Exploring the challenges and hidden opportunities of hosting a virtual innovation competition in the time of COVID-19

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INTRODUCTION: WORLD INNOVATION SUMMIT FOR HEALTH INNOVATION PROGRAMME
History and evolution of the WISH Innovators Programme
Launched in 2012, the World Innovation Summit for Health (WISH) is a global health initiative of the Qatar Foundation, under the patronage of Her Highness Sheikha Moza bint Nasser that aims to promote and facilitate innovation in healthcare delivery globally. There have been five global summits to date. In addition to its core research activities and community programmes, WISH organises innovation competitions, the culmination of which takes place during the biennial summit, whereby innovators from around the world are invited to showcase their healthcare innovations.

The WISH Innovation Programme was formally launched in 2013 and, to date, 128 innovators have participated. When it started in 2013, 15 innovations were selected to be showcased in their own personalised exhibition space at WISH. In 2015, the innovation programme evolved into an innovation competition, with two distinct categories labelled ‘Innovation Showcases’, for established but underexposed startups and ‘Young Innovators’, aimed at innovators under the age of 30.

Over the years, the number of showcasing innovators gradually increased as WISH’s reputation and outreach grew. WISH’s innovation competitions have a very strong global representation. However, compared with other competitions and accelerator programmes, it fell behind when it came to incentives (both monetary and in-kind), as well as long-term support and mentorship for innovators beyond the conference.

Intended plans for the WISH 2020 innovation competitions
Following the 2018 WISH summit, a decision was made to transform the 2020 innovation competition to a more incentives-driven programme that offered those shortlisted not only the platform to showcase their innovations and network with conference delegates, but also provided them with training, mentorship, and potential funding from identified investors. The overarching aim was to form a bridge between innovators and four key groups: investors and mentors;
innovation hubs and enterprise ecosystems; policy-makers and healthcare leaders who can identify areas of need at a system-wide, national and international level; and healthcare workers who can identify patient-centred needs from a frontline perspective.

The competition categories were also changed with one aimed at startups, labelled ‘Spark’, and the other aimed at scale-ups, labelled ‘Booster’. This was done in an attempt to remove barriers relating to the age of the applicants and refocus on the main objective: promoting innovation in health.

Other prizes or incentives, in addition to networking and building connections, offered to the shortlisted innovators included social media exposure, one-on-one mentorship and training, cash prizes for the overall winner from each category and support after the summit.

The competitions were launched and opened for applications in March 2020 with a closing date of 31 July 2020. Over 300 applications were received, and a rigorous three-stage judging process followed that took place over the span of a month. The judging process in its entirety was conducted virtually by an international judging committee that voted for the 30 (15 for each competition) shortlisted, showcasing innovators.

The judges were recruited based on experience and represented several international, reputable organisations from academia and industry, as well as leadership from accelerator and incubator programmes such as the Arab Innovation Academy, Qatar Business Incubation Centre, Qatar Science and Technology Park, BMJ New Ventures and the Helix Centre at Imperial College London. These international judges, with experience in the field and across the world—from the United Kingdom to Brazil to Qatar—were asked to assess the innovations on a numerical scale based on several criteria such as novelty, scalability, access and likelihood to gain funding.

**WISH goes virtual: problems to be solved and opportunities to be grasped**

The competitions were launched in March 2020 mere days before the coronavirus outbreak was declared a pandemic by the WHO. This marked the beginning of a series of events that would complicate and challenge the delivery of the WISH 2020 summit. By May 2020, the decision was made that the WISH summit, like many other scheduled conferences, would indeed take place on schedule in November, although virtually.

It can be argued that online conference hosting is much less complex and opportunistic than the in-person experience, but not always.\(^1\)\(^2\) In the case of WISH, seeing as preparations for the innovation competition had been long in the making, the pandemic did not affect the overall recruitment or judging processes which were already in place and conducted virtually regardless of summit format. However, other challenges were encountered when it came to execution.

**Challenges**

| ► Lack of Human Interaction |
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| Given the abrupt switch to virtual reality during the COVID-19 pandemic, the main challenge was one that has been felt by all: lack of human, social interaction. Networking being a key element to the WISH summit experience, it became a struggle to recreate this experience for the virtual version. Another challenge related to human interaction was the inability to use ushers or runners to physically find and help direct speakers, presenters, or exhibitors to the sessions they are late to or are unable to find. |

| ► ‘Zoom fatigue’: the importance of creating a unique user experience |
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| By the summer of 2020, people were already complaining of ‘Zoom fatigue’.\(^3\)\(^4\) The abrupt mass adoption of digital technologies and the excessive use of virtual platforms had already led to reported feelings of tiredness, anxiety and worry due to the unnaturalness of virtual interactions.\(^5\)\(^6\) Therefore, creating a unique, seamless and realistic experience was of utmost importance to the organisers. |

| ► Time zones |
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| For previous summits, WISH delegates and innovators would be invited to attend the conference physically in Doha, eliminating the issue of conflicting time zones. Hosting the conference virtually added the extra layer of complexity of international participants and various time zones. |

| ► Opportunities |
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| **Accessibility and Visibility** |
| The biggest advantage of going virtual, like any conference or online event, is accessibility. In the case of WISH, |
where in the past conference delegates, participants, exhibitors and innovators were required to be in physical attendance in Doha to take part, this limitation was replaced with the potential to reach a wider audience, to create more partnerships and to increase visibility.

