Microsoft

Sierra - Concept Vision

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Microsoft

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This document compiles the high level thinking and general concept for the Sierra Portal. It contains a description of the portal's objectives and target users. It introduces the general UI behaviours as well as concept wireframes and look & feel.

The wireframes and designs in this document are early work and as such are subject to change. They should only be used for inspiration. More reliable specifications for development will come later in the form of detailed wireframes and detailed designs.

This document can be read by anyone who will be working on the Sierra project - project managers, developers, designers, etc. - as well as potential users of the portal - operators. It ensures everyone on the project team shares a common vision.

Portal Overview

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Portal Overview - What is the Operator Portal...

The Operator Portal is a **cloud based** service designed to create a single point of entry for all customers of the next generation Mediaroom product. Built to be accessed from any platform via a standard web browser it will present a **unified** experience to **manage and monitor** all aspects of an operator's VOD service.

It has been conceived as a highly flexible suite of tools, capable of **adapting** to a broad range of operator needs which will enable operators to focus on **adding value** to their subscriber propositions, and to **drive maximum revenues** from their content catalogues.

Designed specifically around the day to day needs of the operator team the portal can be personally tailored to fit each user's job role, reducing unnecessary functionality and interface clutter, to help increase the overall ease of use and their operational efficiency.

Portal Overview - Who is it for

Content Merchandiser (OCME)

In charge of setting the prices for content, establishing offers and maximising revenues.

Works closely with OCMA to decide what to promote where and when.

Monitors sales performance and analyses the success of campaigns.

Service Administrator (OSA)

In charge of managing operator user accounts.

Configures the validation workflow for the team for all day to day tasks.

Configures ingest workflow and roles.

Monitors the overall system health.

(OCMA)

In charge of editing the catalog and curating what consumers can see on their STB/iPad/etc...

Manages promotions, packages and banners in collaboration with the OCME's offers.

Has manual override on content categorisation and meta data to make changes as and where necessary.

Content Manager

Customer Service Representative (OCSR)

Supports customers with problems or for profile information updates.

Escalates to Technical Support (OTS) if necessary.

Asset Manager (OAM)

Monitors and manages the ingest/export process: create new ingest rules and rectify errors.

Sets up "batches" for operations on the catalog that the OCMA cannot handle manually.

Quality assurance (OQA)

Proofread promotions, packages and titles that have been created/edited by an OCMA or OCME before they go live.

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Content Merchandiser (OCME)

In charge of setting the prices for content, establishing offers and maximising revenues.

Works closely with OCMA to decide what to promote where and when.

Monitors sales performance and analyses the success of campaigns.

- 1. Create a half-price offer on specific content for a limited duration.
- 2. Identify lowest selling titles last month, create an offer for them and ask the OCMA to promote them on the service homepage.
- 3. Offer 5 free movies on a specific device to new customers signing up.
- 4. Discretely A/B test two different offers to a small group of consumers before rolling it out to the whole subscriber base.
- 5. Create an automatic discount for a week each time a title is added to a specific package.
- 6. Set up the frequency of pre/mid/post-roll adverts and increase the number of sports related adverts for sports pack subscribers.
- 7. Compare sales analytics for two different subscriber groups.
- 8. Analyse the success of an offer and try alternatives.
- 9. Set up a partner offer as agreed with a brand sponsor that includes bespoke package branding.
- 10. Create an offer for a package created by OCMA for a specific occasion (Halloween, Christmas, Valentines...).

Content Manager (OCMA)

In charge of editing the catalog and curating what consumers can see on their STB/iPad/etc...

Manages promotions, packages and banners in collaboration with the OCME's offers.

Has manual override on content categorisation and meta data to make changes as and where necessary.

- 1. Manually edit the poster art for a title.
- 2. Proof read and amend the description for new hero title.
- 3. Add a catchy pull quote to help promote a hero item.
- 4. Create a package around a specific theme (e.g. Halloween movies, sequels...) and promote this package on the homepage with bespoke visual assets.
- 5. Add a hero module to a section of the catalog that automatically displays the most popular movies for that section.
- 6. Create a promotion directly from an offer created by an OCME.
- 7. Add a new section to the catalog, and define what content should automatically go in it.
- 8. Define a package so that future titles that match that definition will automatically be added to package on ingest.
- 9. Customise the appearance of the client for a specific section of the catalog.
- 10. Manually define related content for a title.

Customer Service Representative (OCSR)

Supports customers with problems or for profile information updates.

Escalates to Technical Support (OTS) if necessary.

Technical Support (OTS)

Similar to OCSR with higher degree of technicality. Can identify if the problem comes from Sierra, operator IT or elsewhere. Escalates to Microsoft Support (MS) if necessary.

- 1. Help customer troubleshoot and rectify an error code issue.
- 2. A customer report that a title doesn't work, OCSR identifies if it is an encryption problem or a rights problem.
- 3. Retrieve the pin number for a customer that has lost it.
- 4. Help a customer who has recently bought a new package but cannot access the channels yet.
- 5. Change or upgrade the customer subscription.
- 6. A customer had bought a new device and wants to add it to his existing account.
- 7. A customer wants to access a package that is not included on his subscription, OCSR suggests the best offer subscription or upgrade.
- 8. Disable an account that has not paid their bill.
- 9. Revoke previously purchased content if the customer had purchased the content in error.
- 10. Send detailed information to the technical support to help solve a problem.
- 11. Impersonate a customer to see what the problem is from their point of view.
- 12. A customer wants to remove the parental control from a specific user of his account.

Service Administrator (OSA)

In charge of managing operator user accounts.

Configures the validation workflow for the team for all day to day tasks.

Configures ingest workflow and roles.

Monitors the overall system health.

- 1. Configure EPG channel map
- 2. Configure DVR endpoints
- 3. Monitors integration with other operator systems: incoming feeds from CRM, outgoing feeds to billing. Identify errors and eventually escalate to Microsoft Support (MS) or in-house IT team.
- 4. Configure workflow roles for ingest and distribution: which OAM manages which flow.
- 5. Get alerted if a critical part of the system is down.
- 6. Analyse system health variables (peak processing time, total videos delivered...) and compare with targets.

Asset Manager (OAM)

Monitors and manages the ingest/export process: create new ingest rules and rectify errors.

Sets up "batches" for operations on the catalog that the OCMA cannot handle manually.

- 1. Monitor the ingest and export processes. In case of error, identify the problem and try to fix it.
- 2. Manage list of supported devices and encoding parameters for each device.
- 3. Define rules for how metadata from different sources is combined.
- 4. Makes sure there are no duplicates in the catalog. If there are, define merging rules.
- 5. Identify missing metadata and either find a way to ingest again or notify OCMA to edit manually.
- 6. Set ingest priority to high on specific titles requested by the OCMA.
- 7. Preview encoded asset quality as rendered on various client devices.
- 8. Define rules to sort incoming titles into different packages depending on their metadata, on request from OCMA.
- 9. Define target devices and encoding rules based on package, in collaboration with OCME/OCMA.
- 10. Import or manually define breakpoints for mid-stream adverts.

Quality assurance (OQA)

Proofread promotions, packages and titles that have been created/edited by an OCMA or OCME before they go live.

- View all promotions, offers, packages or titles recently created/edited and waiting for approval.
- 2. Within an edited promotion/package/etc., easily identify what data has been edited.
- 3. Preview titles and catalog as seen on different platform by impersonating specific consumer types.
- 4. Validate or reject changes on an offer, promotion or title.
- 5. Ensure consistency of the contents displayed in the portal.
- 6. Search all content for mentions of specific words/typos. Ability to replace all.

General concept

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Design Approach

Overview

The Operator Portal is designed to be a premium Microsoft product that greatly enhances Mediaroom service offering for new and existing customers.

It inherits the design language established by Windows 8 and has the following design beliefs running through it's core.

Easy to use

- It must be a pleasure to use with a very small learning curve for all users.
- It should be based around a few simple yet powerful UI paradigms.
- All low value tasks should be automated to increase operator productivity.

Task based

- The UI must be built around all the operator roles and their daily tasks.
- All onscreen information, content and functionality should be personalised to the current user role to provide the most relevant actions and information necessary for them to achieve their task.

Adding value

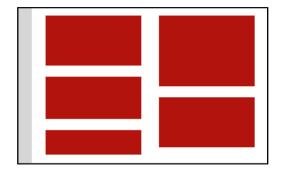
- Use all available data to help the operator identify where potential new revenues lie and where to find new commercial opportunities.
- Integrate the use of analytics into all daily tasks to ensure maximum performance intelligence is provided to all users.

