HS 3d Engine current features:

1. Loading obj files (triangles format)
2. Textures with baked lighting (2 files, jpg and alpha channel) .- In FF no need for backed textures
3. Objects “attached” to walls, ceiling, floor or floating
4. Objects are in centimeters and scaled according to scale of the scene.
5. Paint the walls/ place wallpapers
6. Move/Scale/Rotate/Levitate objects in scene
7. Handle multiple touches / gestures
8. Generate screen shot of current design.
9. Using masks for empty rooms for Painting.- In FF no need for masks
10. Gyro camera calibration
11. 3d analysis on server side to get room estimations
12. Background image of room is not in 3d.
13. Object selection and “contour”
14. Texture caching
15. Object caching – Each platform develops separatly
16. Animation on objects (shake on delete)
17. Product tag info button that attached to models when selected.
18. Relation between camera default positioning and object placement.
19. Texture resizing for smaller objects.
20. Antialiasing
21. Object sorting for blending objects
22. Support for glass objects.
23. Furniture tinting according to environment.
24. Dirty scene detection (for saving)

Missing:

1. Excessive memory usage.
2. Raising conditions between objects on same y/z.
3. Render on demand.
4. Excessive battery usage
5. Shaders support- multiple shaders per object/ object part/ object type
6. Lighting & Multiple lights – instead of backed shadows.
7. Replace textures of models (good for configurator)
8. Real 3d empty room
9. Movement inside 3d world (person view)
10. Painting/Tiling floors/walls for real 3d rooms
11. Top view of room
12. Objects with opacities.
13. Z index concurrency issues
14. Scene graph- for example moving walls of scale will move all the models that attached to it.
15. Grouping models – adding/replacing group of models at once.
16. Replacing background image for same design.
17. Collision
18. Snap to wall
19. Undo/Redo in 3d
20. Placing objects one on top of other.
21. Camera handling, multiple cameras
22. Bad contour implementation
23. Loading objects to scene by order
24. Cross platform solution

Floor planner functionality:

1. 2D polygon manipulations –resizing, modifying shape, combining
2. 2D polygon definition
3. Measurement gui
4. Zoom in/out camera,
5. Moving camera in top view
6. 2D ui that connected to 3d
7. Wall rendering
8. Snapping guides
9. Export to HD resolution of the scene
10. Collision detection between walls and inside objects.
11. Wall objects (windows,door,etc..)
12. Wall object measurements
13. Object configurator

Cross product:

1. Cross platform/project unified formats
2. Using FireFly on server to render HD scenes for Planner/Photo Editing
3. Unified Configurator.
4. Unified Catalog of models, paints, wallpapers.