► Convenience
Another benefit of hosting the innovation competitions virtually, was that the time commitment required from the main global health innovation experts and any potential investors who were interested in engaging with the competition winners was significantly reduced when compared with the physical experience. Where in the past delegates and participants were required to travel to Doha to take part, this time people could sign in and sign off at their convenience, without neglecting their other commitments. This increased the chances for involvement from otherwise very busy and very senior delegates.

► Space for creativity
Creating a virtual platform eliminates the restrictions imposed by available venue space. Therefore, prototypes that previously would have been too big in size and too complicated to ship, could be showcased virtually in a variety of ways. The number of booths could be increased, as could the amount of text and other elements on display on booth walls.

Solutions
► A unique virtual reality platform
In order to avoid ‘Zoom fatigue’ the WISH summit was designed with the aim to be fully immersive and interactive, housed within a unique, virtual reality platform. The ‘Innovation Hub’ looked on the screen as it would in real life at the summit venue (see figure 1). The user could click on the booth they wanted to ‘visit’ and watch a prerecorded presentation or video about the innovation on the screen inside the booth. It was also possible to chat and/or schedule a meeting with the innovators. This was a relatively novel concept and with this came clear advantages and disadvantages: the advantages being the realistic experience that encouraged the user to interact with the platform and fellow delegates more than the traditional online conferences and meetings, and to be able to visit the booths at any time from anywhere in the world. However, wherein real-life these interactions would occur spontaneously with no planning, creating these virtual spaces for interaction required a very intricate level of attention to detail. From where the user should click, to where the chatbox would appear, to how the meetings would be synced to calendars, all details required an unprecedented level of preparation, testing and troubleshooting. Designing something that doesn’t look like anything that exists on the market means that things often get lost in translation. Therefore, it was crucial to request functional, testable demos regularly to make sure that organisers and developers are in alignment when it comes to envisioning the final product.

► Built-in networking function
The issue of social interaction was tackled mainly through the use of a built-in networking option that allowed users to request to schedule meetings alongside an in-built chat function (see figure 2). Delegates could even choose to network with fellow participants with similar interests. For the innovation booths, the conference delegates were given the opportunity to ask the entrepreneurs questions via the chat function and book virtual meetings with them if needed. The use of virtual avatars to help answer questions also helped make the experience closer to home and more interactive and user friendly.

Figure 1  Screenshot from WISH 2020 innovation hub on the virtual summit platform. WISH, World Innovation Summit for Health.
Early-stage innovation report

► Technical support and ‘remote ushers’
In the case, a participant was late to their session or meeting, or missing on the platform, a phone call was the only form of communication or an email reminder. Assigned virtual ‘remote ushers’ and technological support in the case of delays due to technical issues, were helpful, although not always successful.

► Flexible scheduling
In an attempt to overcome scheduling difficulties due to conflicting time zones, showcasing innovation competition participants were divided into two groups or two time slots that effectively encompassed all time zones. Delegates visiting the innovator booths were also given the option to schedule meetings with the entrepreneurs based on mutual availability. From the innovator competition participants’ experience perspective, where in the past they would have been required to be physically present at their booths at all times, a virtual summit allowed for them to be at two places at once. They could for the first time attend the summit sessions they were interested in, and attend to booth visitors should they be notified and required to do so. This allowed for an improved user experience for those showcasing.

► Platform accessible around the clock
Summit content, including the content displayed at the innovator booths, were displayed at all hours of all days, even after the summit had officially ended, all accessible with a click to everyone who had registered. Training and mentoring support sessions that were offered to the shortlisted innovators were also recorded and could be revisited.

► The use of three-dimensional (3D) prototype models
Five of the 30 shortlisted innovations that showcased at WISH 2020 were chosen by WISH to have a virtual, 3D model of their prototype produced by the platform developers (see figure 3). This was so that booth visitors would have a 360° view of the prototype, and could see it being used for its intended purpose, in its intended setting, within the platform. This helped enhance both the exhibitors’ and delegates’ online experience.