Flexible/Adaptable

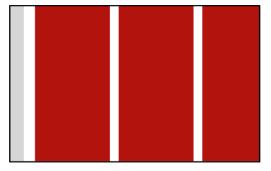
- Start simple and progressively disclose complexity so the interface is never more complicated than necessary for any user at any time.
- Enable a high degree of customisation within the system so that it is inherently simple to use but still flexible enough to cover a broad range of advanced needs

Layouts

There are only 2 layouts in this web application:

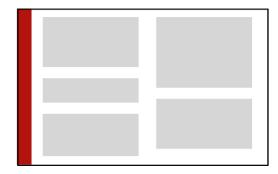


Mosaic of widgets
Only used for one screen: My Hub

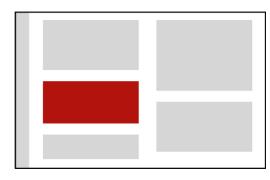


Horizontal arrangement of panels Used everywhere else

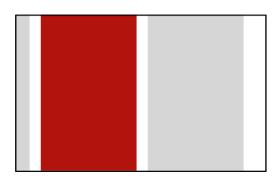
These layouts are built with 3 basic components:



Navigation Always there



Widgets
Used on My Hub only



Panels Used almost everywhere else

Panels

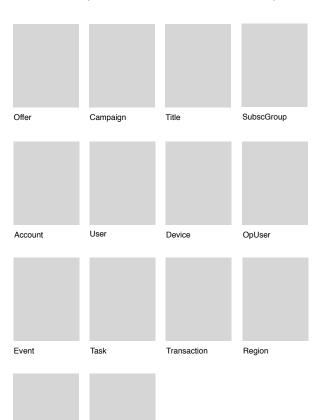
There are 3 types of panels:

Cards:

AdRule

DeviceType

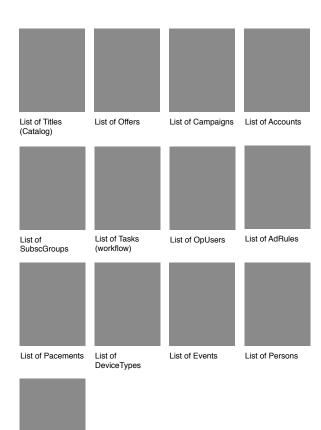
i.e. "detail page". Cards show all the attributes of an object, including related objects. Cards include analytics, status and recent activity.



Lists:

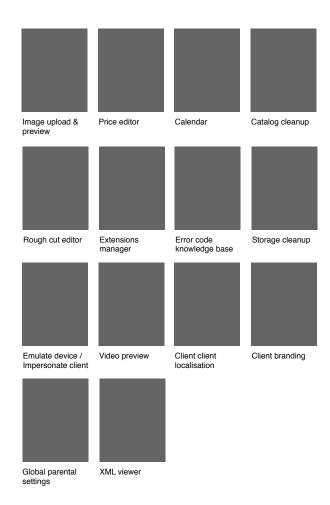
List of Regions

Can be used either for selection or exploration. Lists can be sorted/filtered on a number of criteria.



Tools:

Can be used to edit or manage proprieties or assets.



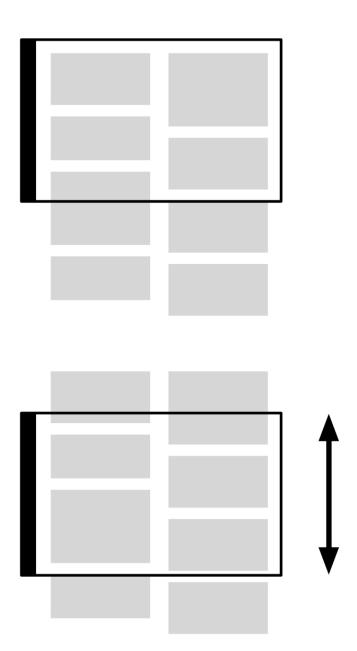
Scrolling - Hub & Widgets

On My Hub, the widgets stack vertically. They occupy the available width.

The operator can scroll vertically. The operators can also re-order the widgets manually to suit their needs.

Different operators see different widgets. Widgets are populated based on the operator's roles.

The navigation is fixed to the left hand side of the screen. It doesn't scroll.



Scrolling - Panels

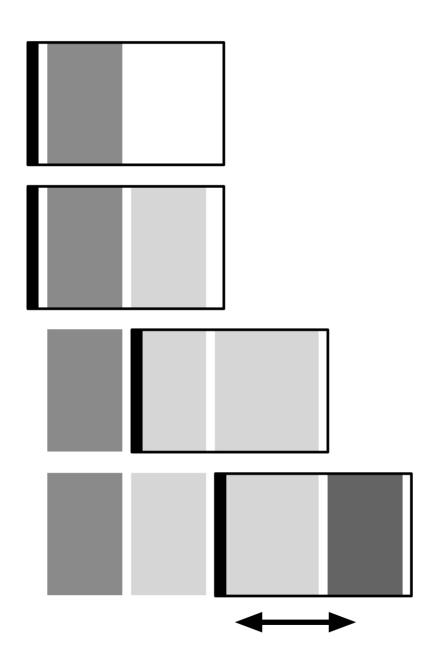
On panelled pages, the interface is made of vertical panels. Panels help operators keep in mind the context of the current task, which is important in task-oriented interface. A pagebased UI, more classic and object oriented, wouldn't work as well because users can lose track of where they came from.

The operators start with a single panel, accessed via the navigation or My Hub. As they interact (e.g. drill down) more panels are added to the right.

The active panel is always the one the far right. The screen right aligns to make sure it is visible.

The operators can scroll horizontally if they want, although interacting with any of the panels other than the right-most one would cancel/dismiss all panels located on its right.

"Tool" panels usually don't let operators access any other panel, so they would always be on the far right. "List" panels, when used for exploration, will tend to be on the far left, as they are a starting point. But when used for selection, they will tend to be at the far right.

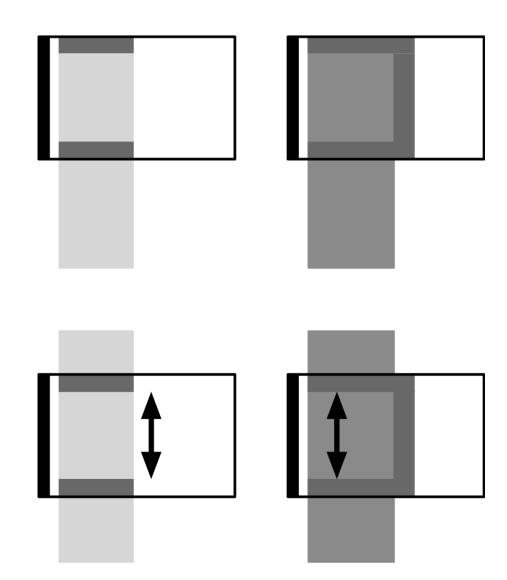


Scrolling - Panel

Panels can be longer than the height of the screen, in which case the operator can scroll vertically.

Some elements of the panel don't scroll with it though:

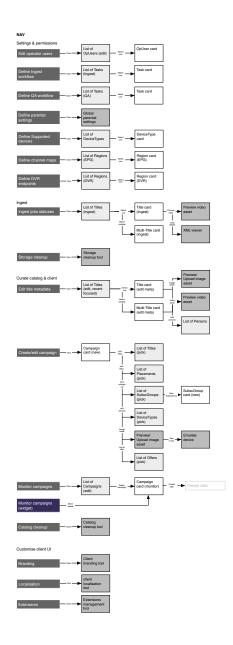
- The panel header sticks to the top of the screen
- The action buttons stick to the bottom of the screen.
- Lists: the filters stick to the right of the panel

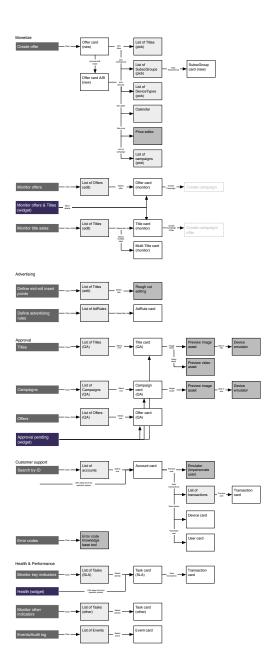


Information Architecture

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Information Architecture

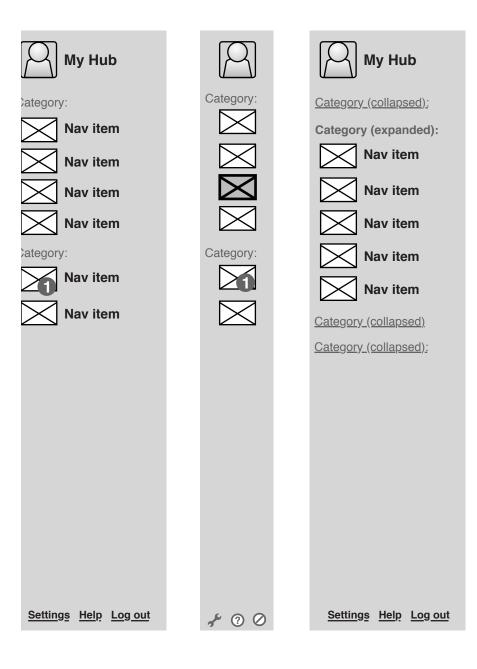




Wireframes: Navigation

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Navigation - General



Left: Operators can only see a subset of all navigation items,based on their role. Items are grouped into categories.

Middle: Once operators navigate away from My Hub, the navigation collapses. The active task is highlighted in the navigation.

Right: If an operator has too many roles and all navigation items don't fit vertically, the categories collapse.
Only one category is expanded at a time.

