**The Reagiro Manual Wheelchair Design**

At the PMG conference 2018 in Manchester, Reto Togni, a product design engineer, presented his Reagiro manual wheelchair and discussed the journey from idea to prototype.

The Reagiro is the first manual wheelchair to feature a fully mechanical, steering system which allows the user to control the wheelchair through upper body movements rather than the conventional method of powering a wheelchair. Togni feels that the benefits to this method of powering a wheelchair are that the user can mobilise the wheelchair one handed which will allow the user to carry items in there free hand and also that the use of lateral movements to power the wheelchair is connected to fun and a sense of freedom.

Togni discussed how he felt that while there had been many recent advances within the world of assisted technologies but there had been very little development of manual wheelchairs over recent decades and how this had inspired him to develop the Reagiro.

Togni showed the audience how the prototype for the Reagiro had developed from early wood and metal static prototypes to the fully working model that he presented at conference.

Finally Togni discussed how he was now working with Invacare and the Zurich Lab for Biomechanics and how the next stage was, in order to develop the wheelchair further, was to develop a research plan for clinical usability studies and clinical trialling.

Togni presented an interesting session which showed the development of a product from a design perspective rather than a product developed from a clinical need.

**References**

Togni, R. 2017. The Reagiro [online]. Available at: <https://retotogni.com/the-reagiro> [Accessed 12 September 2018]