



Tracking and Reacting to the Evolving Knowledge Needs of Lifelong Professional Learners

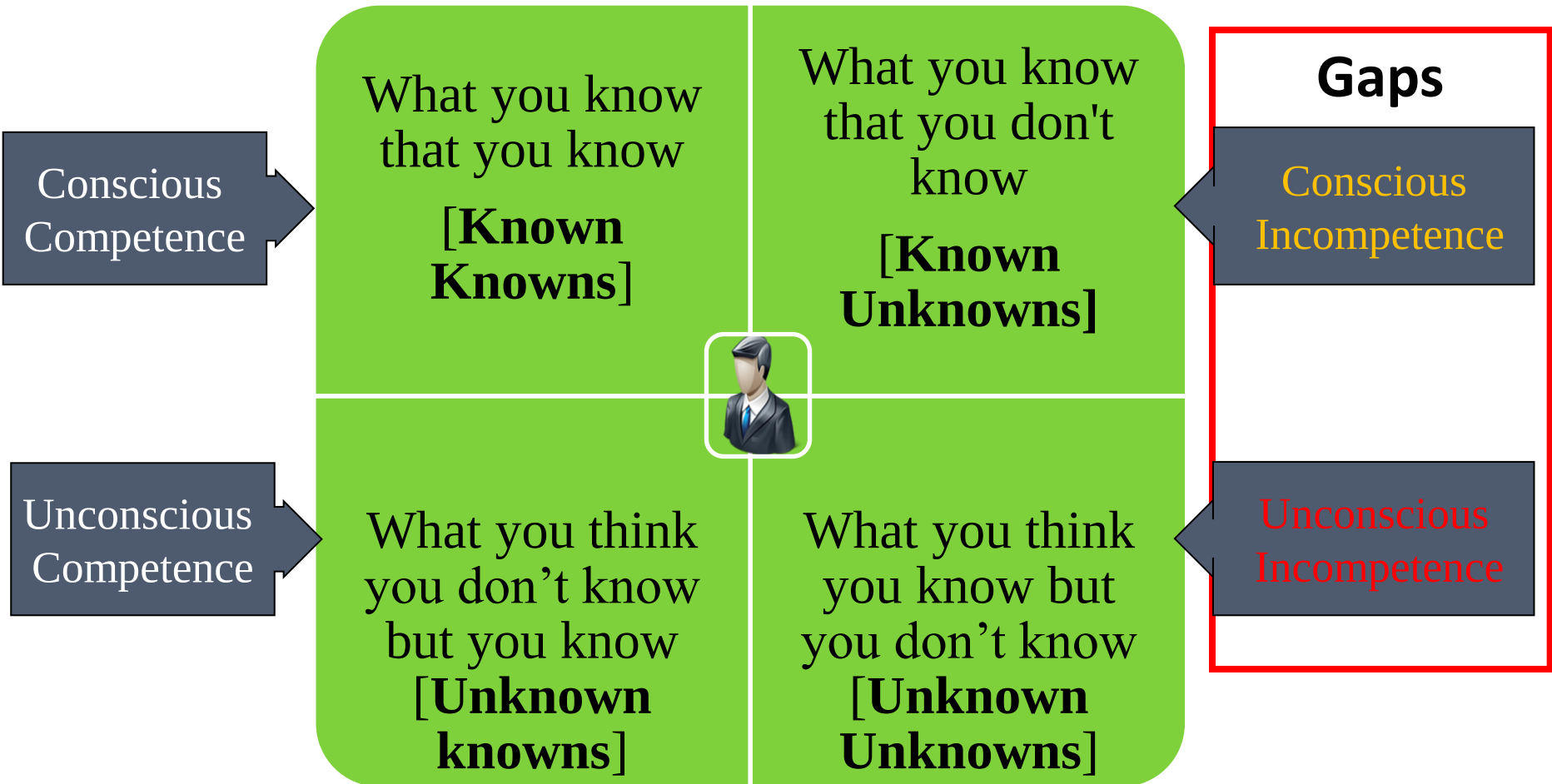
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- Professional learning is an important subset of lifelong learning and a burgeoning area of advanced learning technology research.
- This research aims to support the lifelong learning needs of professionals by detecting gaps in their knowledge which they are not aware of.
- Traditionally, the majority of support provided to professionals is oriented around their job role.

