examples include using aids from the internet like zoom, skype, others alike to gather information and communicate them with the team.
- f) The importance of being connected to governmental, local and international organizations that have updated information and technical know-how on related emergencies for possible collaboration. Examples include using search engines and other means to get information from the website of the organizations like World Health Organization (WHO), Ministries of Health, and other related trusted sources.
- g) A considerable lack of health emergency preparedness in some countries, organizations and communities was revealed during this COVID-19 pandemic. This resulted to deaths and rapid spread of the COVID-19 in some countries due to negligence of timely STI tools and expertise.

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- h) The need to always be prepared and have “flexible” Standard Operation Procedure (SOP) for any such emergencies. SOP helps in the execution of STI methods to produce solutions in fighting the COVID-19 pandemic.
- i) Serendipity occasioned solutions occurred that were useful in inventing and discovering new strategies, ideas and products/services as spill-outs from mainstream R&D and other processes using STI methods and strategies. Examples include different methods of producing cheaper sanitizers, disinfectants and others to fight the COVID-19 Pandemic.
- j) Coopetition also occurred during the time. That is collaboration between business competitors, in the hope of mutually beneficial results in fighting the spread of the COVID-19 Pandemic. This happened between competitors as a result of STI methods (IPs, Proprietary formulations, etc) owned by one competitor and the other needing it to offer solutions. The only way to achieve is by the two collaborating to mutually achieve the solutions and sharing the benefits. Examples include in vaccine/solutions manufacturing by Pharmaceutical industries, sanitizers/disinfectants, database and information sharing, others alike.

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