

Validity Experiment

Background: induced Pluripotent Stem Cells (iPS cells) are a unique stem cell type engineered in 2006. iPS cells are adult cells from which have been reprogrammed back into an embryonic stem cell-like state. In this state, an iPS cell can be turned into, or differentiated to, any other cell type in the adult human body. iPS technology is recently being lauded as the future of regenerative medicine as they can be used to regenerate tissues or even engineered into functioning organs. Current clinical trials are already being performed using embryonic stem cells and iPS clinical trials are being planned. However, currently there are no public means for consumers to generate their own iPS cells, and an immediate backlog in regenerative medicine once stem cell therapies have been approved is the generation and expansion (growing) of patient-specific stem cells. The MyPS proposal is thus the first public, privatized iPS bank, which allows consumers to affordably generate and store their own iPS cells for use in future therapies.

Problem: Customers may not use MyPS bank because of the complexity of the subject matter, or may be reluctant to invest in iPS technology without further information or recommendations.

Hypothesis: Less informed customers are more likely to be uninterested in using a stem cell bank because they do not understand the process or benefits, more informed customers are more likely to use the bank because they can identify the potential in iPS technology.

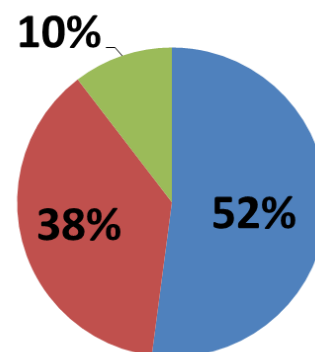
Test: Survey sent to a wide variety of people - from the very informed (fellow biotech colleagues/scientists, knowledgeable science subreddits), moderately informed (general science subreddits/colleagues) and uninformed (general public, Facebook). In the survey, users indicated their level of familiarity to iPS technology over the course of several technology-specific questions. Level of knowledge was categorized into "Little", "Moderate" and "Most".

Results: Surprisingly, the very informed and the uninformed were most likely to adopt the technology. The moderately informed, e.g., those who were aware of iPS technology but were not completely up to date on the cutting edge, were more skeptical. The more skeptical customers would need a doctor recommendation, whereas people more likely to adopt would be willing to be more proactive. However, in all circumstances, it appears that the recommendation or approval of a doctor would be important to adoption of iPS banking.

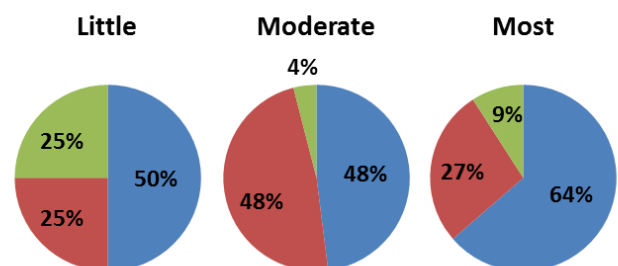
Conclusion: The general public (uninformed) and specialized scientists/biotech customers would be easier to attract, however utilizing doctors as a marketing channel (education, adoption of services) could expand our customer pool significantly (50% of customers were "moderately informed").

Would you use MyPS Bank?

■ Yes ■ No ■ Maybe



Survey Results by iPS Technology Knowledge



Would you use this service on your own or would you first consult with a doctor?