Navigation - All Items

Settings & permissions

Edit operator users

Define Ingest workflow

Define QA workflow

Define parental settings

Define Supported devices

Define channel maps

Define DVR endpoints

Ingest

Ingest jobs statuses

Storage cleanup

Curate catalog

Edit metadata

Create/edit campaign

Monitor campaigns

Catalog cleanup

Customise client UI

Branding

Localisation

Extensions

Monetize

Create offer

Monitor offers

Monitor title sales

Advertising

Define mid-roll insert points

Define advertising rules

Approval

Titles

Campaigns

Offers

Customer support

Search by ID

Error codes

System health

Monitor key indicators

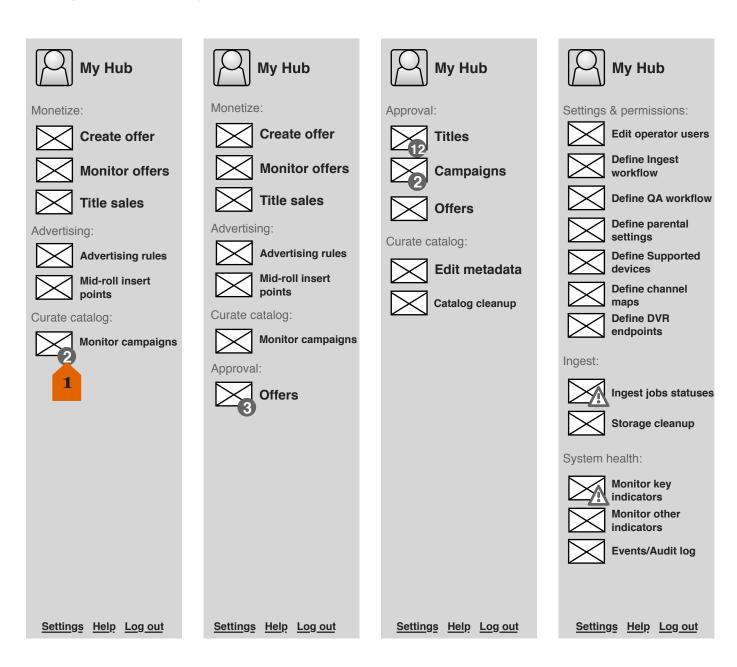
Monitor other indicators

Events/Audit log

This is the complete list of possible navigation items.

The average portal user would never see all items but only a sub-set.

Navigation - Collapsed



Left: Navigation as seen by an operator with OCME (Merchandiser) role

Middle left: Navigation as seen by an operator with OCME SUPERVISOR (Chief Merchandiser) role

Middle right: Navigation as seen by an operator with OQA (Quality Assurance) role

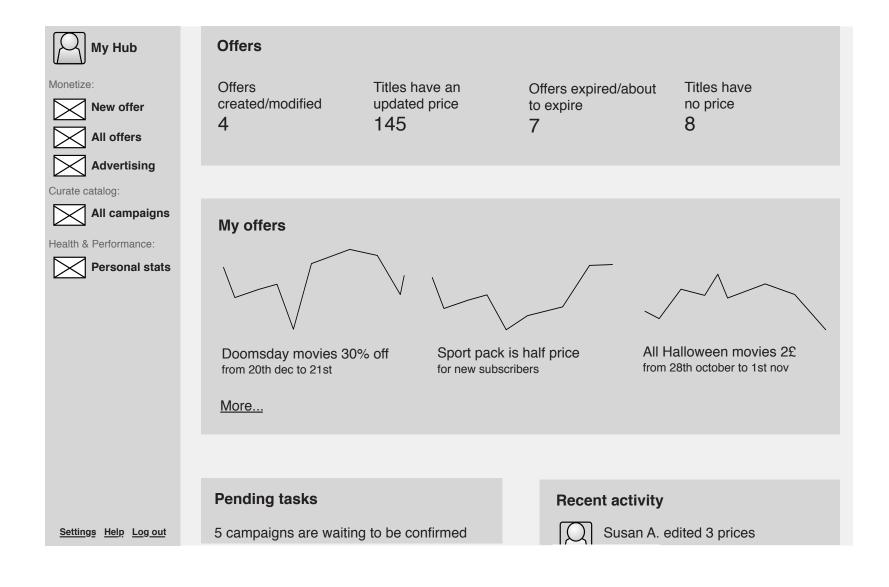
Far right: Navigation as seen by an operator with OSA (System Administrator) role

1. Badges notify operators of noteworthy items and pending tasks.

Wireframes: My Hub

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My hub

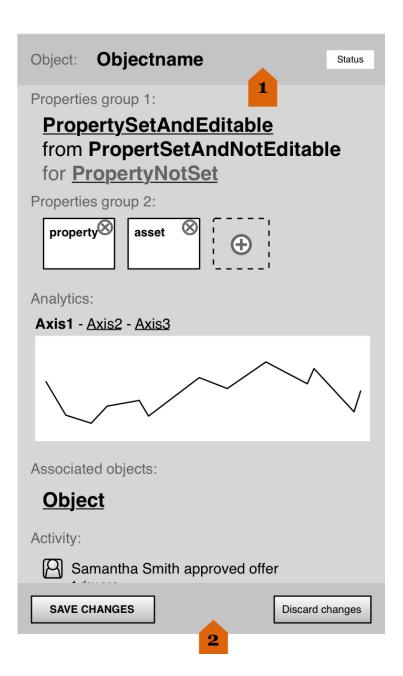


My hub as seen by an OCME (Merchandiser)

Wireframes: Cards

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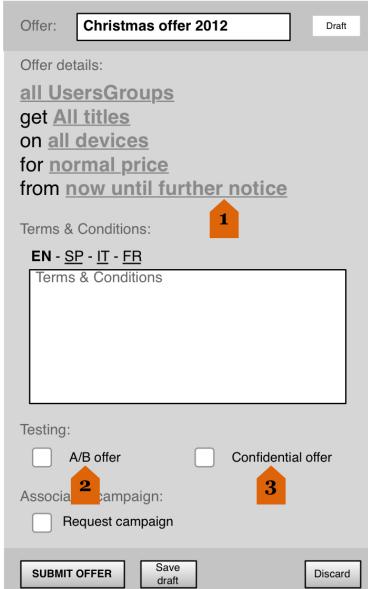
Generic card panel



- 1. Header includes object type, name and status.
- 2. Action buttons always visible at the bottom of the page, even if the card is longer than the screen height. Save/ Confirm always in the bottom left corner, Cancel/Discard changes always in the bottom right corner.

Offer card





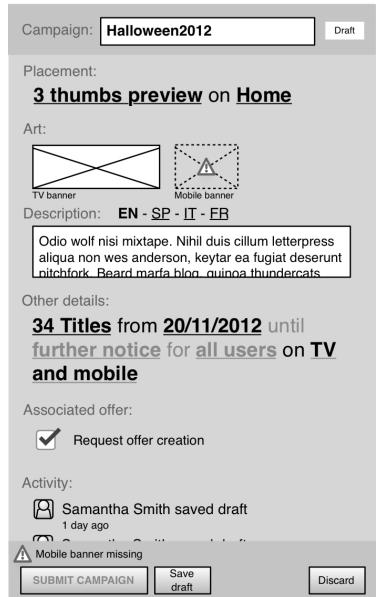
Left: Offer card as seen by someone without editing permission

Right: Offer card as seen when creating a new offer

- 1. The offer is described in "plain English" where operators can simply click the parts of the sentence that they want to change.
- 2. Activating the "A/B offer" option displays a second set of Offer details and automatically creates a set of 2 offers aimed at two subsets of the target Subscriber Group.
- 3. "Confidential Offer" reduces the sample to just a 100th of the target Susbcriber Group.

Campaign card

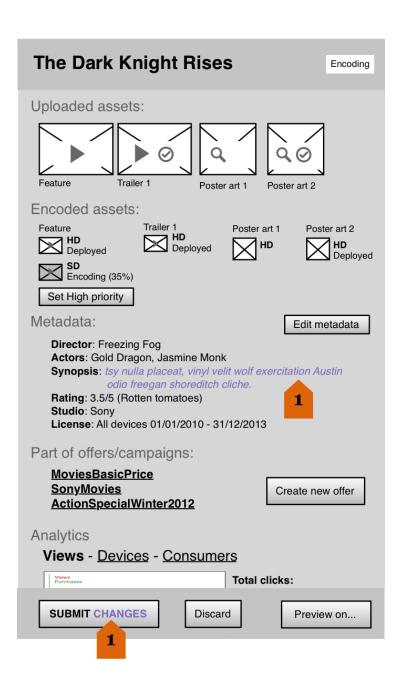




Left: Campaign card as seen by someone without editing permission.

Right: Offer card as seen when editing a draft campaign.

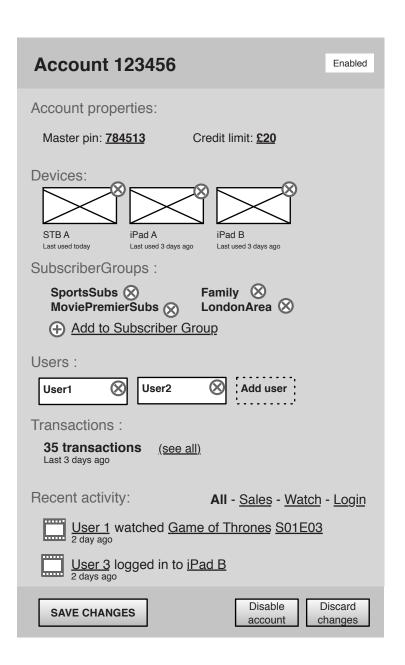
Title card



Left: Title card as seen by someone with OCMA role (but not OCME). OCME, for example, would also see advertising related information.

