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CHAPTER 3

The World Health Innovation Summit (WHIS) platform for sustainable development. From the digital economy to knowledge in the healthcare sector.

Gareth Presch, Francesca Dal Mas, Daniele Piccolo, Maksim Sinik and Lorenzo Cobianchi

Abstract

The increasing development and availability of new technologies in all fields have led to the creation of new strategies and business models, meaning the way an organization creates, captures, and distributes value. Among these business models, platform companies or "platfirms" represent a compelling case, as they can allow knowledge and data sharing increasing the organization's value. The concept of value has changed in the last few years, from a purely economic or financial perspective to a value which must include the environment and the society, gathering together different stakeholders. The chapter aims at investigating the contribution of "platfirms" in a critical sector, that of healthcare, by analyzing the case of the World Health Innovation Summit (WHIS). Results show how "platfirms" like WHIS can contribute to the creation and spreading of knowledge, involving experts, professionals, and people, and reinvesting efforts, value, and money back to the community in a circular way. New technologies can so enhance the creation of new sustainable business models and solutions able to increase the social value, allowing so to move from a digital economy to knowledge.

Keywords

Platfirms ● Business Models ● Sustainability ● Healthcare ● World Health Innovation Summit

3.1 Introduction and objective of the study

Several new technologies have been introduced in the last decade to the design, production, and sales of products and services. From augmented and mixed reality to artificial intelligence, from robotics to big data analytics, new technologies have enabled faster and more efficient innovation through the creation of new products, services, processes, new ways of communication and opportunities to increase the business (Bagnoli *et al.*, 2019; Fletcher, 2015; Kagermann, 2015). Technology, in general, is becoming cheaper and more accessible, and this leads to previously unknown possibilities, fostering the progress, bringing opportunities for organizations to expand their horizons and knowledge (Dal Mas *et al.*, 2019; Toniolo *et al.*, 2019). The introduction of such technologies foster the development of new strategies (Amit and Zott, 2001; Schlegelmilch et al., 2003; Teece, 2010a) as well new business models (Biloslavo et al., 2018; Nielsen et al., 2018; Teece, 2010b), meaning the way an organization creates, captures, and distributes value (Osterwalder, 2004; Osterwalder et al., 2014).

One of the most successful business models enhanced by the introduction of such technologies is that of the platform companies (Gawer and Cusumano, 2014) or so-called "Platfirm" (Troiani *et al.*, 2016) as new digitally-enabled business models. The phenomenon is so relevant that literature defined it as a new industrial revolution. According to Troiani et al. (2016, p. 2) "after the era of the machines that have boosted physical power, the digital revolution has extended the power of human intelligence and its ability to influence the surrounding environment. The organizational and business model of platform-companies lies in fact at the heart of contemporary enterprises that are growing faster, immediately expanding to a global level and revolutionizing the logics on which entire industries have been based for decades." One of the most known examples is Airbnb, which has extended its economic value from nothing to over 24 billion $ in only nine years, more than any hotel chain in the business, including Marriott and Hilton.

However, the concept of value has been evolving over time. While once it was limited to a dimension of economic or financial value for the shareholders, it has now embraced a wider concept, which

includes the wealth and well-being for the society and the environment (Dal Mas, 2019; Edvinsson et al., 2006; Grafstrom and Edvinsson, 1996; Massaro et al., 2018). Sustainability has hence become a central topic in a modern society which is facing global climate problems, poverty, pollution, and a lack of basic healthcare services in several areas of the planet. In 2015, the United Nations established the 17 Sustainable Development Goals (SDGs) as the commitment that all countries must meet. The SDGs call for massive economic and social changes that allow to run businesses and satisfy the needs of consumers taking sustainability into the picture. This includes a lower consumption of resources, especially the non-renewable ones, the respect for nature and earth, and the attention towards social issues such as equality and inclusion. These new perspectives call for new sustainable business models (Boons and Lüdeke-Freund, 2013; Seelos and Mair, 2005, 2007; Tukker, 2004). Zott et al. (2011) state how adopting a sustainable business model can help to business to create value not only for customers but also for other stakeholders, society, and the natural environment. The value is so captured and distributed across a broad set of stakeholders. The new technologies can be seen as powerful allies to sustainable business models to reach the goal, by helping to provide sustainable products, services, as well as transparent and sustainable supply chains (Linton et al., 2007; Seuring and Müller, 2008).

