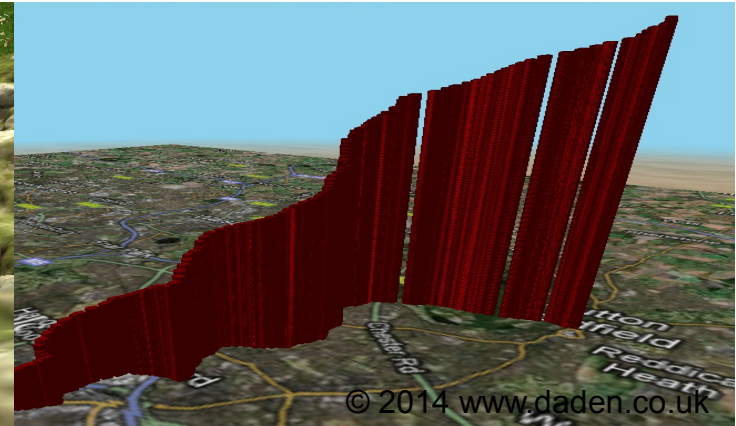




Virtual Field Trips as a Service

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Virtual Skiddaw

- Unity application developed in 2013 by Daden for the OU
- Support physical field trips: planning, on-site, revision, unable to attend
- 10km x 10km = 1600 sims!
- Walk, fly or teleport navigation (with compass & minimap)



Site Activities

- 6 sites, typically 50m x 50m, c.2-10 cm detail
- Allow students to understand context, sketch, roam, pick up specimen rocks
- “Extras” include flying and rising cut-throughs



Multi-User

- No in-built functionality in Unity3D, wrote it all ourselves
- Played with Jibe but settled on PhotonServer as it gave us finer control and was more generic
- Cloud or locally hosted reflection server to manage multi-user communications
- “on-line/where is” list, chat, and “visibility fader”
- Hybrid mode – you can see other users, they can see you, but you don't see their changes to the environment – ideal for fieldwork type activities (e.g. picking up rocks, changing map layers etc.)



iPad version

- Demonstration only at moment – only one site
- No keyboard/mouse so slightly different UI
- Virtual joystick for avatar movement
- Very limited memory given size of meshes and textures
- Feels far more tactile/engaging, and iPad screen size adequate



Virtual Field Trips as a Service



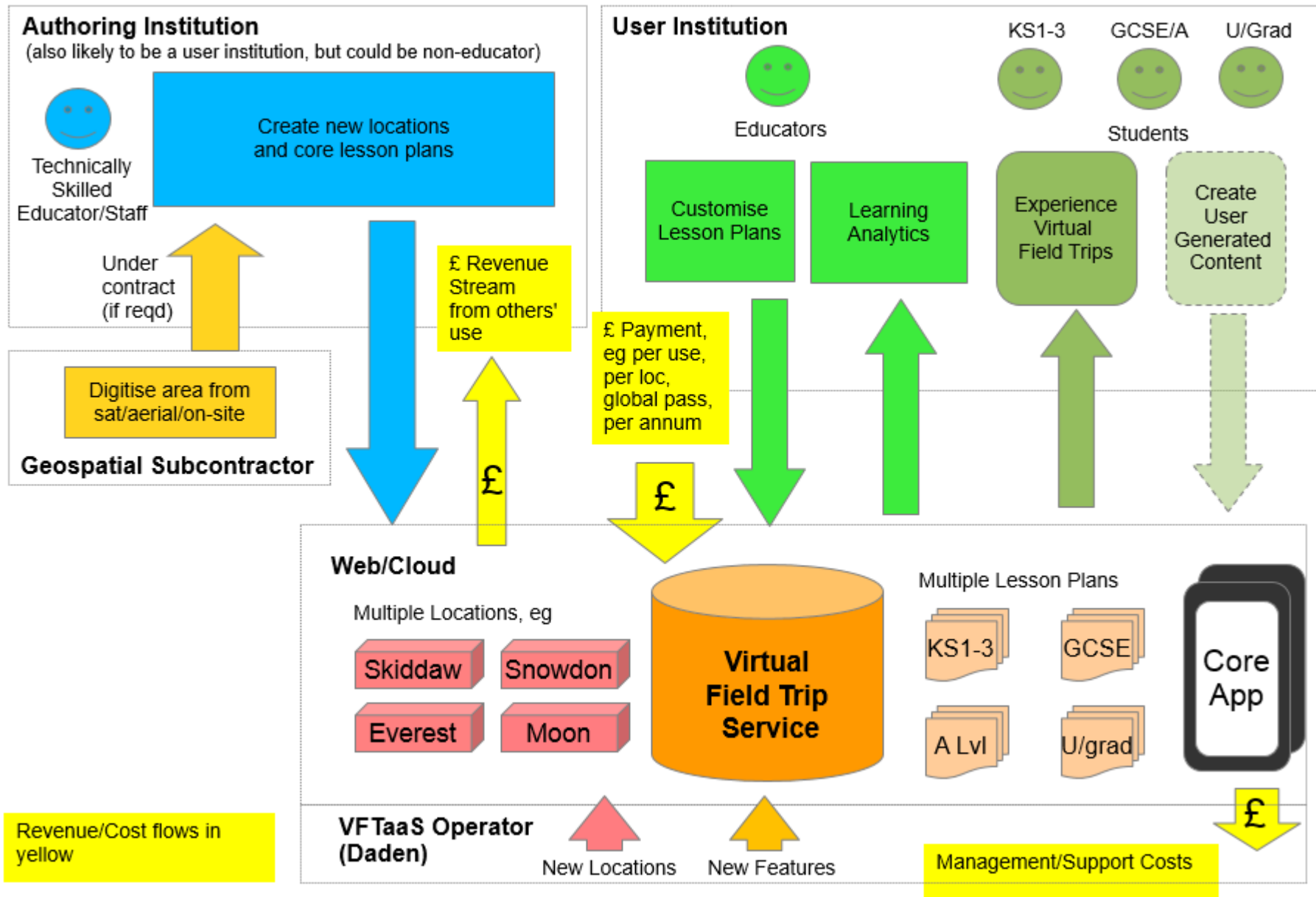
- Feasibility project funded by InnovateUK
- What would it take to move Virtual Skiddaw from:
 - single site/single institution to a
 - multi-site/(inter-)national service
- Partners:
 - Daden Limited
 - The Open University
 - Design Thinkers
 - *Field Studies Council*
- Six month project:
 - Technical Feasibility
 - Pedagogic Structure
 - Commercial Feasibility

VFTaaS Core Concepts



- Service is completely location, subject and educational level independent
- Any skilled organisation can add locations (to a specification and through a QA process)
- Any IT literate staff can add or customise “lesson plans” for any location
- Any teacher can use the locations and lessons plans with their students
- The service is available across multiple platforms – web, PC/Mac download, iOS/Android, other?
- The service is paid for and self-sustaining – model to be agreed
- Organisations contributing locations (and lesson plans) are rewarded (financial or in-kind?)
- A completely safe and managed environment for schools – your class, your world.

VFTaaS Ecosystem



VFTaaS Key Questions



- Does the Virtual Field Trip as a Service concept sounds like something that would be useful to you and your school/college/university/students?
- What do you see as its biggest attractions?
- What do you see as the biggest challenges to deployment (i.e. getting it into the school)?
- What do you see as the biggest challenges to getting student value from it?
- What payment model would be most acceptable to institutions?
- In comparison to Second Life/OpenSim what would you like to bring/leave/add to VFTaaS?



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