1. Changes are highlighted to make approval easier.

Account card

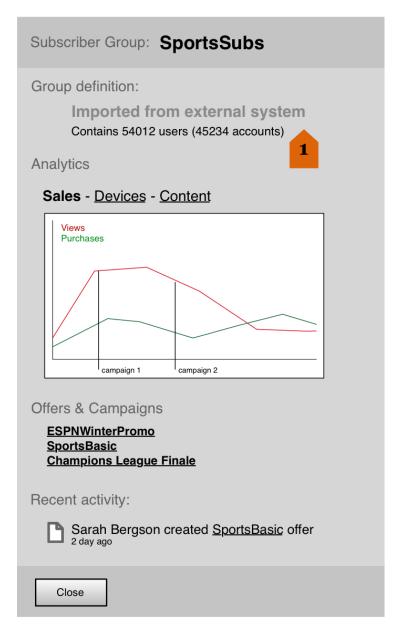


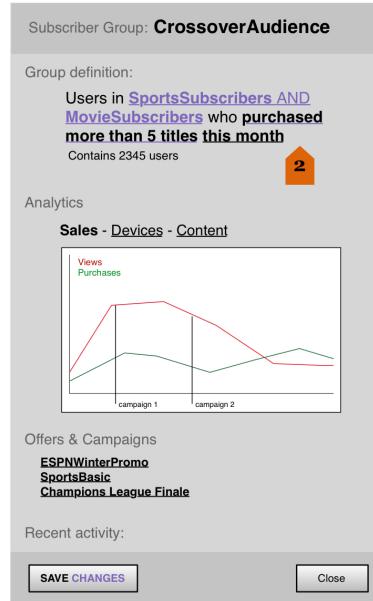
Left:

Account Card as seen by someone with editing permission.

This card has all the account information for a subscriber: groups that they are part of, users and devices connected to the account, pin and parental control.

Susbcriber Group card





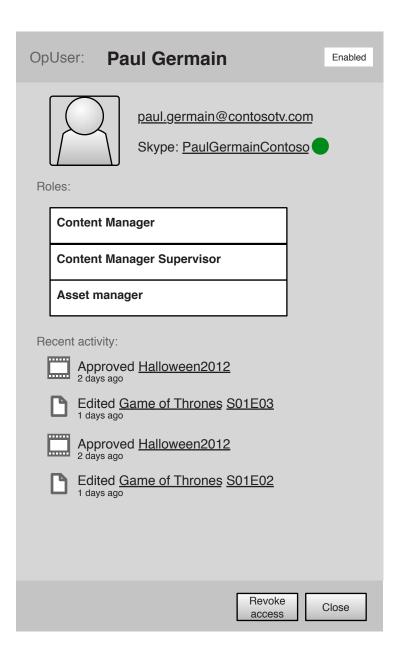
Left: Card for a Subscriber Group inherited from another operator system (e.g. subscription related group).

1. The definition of this group is external to Sierra. No changes can be made to it

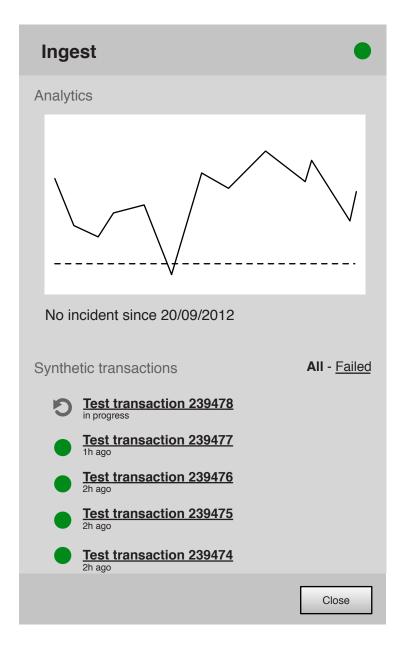
Right: Card for a Subscriber Group created by an operator

2. This group has been created in Sierra by an operator. It allows operators to target users based on their activity.

Operator user card



Task & Transaction cards





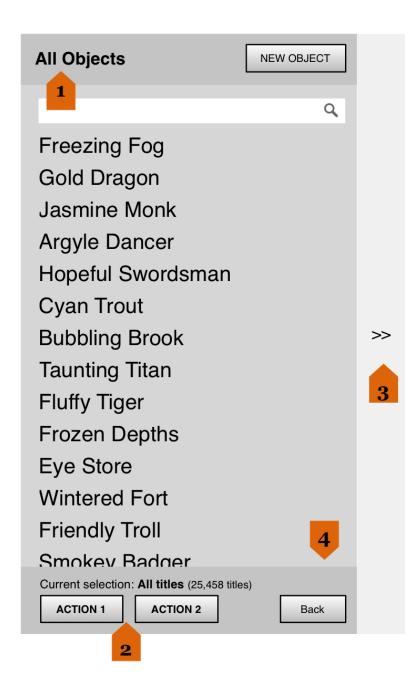
Activity card with information about the system health.

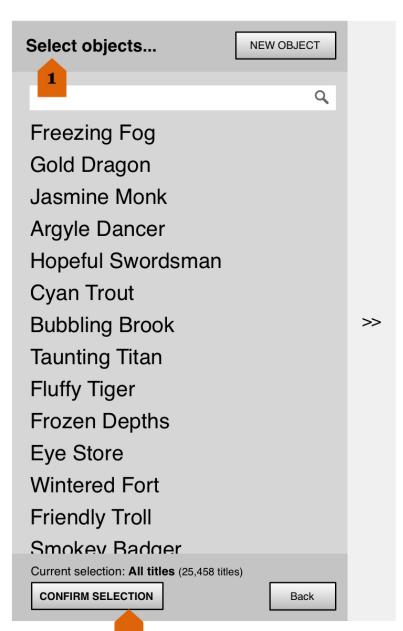
Allows the user to monitor the status of the portal and access the details about a transaction to investigate any possible errors.

Wireframes: Lists

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Generic list panel

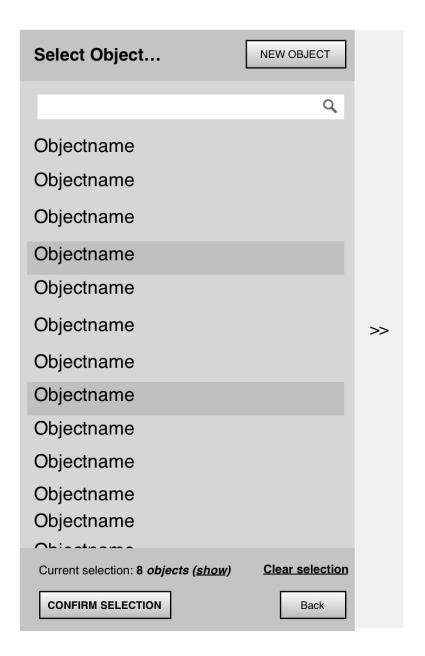




- 1. The title in the header reflects whether the list panel is being used for exploration or selection.
- 2. The action buttons at the bottom of the page also reflect this. The actions always apply to the current selection (by default, all the content of the list).
- 3. Filter could be opened or collapsed by default (Operator preference).
- 4. Infinite scrolling: load enough items to fill even a screen with a high resolution...

2

Generic list panel - Selection

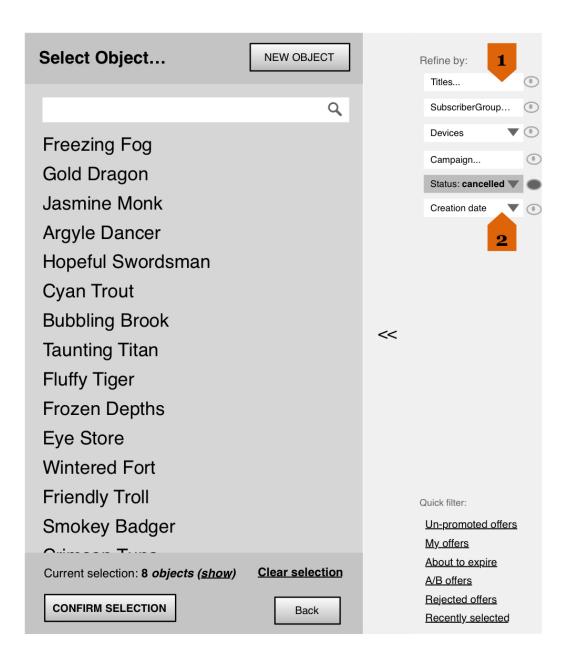




Objects selected are grouped together and can be viewed as a subset list.

Users can then clear this selection or remove items one by one from the selection group.

Generic list panel - Filters



There are a number of **axes** to sort/filter/analyse the content of the list:

- 1. Some require the user to select an element from a different list via a new list panel (show with "...").
- 2. Some just require the user to select an option from a drop down or enter a numeric value (show with arrow).