LESSONS LEARNT AND RECOMMENDATIONS FOR THE FUTURE
It is now more important than ever to maximise the exchange of ideas and best practices in the scientific and medical fields, although virtually. The COVID-19 global pandemic has switched the focus to online conference delivery as an environmentally friendly, time-efficient and cost-effective alternative. Given the uncertainty around when large in-person gatherings will resume, and the issues surrounding ‘Zoom fatigue’ there is a need to enhance user experience in the virtual conference and exhibition space. Below are some recommendations that stemmed from the virtual WISH 2020 experience:

► Start the planning process early
In general, online meetings have saved a lot of time. However, creating a unique user experience through a customised platform requires plenty of planning ahead. This includes time working with online developers to translate thoughts and ideas into virtual reality. Another development stage that requires a substantial amount of time is the testing stage. Ensuring that the platform is ready for testing well in advance of the event launch is extremely important as it allows for bug fixes and ironing out of the small details that would be hard to pick up on without going through the actual experience. It is also equally important for exhibitors (in this particular case, the showcasing innovators) to also have access to the platform in advance so that they can ask questions and flag any issues they may encounter before the start of the conference.
With the WISH 2020 innovation competition, the planning commenced over a year in advance (see figure 4). This allowed for prior research on similar programmes, initial contact with potential contestants and investors and preparation for the online application form. Given the unforeseen circumstances, delays were inevitable, even with detailed planning, and so a flexible mindset, with substantial buffer time, is very important.

► Schedule conference related activities in advance of the conference

Spreading scheduling training sessions for the innovators across 2 days in advance of the summit launch proved extremely successful as this reduced the length of time per day they had to dedicate to their participation at WISH on any given day, which, in turn, increased the likelihood that they would be interested in taking part. This also allowed for them to concentrate their efforts on networking and attending the conference discussions during the summit.

► While content will always be king, user experience is also important

Designing a digital setting that resembles your main conference venue closely makes things more realistic and interesting to international participants. Making the platform easy to navigate further enhances the user experience and makes it more likely for them to reconnect and engage for longer periods of time. Keep in mind that this can affect cost: the more features you include, the more expensive the invoice.

► Be conscious of time zones

Operating at hours that are convenient for most is of utmost importance and has a great effect on conference and booth attendance, interaction and participation.
Another way to tackle issues related to time-zones, which worked particularly well for the innovation session was first, to split the participants into two groups for their training sessions and mentorship meetings based on geographical location. Another tactic that worked well was to record sessions and have them accessible for playback at event participants’ convenience.

- Provide technical support
  Having technical support available to all delegates throughout conference operating hours was extremely useful for many, especially those less familiar with virtual meetings or those experiencing issues with signing in or navigating the event platform.

- Assign focal points from hosting organisation
  Assigning a clear focal point from the hosting organisation, preferably someone who has been in contact with the innovators or participants from the start, is also helpful. In the case of WISH, the Head of Innovation was the main focal point for all participants. In fact, in order to better share experiences and communicate easily, a WhatsApp group was created for all the showcasing innovators to discuss various aspects around their participation. This could make the participants feel more supported, included and more motivated to actively take part.

- Include a backup plan
  Even with substantial testing, there is no way to predict with complete accuracy how the platform will react under pressure, at times such as the opening of the conference when everyone is accessing the platform at once. Keep in mind that not everything will go perfectly to plan, so creating a risk register with an exhaustive list of scenarios and available backup options helps mitigate potentially problematic situations and is an extremely important and often skipped step.

CONCLUSION
As highlighted by the WISH experience, hosting virtual conferences and competitions can have some advantages in that it helps build and maintain focus around one topic at a particular point of time, without demanding the heavy time commitment that goes with attending an overseas event. Hosting virtually also allows for greater global outreach and increased access to a range of experts and investors that may have otherwise been unable to attend. Displays of 3D models of prototypes can provide an alternative solution to physical presentation while online interaction offers means of continued engagement with competition participants, past conference dates and venue operating times. While recommendations were highlighted based on successful solutions from the WISH virtual summit, it is important to note that this is not a ‘one size fits all approach’. What worked in the context of WISH, might not work for others seeking to organise their own innovation competition, however, shared experiences could provide guidance where needed.

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REFERENCES
1 Saliba M. Getting to grips with online conferences. Nature Energy 2020;5:488–90.
2 Houston S. Lessons of COVID-19: virtual conferences. J Exp Med 2020;217:1–4.
3 Wiederhold BK. Connecting Through Technology During the Coronavirus Disease 2019 Pandemic: Avoiding “Zoom Fatigue”. Cyberpsychol Behav Soc Netw 2020;23:437–8.
4 Fosslien L, Duffy MW. How to combat Zoom fatigue, 2020. Available: https://hbr.org/2020/04/how-to-combat-zoom-fatigue [Accessed 14 Mar 2021].
5 Wolf CR. Virtual platforms are helpful tools but can add to our stress, 2020. Available: https://www.psychologytoday.com/us/blog/the-desk-the-mental-health-lawyer/202005/virtual-platforms-are-helpful-tools-can-add-our-stress [Accessed 14 Mar 2021].
6 Morris B. Why does Zoom exhaust you? science has an answer, 2020.
7 Pacchioni G. Virtual conferences get real. Nature Reviews Materials 2020;5:167–8.
8 Barral A. Virtual conferences are the future. Nat Ecol Evol 2020;4:666–7.