

Interdisciplinary Researches in Iran V: Toward Interdisciplinary Technologies

In the previous editorials,^[1-4] we discussed about interdisciplinary researches (IDRs) in Iran and explained about producing (Multi-Dimensional) Medical Signal Analysis (MDMSA) software as an IDR field in Iran that seems to have more available conditions for marketing. Although we yet suffer from cultural and organizational obstacles in Iran for the development of advanced technologies, policymakers have made great efforts to legislation in this regard during current years. However, one of the main problems of academic, cutting edge researches in Iran is finding a suitable industry partner and high-tech company related to their researches. It means we are able to produce high-tech products such as MDMSA software, but there are no direct customers in the nation for these products. Hence, a principal question is: "Can we overcome this barrier by finding an appropriate business model?"

There are different approaches to business model categorization.^[5] In a point of view, the E-business model patterns can be categorized to content provider, direct to customer (D2C), full-service provider, intermediary, shared infrastructure, value net integrator, virtual community, and whole of enterprise.^[6,7] In D2C, we can bypass traditional channel players and provide goods to the customers directly. Using this model for MDMSA software necessitates producing MDMSA software which can be directly used by patients.

In this regard, Game and Treatment Research and Technology Group (GTRTG) was founded in the School of Advanced Technologies in Medicine, Isfahan University of Medical Sciences in 2015. The mission, vision, and values of GTRTG are as follows:

- Mission: Create a platform for researchers to conduct basic, applied, and IDRs in the field of game therapy and communicate with patients and health policy makers to contribute to the improvement of public health by producing free/cheap software/apps for mankind
- Vision: Becoming the lead center for game therapy by using the existing capabilities in the nation and human talent cultivation to design and develop of new software/apps for game therapy and virtual treatments
- Values: Integrity (our designs, actions, and behaviors to produce the software are based on honesty, trust, justice, and the ethical standards), intra- and inter-national

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collaboration of (multi/inter-disciplinary) researchers, creativity and innovation, teamwork, technology transfer, discovering and empowerment of interdisciplinary talents, improvement of the work culture, and wealth creation by human resources management.

As an example, because many teenagers are at risk of addiction, an active project in GTRTG is designing computer/mobile games to increase teenagers' awareness in this regard and control the high-risk behaviors. For this project, students of multidisciplines (such as psychology, biomedical, and computer engineering) will be involved to design the game strategy, develop the software and application, and finally validation of designed game for control the high-risk behaviors and addiction.

Hence, developing research and technology groups like GTRTG could be a solution for entering academic, cutting edge researchers in Iran to global markets while there are no big high-tech companies related to MDMSA software in the nation.

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