Generic list panel - Analytics



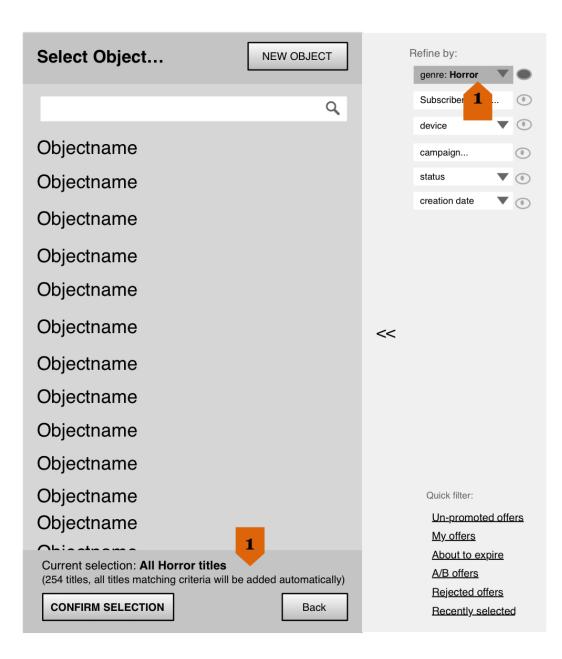
- 1. As an operator "activates" more axes...
- 2. ... relevant analytics can appear to help the operator make a decision (e.g. choose the right content). The analytics can be actionable, they are a shortcut for entering filter values along the relevant axis.

The idea behind this system is to only show analytics around axes that the operator has explicitly expressed an interest in.

3. Also, if relevant, additional columns of data can be displayed. Some of these columns will enable sorting (click on column header).

Clare Early III conceptor

Generic list panel - Dynamic selection



1. Instead of manually selecting objects, operators can just set filters and use this as a selection.

They are effectively creating a "query" that will encompass matching objects as they are added to the system.

The original requirement for "rules to automatically generate offers" is essentially covered by this, in a way that doesn't introduce a new paradigm for operators.

As soon as the operator clicks on an item in the list, they are back in "manual selection mode", with a selection of 1 title.

Catalog - Unfiltered

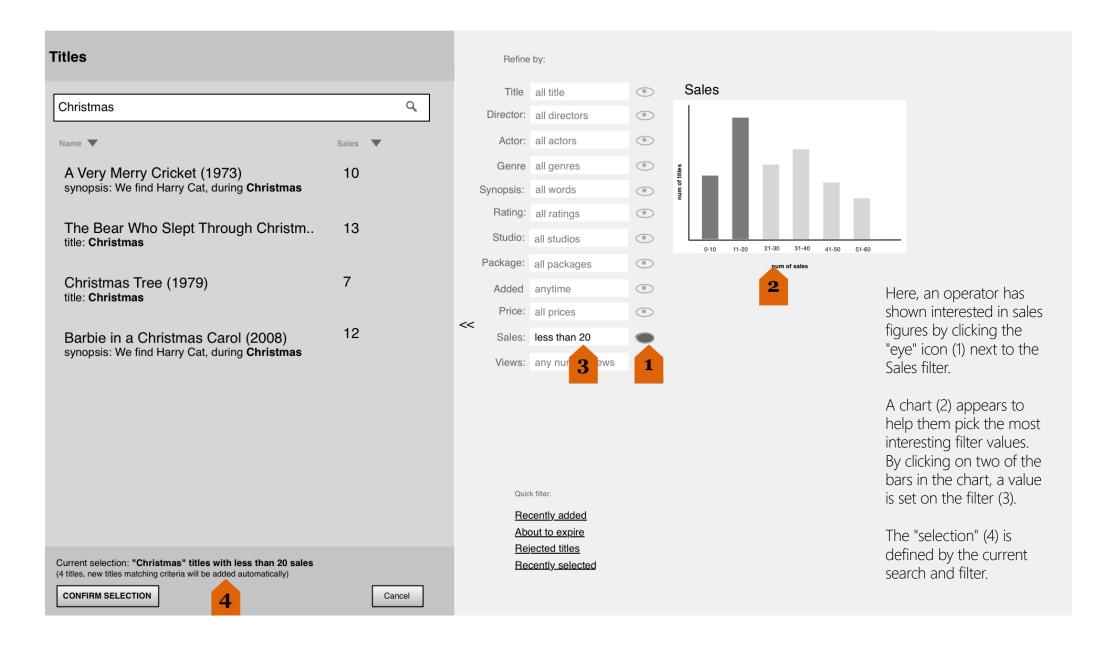


The catalog (list of titles) is the most complex list in Sierra but only reveals its complexity as operators attempt to use its advanced features.

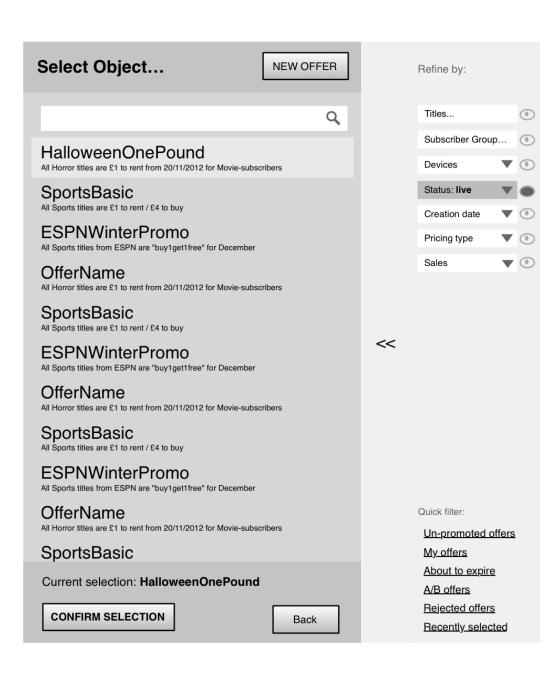
It allows operators to select titles manually, using the general search and filters to find the titles they are looking for.

It also allows operators to use the filters to define a package that will evolve over time as titles gets added to the system (e.g. Movies that include the word 'Christmas' in their description").

Catalog - With filters & analytics

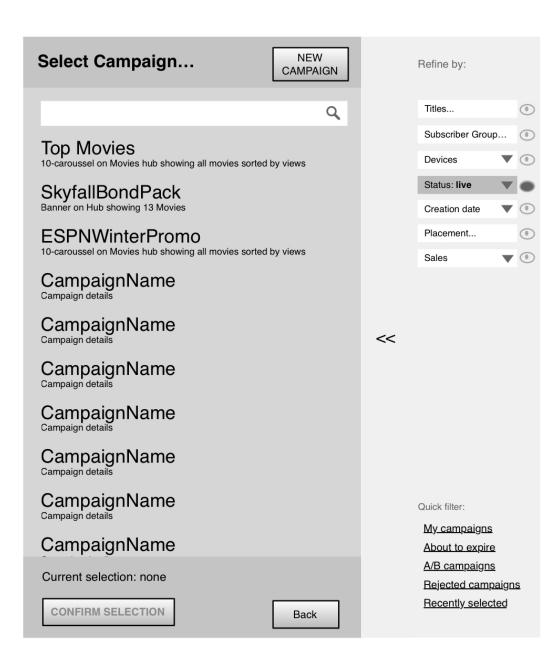


Offers list



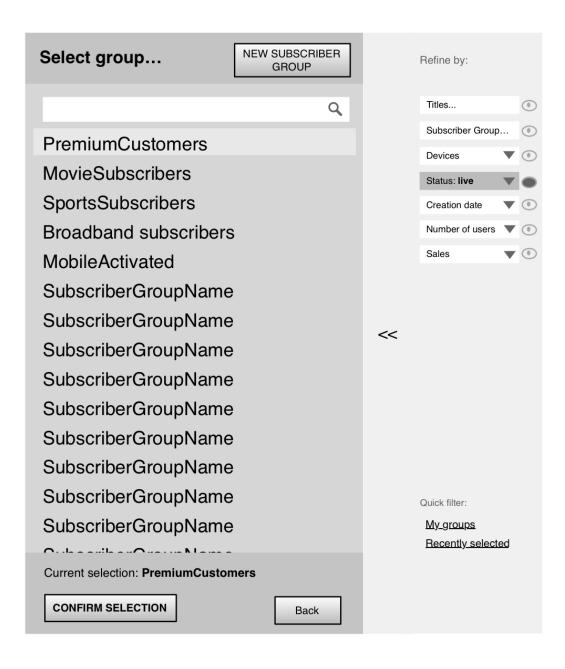
Offer List with an offer already selected.

Campaigns list



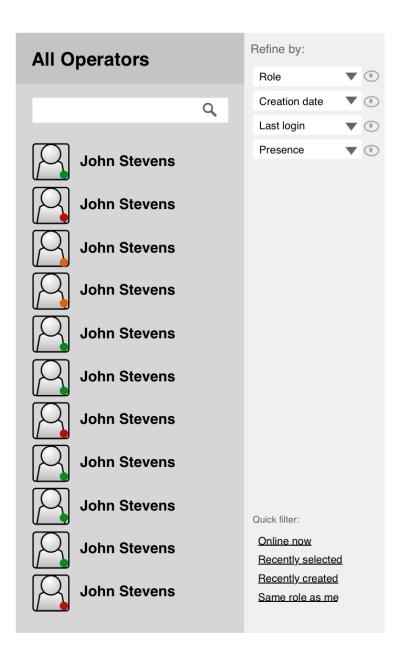
Campaign List with the full list of active campaigns.