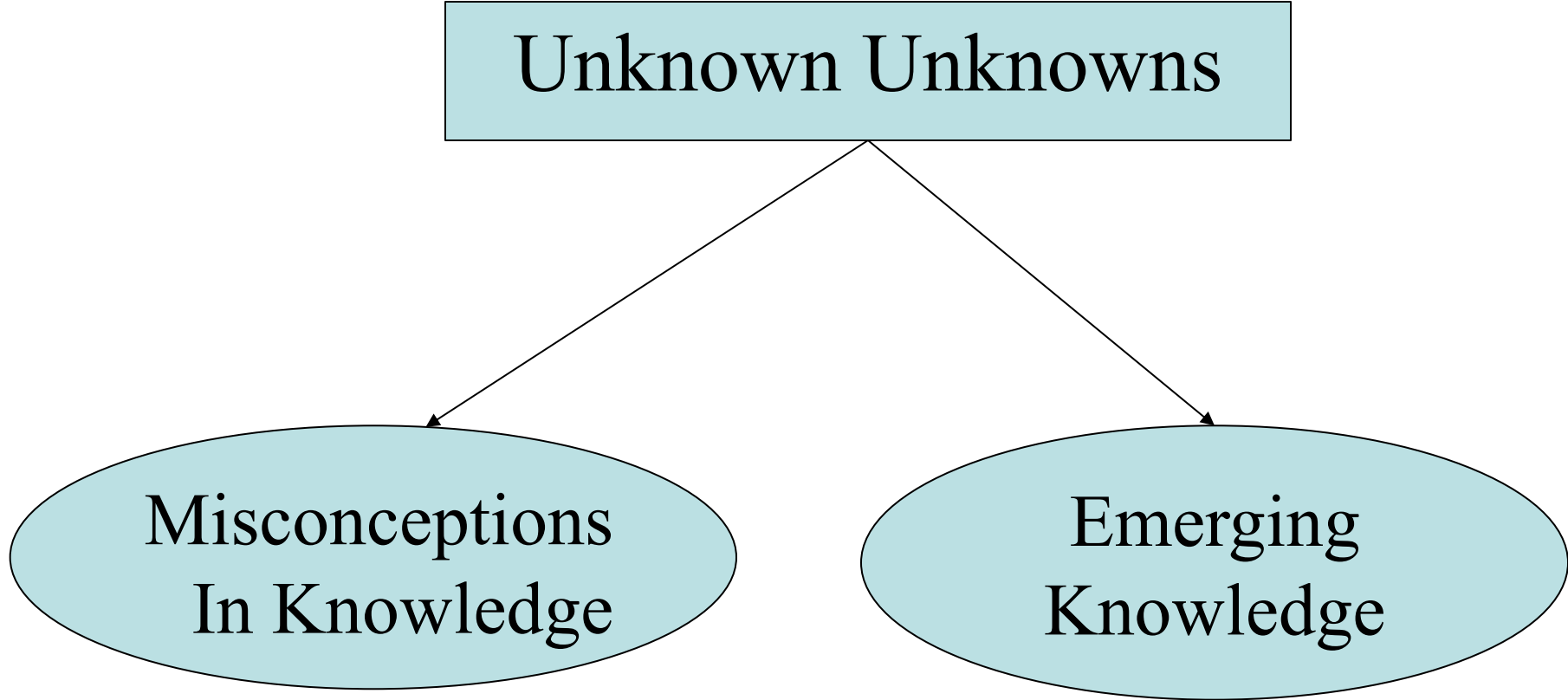


“We didn’t do anything wrong, but somehow, we lost”

- They didn’t do anything wrong in their business however the world changed too fast.
- They missed out on learning
- They missed out on changing



Unknown Unknowns



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graph TD; A[Unknown Unknowns] --> B[Misconceptions In Knowledge]; A --> C[Emerging Knowledge]
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Misconceptions
In Knowledge

