# First of all about numerated use cases.

1. Use case 1: Map layer tab. Everything is possible. Just a few questions about design.
   1. We make one toolbar for all panes in Tab panel (Found FS, Map layers, Output properties). And it is on bottom of this panel. Am I right? Sorry, not sure I understand you question.
   2. Now we delete selected layer using button with trash can (no drag and drop). Okay
   3. What will we move? Separate layer? Group layers corresponding to one feature service? Sorry, not sure I understand you question
   4. Now zooming on the extent of a layer is done by double clicking on this layer. Do we remove this functionality? We can keep it, but “zoom button” I think is more AI like. A
2. Use case 2: Search tab. It’s OK too.
   1. Should we show here the content of the appropriate service (layers, as in your picture)? Yes, that what I was thinking
   2. If the answer on the previous question “yes” should we allow the user to select layers which will be added to the map? Yes, just like the existing workflow. The user searches, gets a set of result, and then they can add the layers they select to the map.
3. Use case 3: Download/export. OK.
   1. You mean that there is a tool (service) that can export a Web map into an AI document? If so it would be great to get the link to such tool. No there is not automatic tool/service to do this. We could do it the same way we have it now, but instead of export to PDF, we export to AI file format (\*.AI)
4. Use case 4: Defining map extent.
   1. Tool tip during drawing the rectangle. Now we use the ArcGIS JS tool Draw to perform this operation. Unfortunately it has only one kind of events: draw-complete/draw-end. So if we want to display any info during draw process we have to develop our own tool. Okay let skip this part, I’ll update the UI mock up.
   2. Scale. The engine used in Adobe HTML5 extensions does not have any special restrictions for REST requests. So I think there is no problem.
5. Use case 5: Photoshop+. The Photoshop has the same possibilities for developing HTML5 extensions as AI does (maybe even more, as it is considered as more widespread product). Cool. Photoshop is their most popular product, this is the reason I wanted us to do support a workflow inside of it. Even more, there is the possibility to use one extension in several products. But it has to use different JSX code for communicating with host application. The extension can define the type of the host application. So there will be no problem Cool
6. Use case 6: Analysis. This is the subject to experiment. Yes, this is what I expected. The main problem is the result of analyzing. I’ve taken a look on the tool “Create Buffers”. It has the property “returnFeatureCollecton” which means (it is the quotation): When true, returns the result of analysis as feature collection and creates a feature service. Of course there is no problem to add a feature service in an exporting web map. But how long is the life of such service? Not sure I understand you question, “life of which service”? We can make a custom GP service and host it ourselves, let us know if we need to do that, or can you set up the GP tool/service yourself? That will allows us to define the output to match what we need. It requires checking. Anyway it depends on the format of the result. So the exact answer can be got after defining the exact list of such operations.
7. Use case 7: Defining map extent manually. I don’t understand exactly how it will work, but if you define this more sharp I’m sure we can implement this. For example, I don’t understand how will the user define the center of the extent? Users of AI (and PS) think about dimensions in non-geograhic units (mm, in, px). So what we need to do is make this “conversion” from geographic units to page units for them. We have 3 existing services for POD that do some of these workflows.

<http://pod-ags-srv-1.esri.com:6080/arcgis/rest/services/mcs_pod/Calculators/GPServe>r

* 1. Calculate Extent, takes in a scale and page size…and returns a geographic area
  2. Calculate PageSize, takes a geographic area and scale…and returns the page size
  3. Calculate Scale, take a geographic and page size…return a scale

For this workflow, AI/PS users doesn’t know/care about map scale, they have a page size the need to fit into and know how much geographic area they want to cover (by drawing polygon on our map control). This is a “CalculateScale” service call; however we need to do extra work because the units are geographic/ground units. So to get the equivalent page units we need to multiply the unit conversion value by the scale (eg. cm to km at a scale of 50,000 is:

1cm = 0.00001km = 0.00001km x 50000 (scale) = 0.5km on a map). So I think the order of calculation is user can’t type in page size first, they must draw geographic area, then we get the scale, then we use this value to convert the distances to page units. Make sense?

1. Use case 8: Authorizing in AGOL. There are two ways to authorize: OAuth2 and token based. My suggest is to keep it the way we have it now (token based, still correct?). I just want an improved UI were I can log out and know want account I’m logged into. Token based has some restrictions but it does not require any additional means. OAuth2 is more flexible but there are some problems (solved for today but they can arise again):
   1. Adobe HTML5 extension engine uses a library which is incompatible with DoJo. They (Adobe) allow to switch off this feature now. But who can guarantee that it will last long?
   2. ArcGIS Online OAuth2 process does not allow so called trusted authorizing. So we have to run some additional web page which is used as a call-back web page. The authorizing will not work if this web page is dead by some reason. It’s not very robust.

# Now about unnumbered use cases.

* Geocoding. We can implement geocoding support. But what we should do with found places? Just mark on the map? How should we mark them? Should we include marked places in the exported map? I suggest we do it like we do with POD, return a list of places and when user click the one they want it get added to the map and we are zoomed to that location.
* Cartographic tools. The Export Web Map tool allows using templates. And they can include everything what can be included in the ArcMap document. I’m not sure where such MXD doc has to be placed to be editable from Adobe HTML5 extension.

# Not mentioned features

* Reorganizing layers of AI (I don’t know what have to be done in PS yet). But was not implemented so I think we have to remember this use case. And more we have to investigate what happens in that case in Photoshop. Reordering layer in PS is not importnct at this point. The AI layer management is very important. As said, I’ll provide more details about this soon in another doc that Sarah and I are working on.
* Removing clipping property from AI layers. The same reason