Subscriber Goups list



Subscriber Groups List with a group already selected.

Operator Users list



Operator User List as seen by Operator System Administrator (OSA).

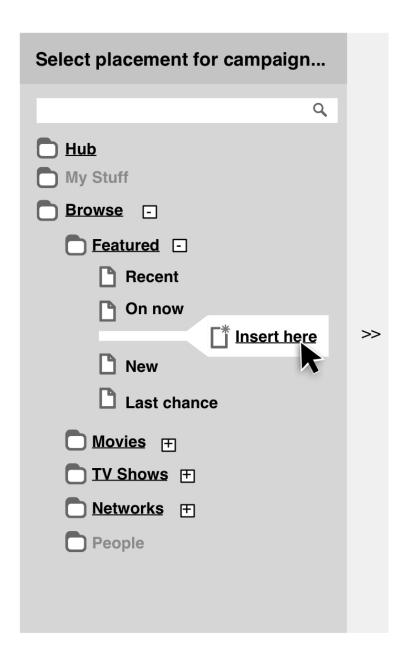
Tasks list (Status)



Overview of the System Health.

The different colour shows at a glance where the Operator needs to intervene and investigate a problem more fully.

Placements



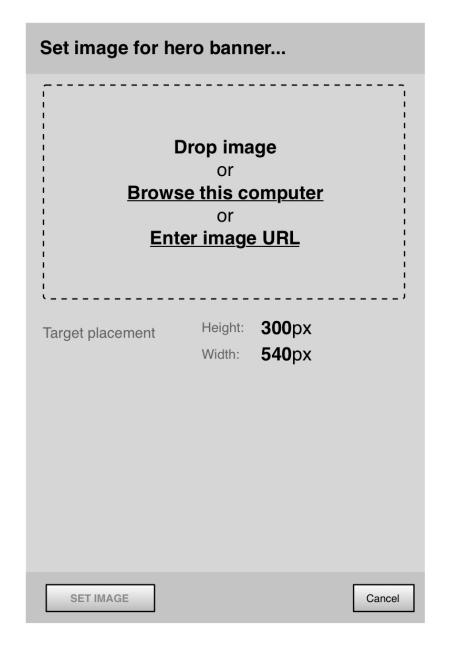
Architecture of the navigation for the operator service as seen by subscribers.

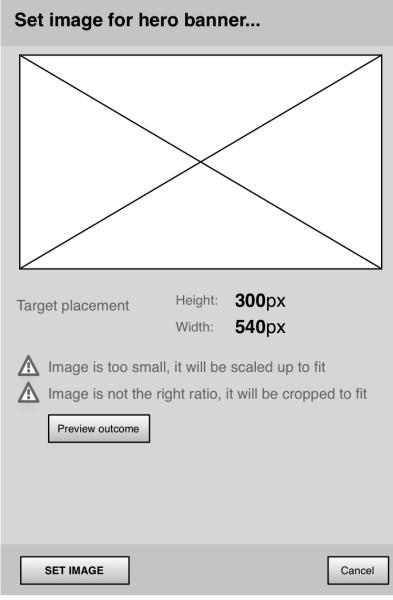
Allows operator user to decide which page a campaign will be placed into.

Wireframes: Tools

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Image uploader

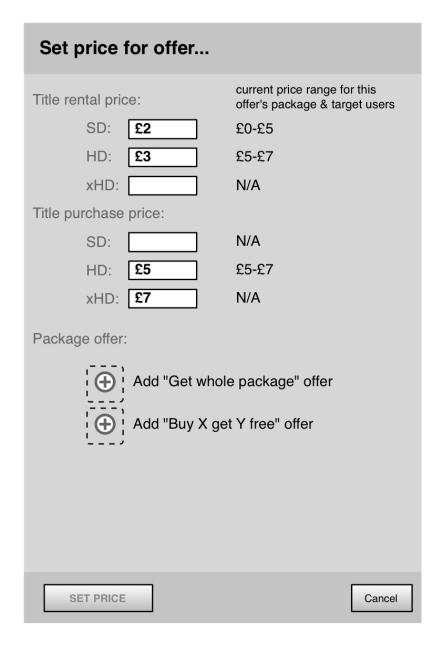




Tool used for upload images for specific marketing purposes e.g. a banner for a campaign.

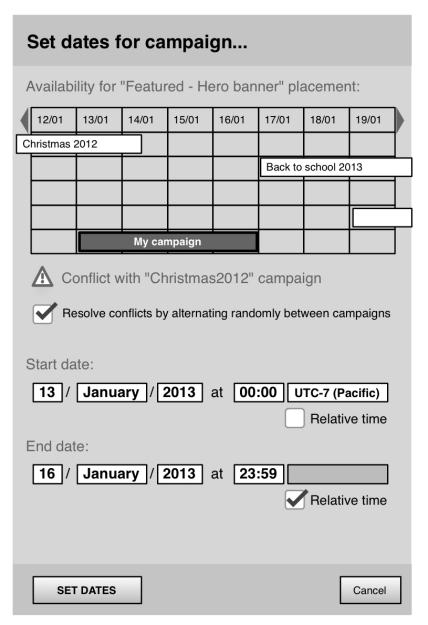
Depending on the template of the subscriber interface and the placement of the image only determined sizes are allowed.

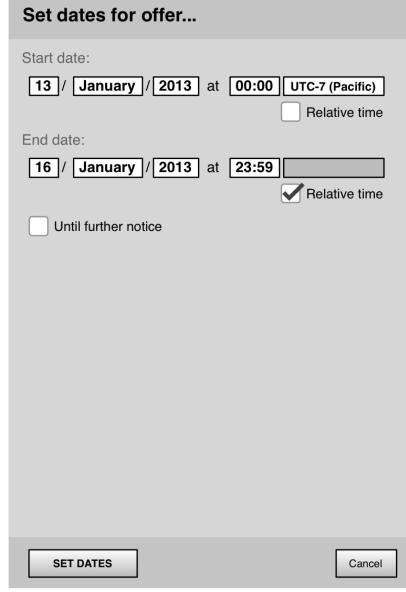
Price editor



Price Editor Tool with an indication of the average price for the titles within the offer.

Calendar





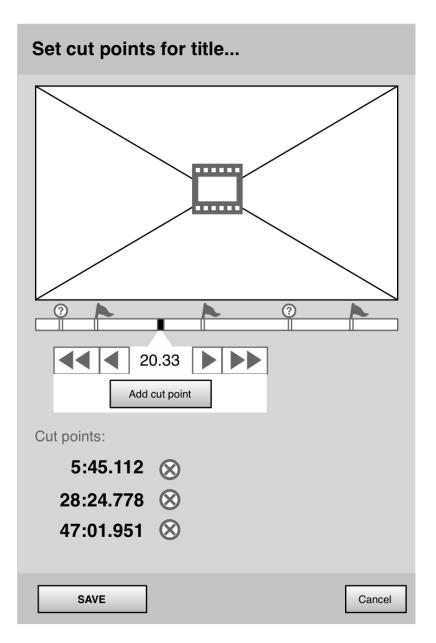
Left: Calendar as seen when an operator is setting a duration for a campaign.

System automatically detects an overlap of campaigns if they are set to use the same banner space.

Right: Calendar as seen when setting an offer.

Time can be set as relative and absolute allowing the user to start an offer and/or a campaign at the same time in different time zones.