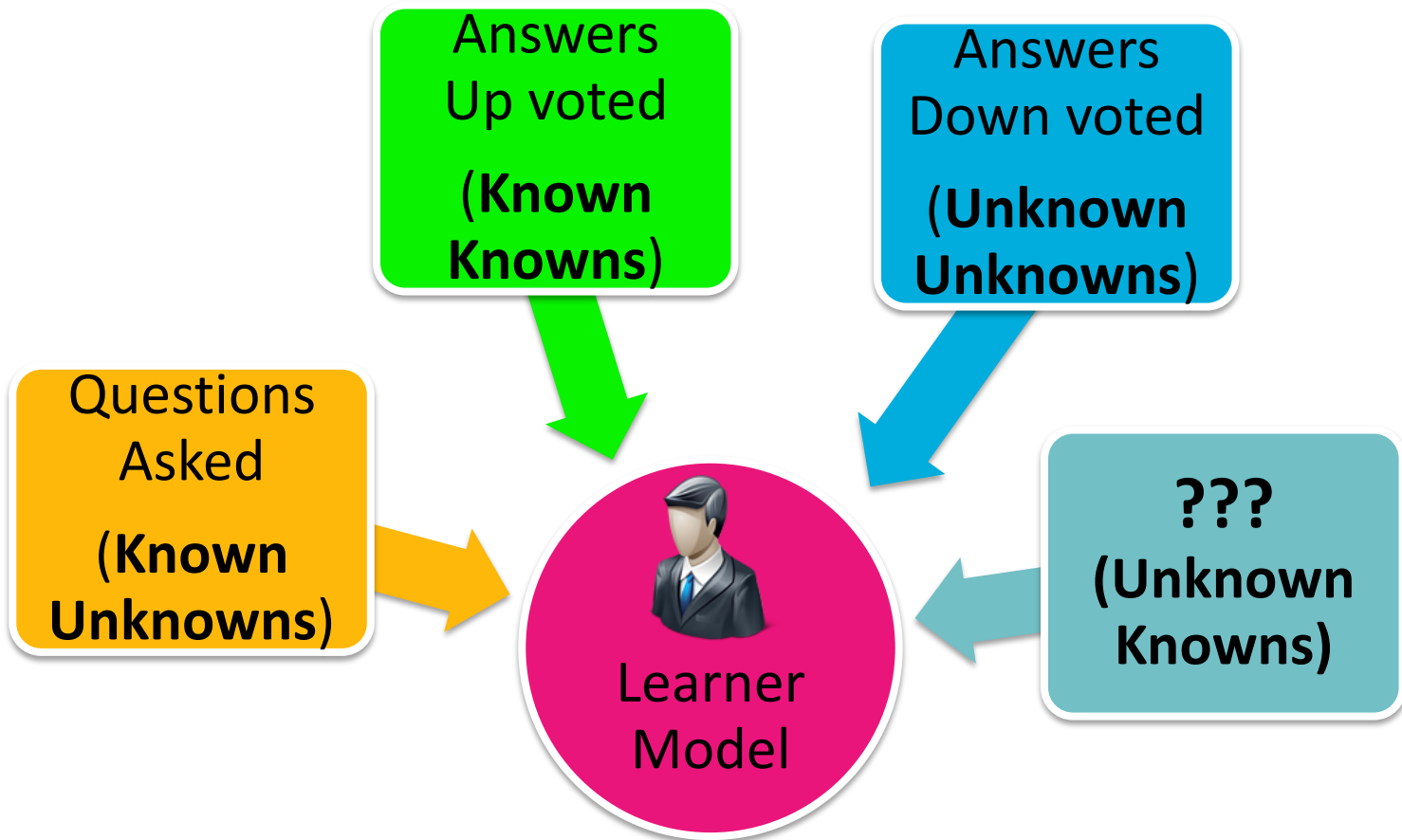
Emerging
Knowledge

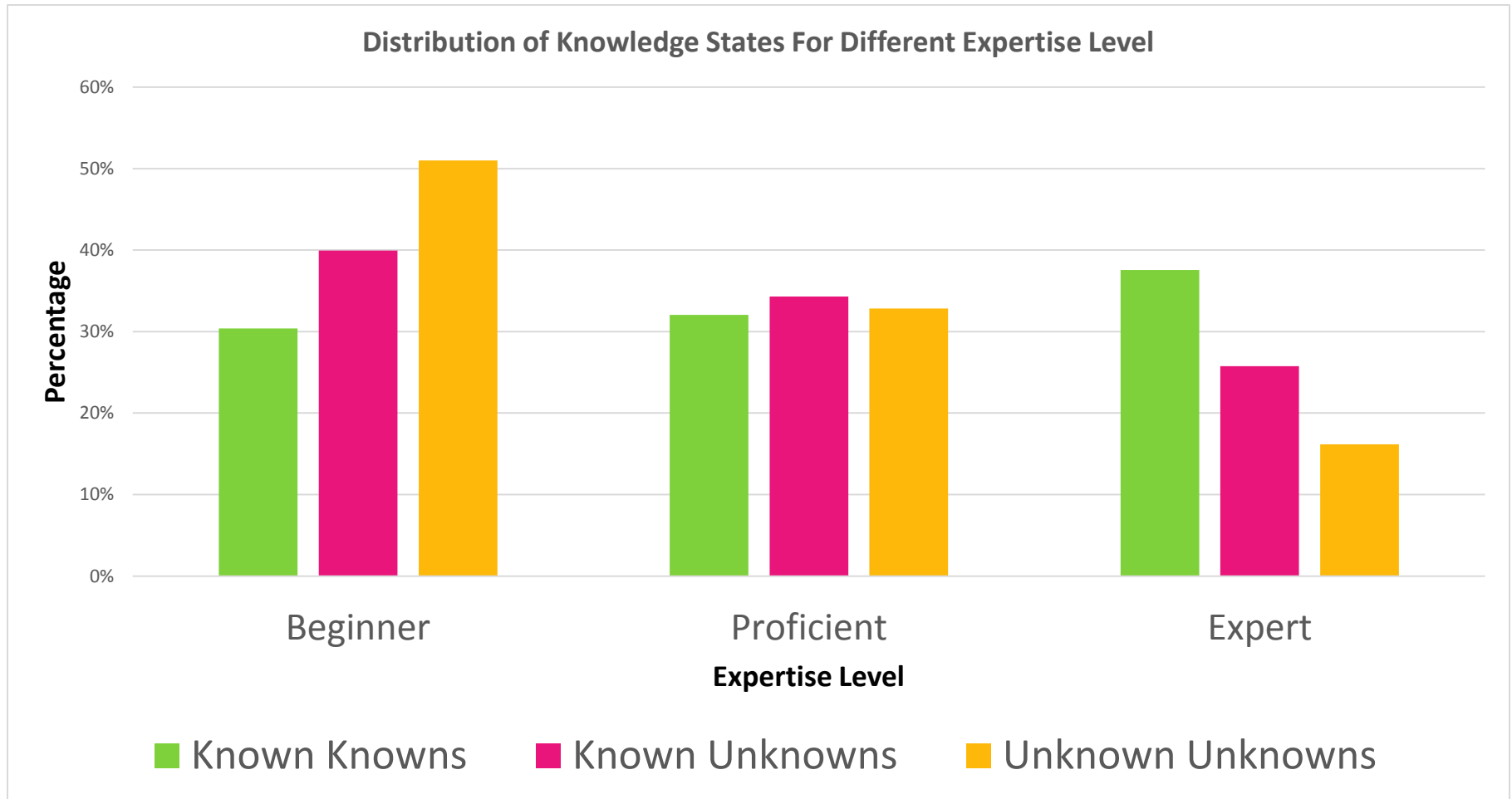


stackoverflow



stackoverflow







Help
Receiving



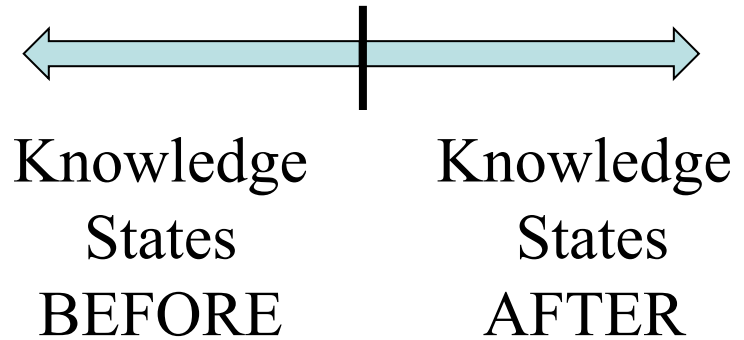
Help
Giving



Self
Learning

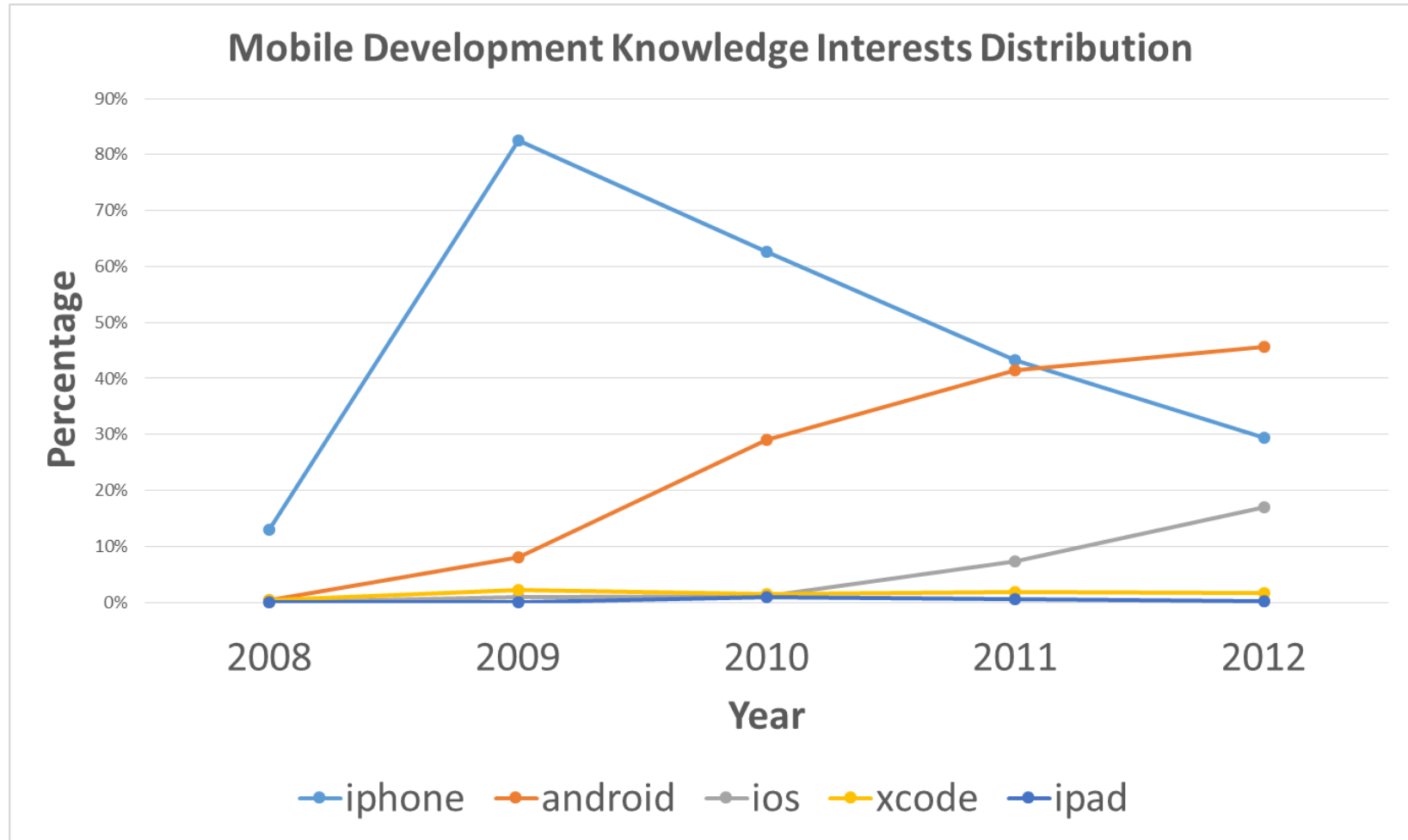


Peer