Sustainability is taking advantage of the platfirm business thanks to the so-called cross-side network effect, that can help to create value gathering people together to foster and share ideas (Ruutu *et al.*, 2017). One of the most known examples is Wikipedia, where people can contribute to the general knowledge of the society by creating and double-checking contents that are freely available to everyone, making knowledge quickly accessible free-of-charge even to the poorest countries of the world. The required characteristics to provide a successful platfirm strategy are to attract people, facilitate the exchange of knowledge among them, allowing the recombination of knowledge-creating a feedback loop where the users that find interesting knowledge remain into the stay and contribute further.

Interesting enough, those business models have been proved to be very successful in the healthcare sector. An example is the Health Information Exchange (HIE) platform, which provides the capability

to electronically share clinical information among different health care information systems. HIE aims to facilitate the access and the retrieval of clinical data to provide safer and more timely, efficient, effective, and equitable patient-centered care (Moore *et al.*, 2012; Yaraghi *et al.*, 2015). One more example is Hospitalrun[1], an open-access platform founded in 2012 that offers free downloadable software for hospital management, to provide the most modern hospital information system to the less-resourced environments, especially those in the less developing countries. Hospitalrun, which is being used by thousands of hospitals and clinics in countries including Kenya, Nigeria, and India was initially established with the cooperation of C.U.R.E. clinics[2], a non-profit, humanitarian relief organization. Therefore, platfirms business models have been proven to be an interesting option to develop sustainable models, especially in the healthcare sector.

This chapter aims to contribute to this research stream presenting the case of World Health Innovation Summit (WHIS)[3], a preventive healthcare platform developed with the aim of empowering people to improve their health and well-being by facilitating community engagement generating value shared.

3.2 The WHIS project

Introduction

The WHIS project was born in 2015 by Gareth Presch, a healthcare manager with 20 years of experience working in the sector in Ireland and the UK. During his job in Ehealth and District Nursing in Cumbria, UK, Gareth noticed the massive pressures on the system and the high level of staff turnover due to these increased pressures. People were constantly leaving due to high stress and other factors. Delivering high-quality patient-centered care can not be met if the organizations are

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[1] Website: https://hospitalrun.io

[2] Website: https://projectcure.org/clinics

[3] Website: https://www.worldhealthinnovationsummit.com/

continuously losing staff. The organization would also struggle to attract staff if the values were not right. Cumbria has had problems recruiting and retaining staff, that are well-publicized.

Gareth started from the concept that people attract people, so he came up with the idea of a community for patients, clinicians, managers, voluntary sector, education and the business community, which was later called "the World Health Innovation Summit" (WHIS) to attract thought leaders to Cumbria. The idea was to support these leaders to disseminate their knowledge through the platform and peer-reviewed journals, and that would help attract staff while showcasing the region as a great place to live, work, and invest.

However, very quickly after the first event, Gareth and his staff realized there was more to it. The technology could help the idea evolve from a simple community to a platform to provide opportunities to support people improve their health and well-being (prevention) that could be applied to any healthcare economy in the world.

Aims and scope

WHIS is aiming to empower people to improve their health and well-being while addressing the challenges faced by the health service. Those challenges lie in an aging population (Börsch-Supan *et al.*, 2005), rising levels of obesity, and other lifestyle diseases (Wilkinson and Pickett, 2006), all set against an 18 million workers shortfall in healthcare staff (Limb, 2016).

The idea is that there are opportunities to create a new preventative model that supports people's health and well-being through the WHIS platform, through effective community engagement and sharing knowledge that delivers well-being for the citizens while creating new opportunities and ecosystems to support the implementation of the UN Sustainable Development Goals, generating value shared that can be recycled and used to regenerate existing and new communities worldwide.

The platform allows everyone to collaborate and break the silo-working through system thinking: linear to circular, dis-connection to interconnectedness, silos to emergence, parts to wholes, analysis to synthesis, and from isolation to relationships. WHIS is the answer to this: a platform for

collaboration with a focus on preventative healthcare. Indeed, according to the Institute for Global Health Sciences of the University of California - San Francisco (Duff-Brown, 2017), diseases like obesity, cancer, etc. could cost 47 Trillion Dollars by 2030 despite the advancement of research in integrated care, including the oncological ones (Cobianchi *et al.*, 2016; Peloso *et al.*, 2017; Zhang *et al.*, 2019). WHIS provides the opportunity to bring together people from many different industries, whose new ideas and different perspectives create new opportunities and value through knowledge transfer.