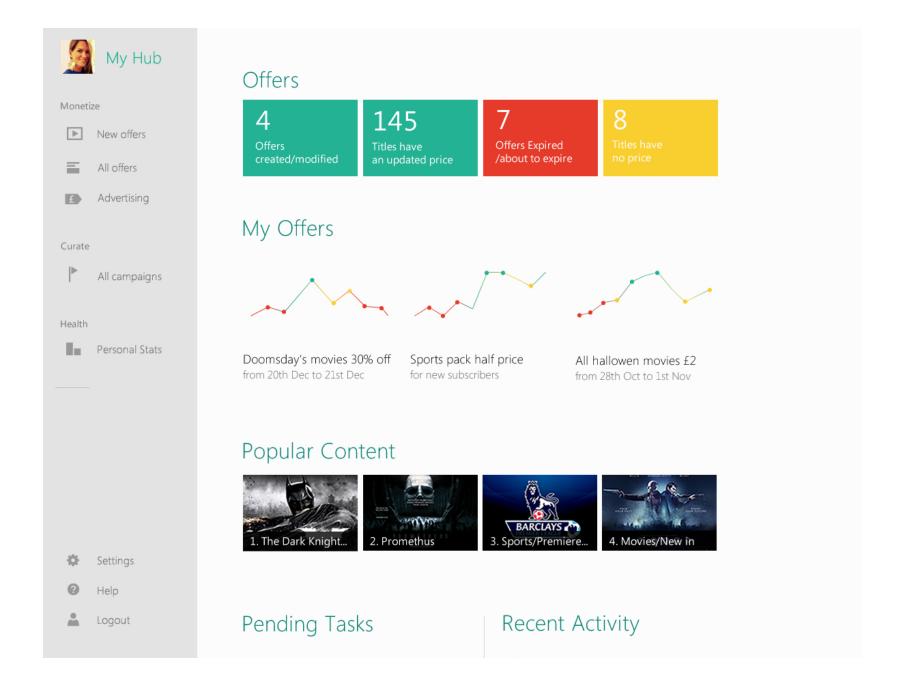
Rough cut editing



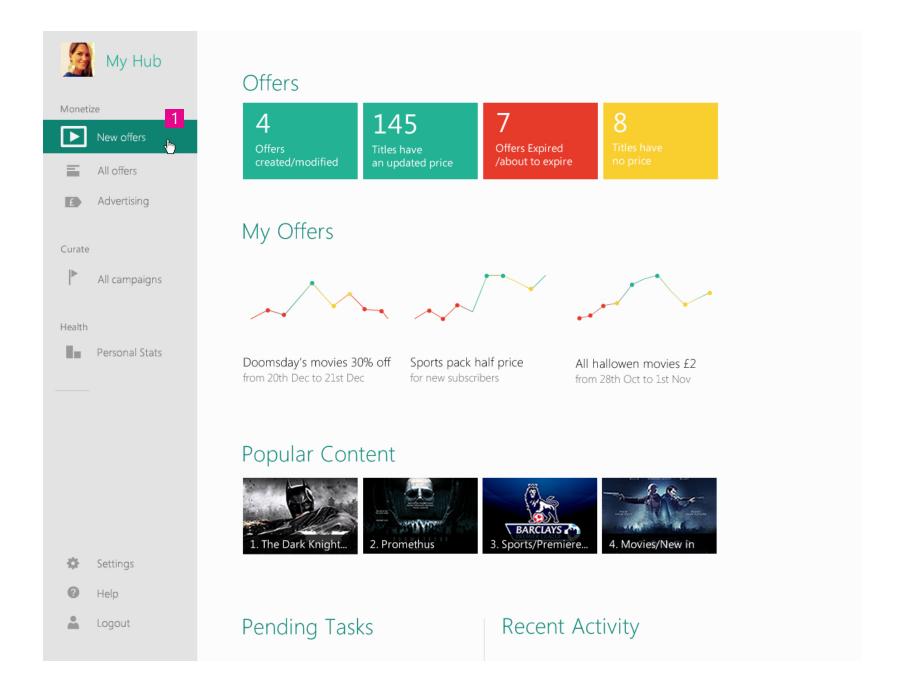
This tool allows a user to decide where video advertising will be inserted along the title timeline.

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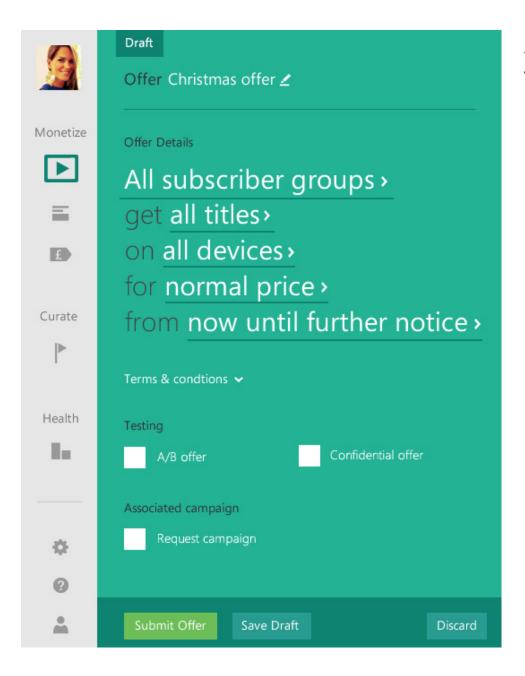
Content Merchandiser



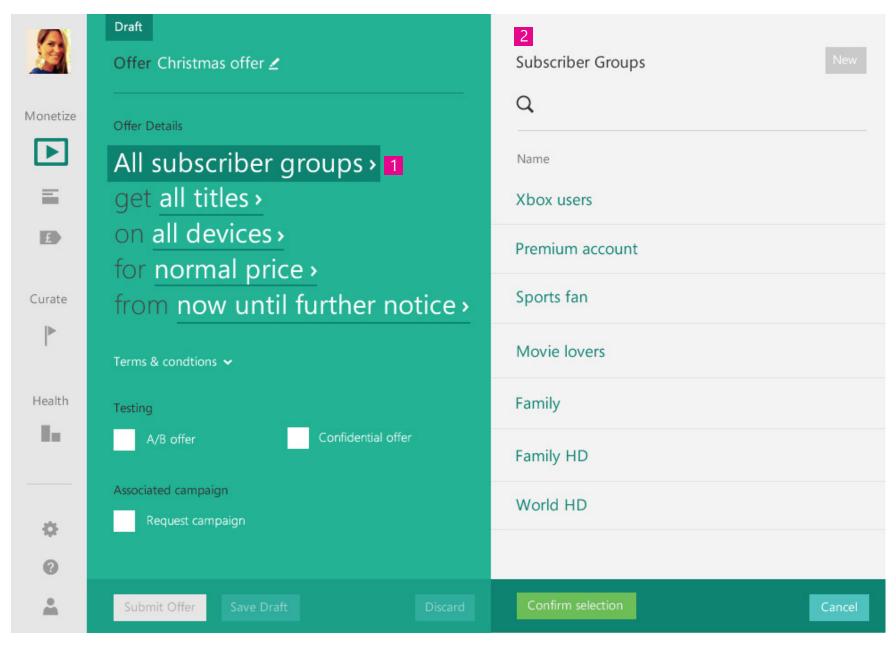
OCME starts their session from the Hub



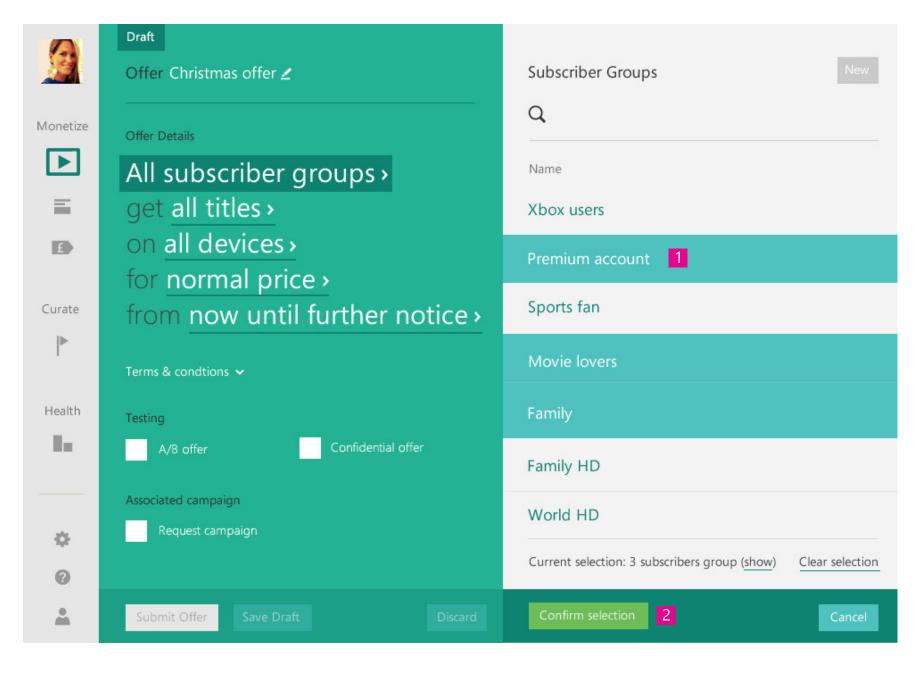
1. Operator decides to create a new offer



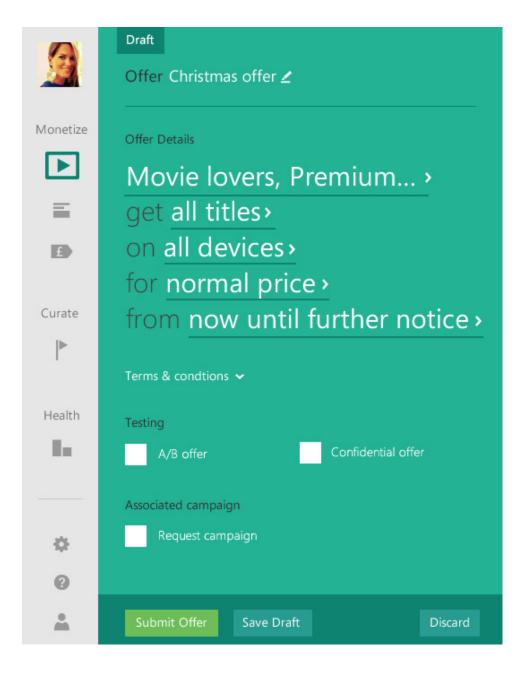
New Offer card: all the fields contain default values.