Influence

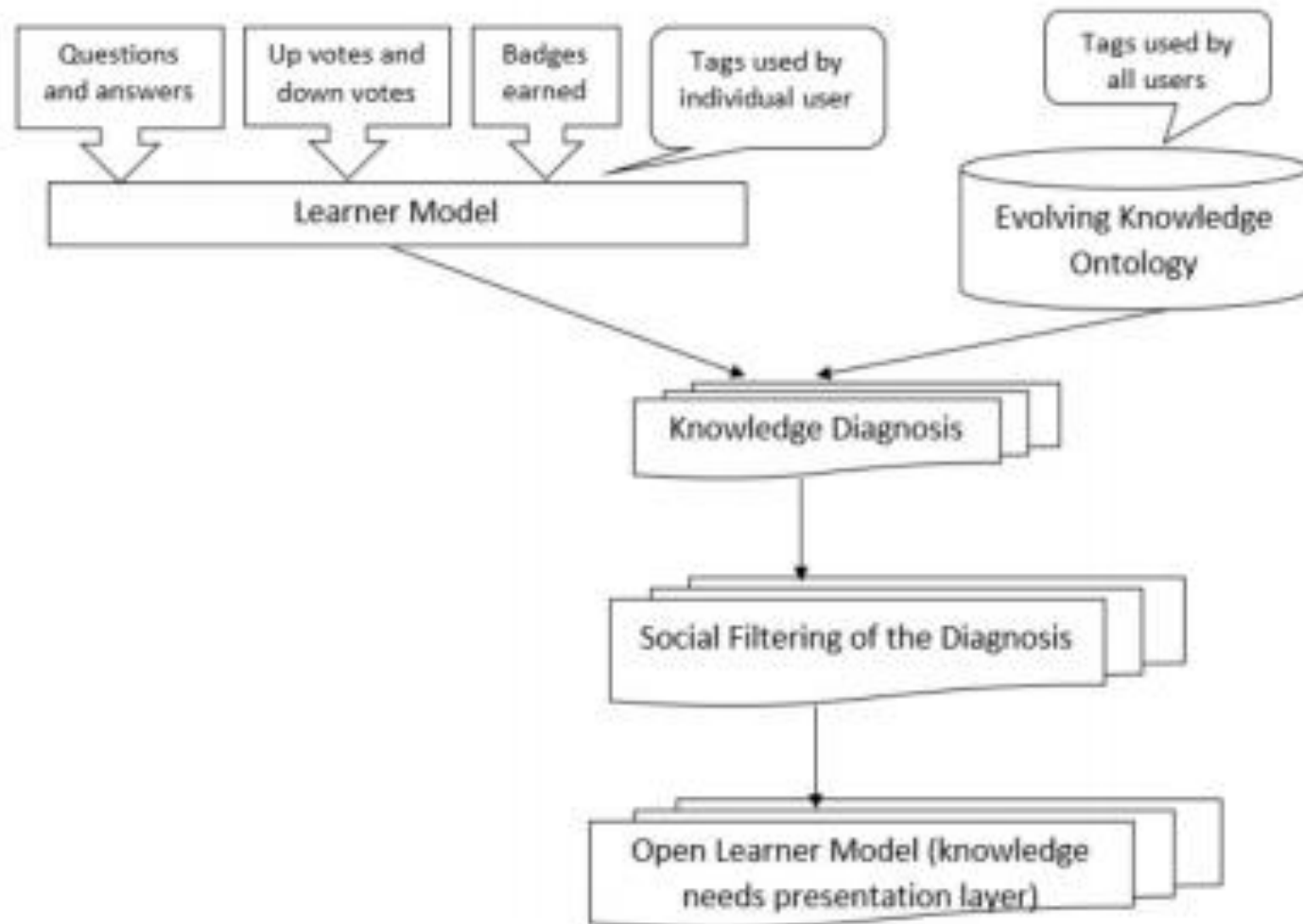


Experiment 2 - Effects of Help and Peer Influence on the Knowledge States

Knowledge States	Help Receiving	Self Learning	Help Giving	Peer Influence
Known Knowns	↑	—	—	↑
Unknown Unknowns	↑	↓	—	↓
Known Unknowns	↑	↓	↓	—



Time Frame	Recall	Precision
Long Term	0.70	0.61
Short Term	0.93	0.81



- Ultimately, we would like to build a support system that provides feedback to the professional learner about their knowledge states, an open learner model for them to peruse.
- We would like to predict forgetfulness in knowledge.
- Also, in future we envisage the possibility of augmenting the online forum with other information about the professional: their resumé or e-portfolio, their LinkedIn profile, job performance evaluations etc.

THANK YOU



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