WHIS plans to become the world's leading platform for health and well-being as it can be shared and scaled to support any community and bring value. WHIS has followers and leaders in several countries around the world, such as UK, Ireland, UAE, Thailand, Nigeria, Kenya, Switzerland, the United States, to name a few. WHIS are partners with United Nations Global Sustainable Index Institute, the foundation leading the implementation of the 17 UN sustainable development goals in cities around the world.

The primary value of WHIS is trust, with the motto "Trust is the Oil of the Future." WHIS grows by attracting like-minded individuals who understand that what WHIS does is for the common good, combining thought and emotional leadership. WHIS provides the methodology and the value proposition, while the actors take ownership and generate the income streams locally, nationally and internationally.

Knowledge sharing and knowledge recombination

The WHIS model is based on combining human, social, and structural capital (Edvinsson *et al.*, 2005; Edvinsson and Malone, 1997; Grafstrom and Edvinsson, 1996), creating a knowledge transfer platform that exists to support the health economies around the world. The WHIS platform works around five main pillars: WHISKids, WHISatwork, WHISSeniors, WHISGreen, WHISTech. Every WHIS pillar is driven by a specific value proposition that supports knowledge transfer to benefit people's health and well-being in the specific area. The platform aims are connecting people, inspiring and influencing positive change. WHIS provides a platform to develop new ideas, prototype at a local, national, or international

level. From pregnancy, creative arts, and design thinking new models and ideas that add community value can be developed through the platform.

Building a community focused on health issues, the platform makes knowledge and ideas globally scaleable. All the social prescribing programs that are already on the platform can be shared everywhere in the world. WHIS can take them from being a local initiative to having worldwide reach. The WHIS team has held summits and activities right across the UK (Newcastle, Carlisle, Nottingham, Blackpool, Manchester, Birmingham, Leicester, ...), Thailand and Greece. The programmes and wellness activities (wellness retreats) have been tested in Cumbria. Additionally, to create engagement, WHIS has launched a magazine (WHISInspire), and WHISTalks, with various other initiatives to support people's health and well-being in development.

The platform can be defined as a social business, aiming to generate income streams to then reinvest money back into local communities (Porter and Kramer, 2006). Once overheads are covered, the profits are reinvested back into the community. The objectives are to improve people's health and wellbeing while creating a new ecosystem through a sharing and circular economy. An independent report has demonstrated that every £1 invested in the activities will generate £36 in terms of social return on investment back to the local community.

Successful case studies

One of WHIS' most success stories has been WHISkids, a program for school children that focuses predominantly on mental health and well-being. From the work in Cumbria and teaming up with a local innovative program for all ages, My Way Code, WHIS codeveloped a primary schools program which helps children aged 4-11 years understand emotions and physical symptoms and what they can choose to do to be more healthy mentally and physically. A couple of thousand children have gone through the programme in Cumbria over the last couple of years. WHIS takes accountability into high consideration, and always measures its work. The results of WHISkids are impressive. The children have so far self-reported the distance traveled in their understanding of their mental health and

wellbeing as being increased by an average of 20%. Middlesbrough Football Club is soon going to apply the WHISkids methodology to football, and more sports and clubs are on the agenda (rugby, cricket, golf, ...). WHISkids can be seen as an example of knowledge sharing and codesign with local partners to bring innovative solutions at scale.

Other programmes developed by WHIS to support people are: WHISatwork (stress management in the workplace, ...), WHISSeniors (falls prevention, quality of life, loneliness, ...) WHISTech (artificial intelligence, robotics, virtual reality, ...) and WHISGreen (energy, waste, and water). New programmes are being developed, including a Cancer Wellbeing programme, Creative Arts, Design Thinking, and a Global Pregnancy Wellbeing Programme. All programmes are based on health education, health promotion, and disease prevention.

These programmes and services will have a positive effect on people and communities over the short, medium, and long term and this is all down to the WHIS platform.

WHIS and the UN SDGs

In September 2015, 193 heads of state pledged their commitment to implement the 17 Sustainable Development Goals at the United Nations. The UNGSII FOUNDATION was created to assist and accelerate the implementation process, with the mission to ensure that the world reaches its goal, at the latest, by 2030. WHIS is a partner with UNGSII for the SDG 25 + 5 Cities Leadership platform[4]. This is an ambitious programme conceived by the UN Director General Michael Moller and Heildelberg Mayor Prof Eckhart Wurzner. The project has identified 25 cities and 5 indigenous communities from around the world to become lighthouses, where experts in their field will come together and help those cities deliver the SDGs by 2030.

WHIS is working on the SDG 3 "Good health and well-being", supporting the 25 cities working with the

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[4] Website: https://www.ungsii.org/sdg-cities

institutions, with the universities, and with the city councils to support them and see what can be done to implement the SDGs. WHIS disseminates information about healthy living and welcomes any support and knowledge sharing, merging, for instance, post-operatory recovery with physical activities and, for example, park walk (Ireland *et al.*, 2019).

In addition to the 25 cities, WHIS is also setting up what is being called Hubs, cities that will become incubators for new ideas and new programmes that can be prototyped, proven and then scaled to the 25 Cities. WHIS plans to bring in leading experts to work on creating these solutions, to be subsequently tested out. As part of that, WHIS is also working on the creation of the next generation health and well-being centers, a mix of clinical, physical, and emotional well-being services.

3.3 Discussion and conclusion

In concluding our book chapter, we would like to start from the premise that inspired this work. New technologies have brought the development of a knowledge economy. Knowledge is a key resource, and it is peculiar since it does not consume resources with its use. Rather, the opposite occurs, it increases its value the more it is used.

The case of WHIS represents an interesting example in the healthcare sector, one of the most influenced by new technologies and continuous innovation and research (Christensen *et al.*, 2000; Currie and Guah, 2007; Iacopino *et al.*, 2018; Lucas, 2015; Mascia and Di Vincenzo, 2011; Muzio and Faulconbridge, 2013). The platform aims to develop new programmes in the healthcare and well-being field, gathering together the most brilliant minds in the area, allowing medical doctors, nurses, educators, psychologists, managers, and other experts to share their ideas and knowledge through the web and on the ground. The galaxy of ideas enables the development of programmes devoted to specific users (school-aged children, older people, mothers-to-be, cancer patients to mention a few) that can be directly prototyped and tested into communities and cities, but also in hospitals, clinics, hospices, schools, and any other organization.

The more the programmes are used, the more data and cases are collected, and the process leads to

a continuous improvement of the models and protocols. New and meaningful jobs can be created and healthcare professionals and experts that are dealing with new cases allow the accumulation of new knowledge, to further refine the programmes. New ideas can be generated, from innovative ways to recover from surgery to older adults' wellness programs, from pregnancy and breastfeeding to raising public awareness towards organ donation.

Best practices, as well as successful programs like WHISkids, can be exported to other countries and cities, involving more professionals and users. Again, the more the protocol is used, the more it can be refined, increasing its impact and the overall value of the process and leading to new opportunities (for instance, refined educational programmes or classes to be implemented into schools, universities, or hospitals). Innovation and ideas can come from everywhere, and platforms like WHIS allow those ideas to be prototyped, shared, create training and employment and scaled in a successful way.

The platform or "platfirm" allows first to attract talents that can share ideas, incorporate them in new business models that can be spread all over the world through community engagement that can be shared digitally. Moreover, the use of a social business model for WHIS allows the development of a broader concept of value. Not only does the value generated by the community applying for the projects return at a greater value in terms of impact and well-being, but the overall profit realized by the platform is reinvested, creating an endless virtuous circle. WHIS represents a positive example of a cross-side effect where buyers, producers, professionals, and social actors operate together to find new solutions. Technology allows the spreading and increasing of knowledge at no extra cost, with a turbo effect on its impact.

In concluding our work, we want to highlight how new technologies can allow the development of new solutions and new ways of increasing the social value thanks to the knowledge economy, especially in critical sectors like healthcare. The future of business will be aligned to social value as we can move from the digital economy to knowledge.

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