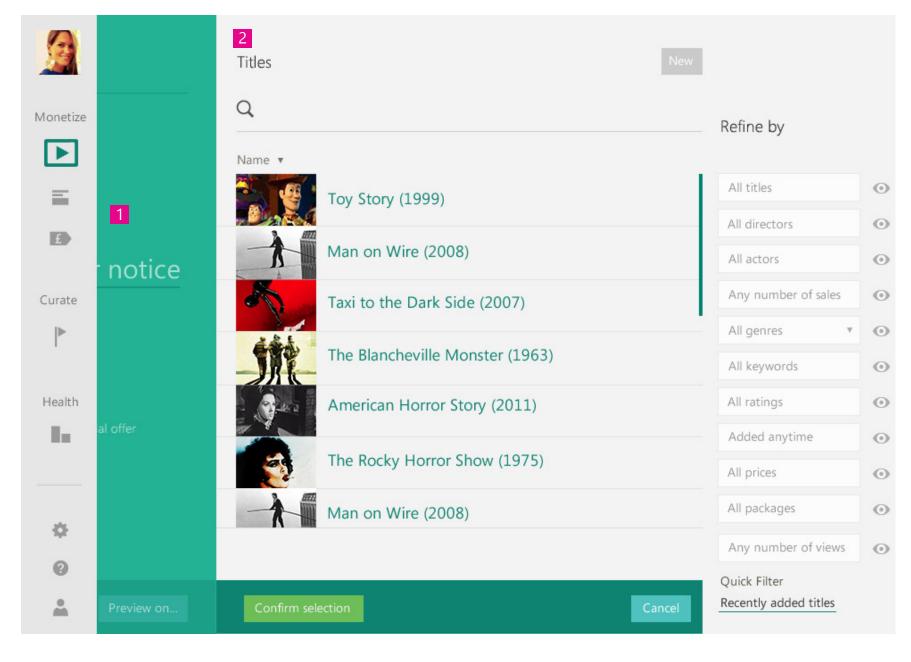
- 1. Operator decides to specify a precise Subscriber Group for the offer
- 2. Subscriber Groups List appears.



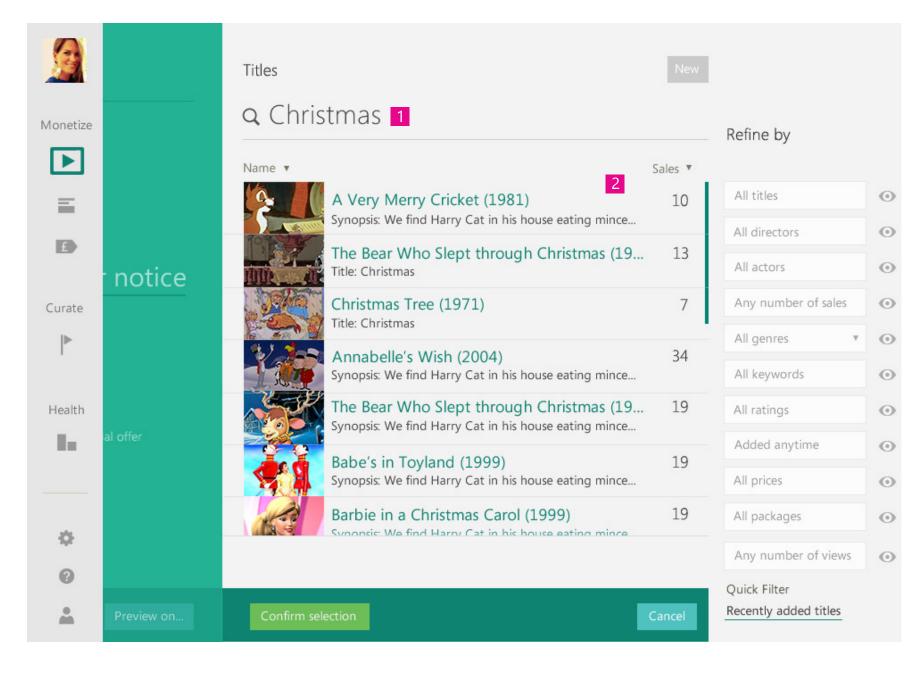
- 1. Operator manually selects Subscriber Groups from the list.
- 2. Operator confirms selection.



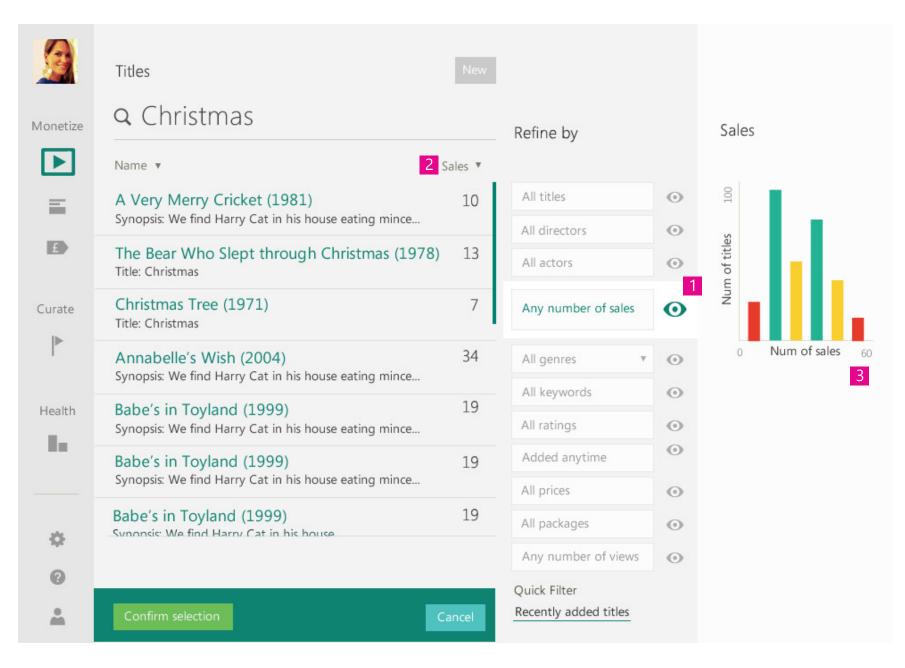
Offer card updated with the Subscriber Groups previously selected.



- 1. Operator decides to specify a precise list of titles for the offer.
- 2. Catalog List and filters appear.

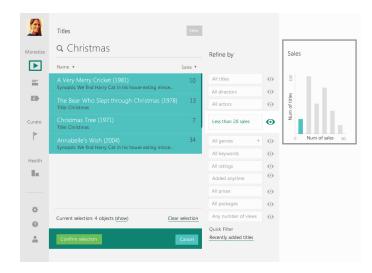


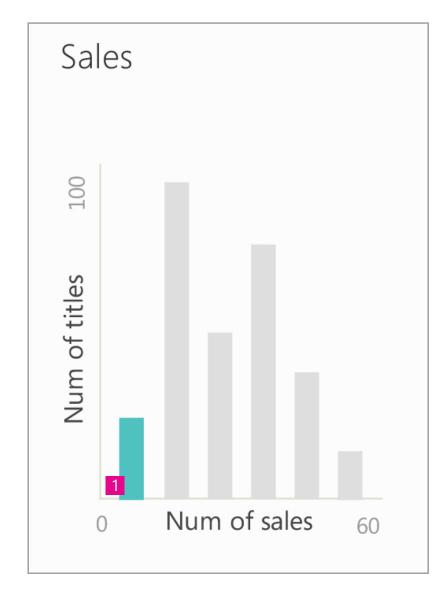
- 1. Operator types "Christmas" as generic keyword.
- 2. List is updated.



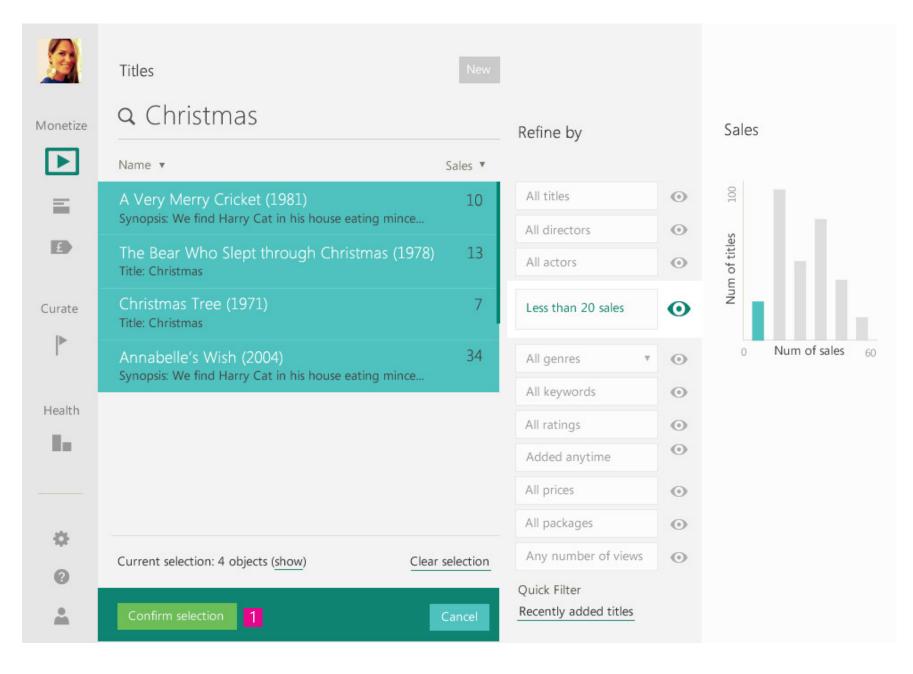
Operator wants to find titles that haven't sold well.

- 1. Operator decides to see the sale values for the current selection.
- 2. A column containing the sale values appears on the list.
- 3. Analytics show the relationship between number of sales and titles.



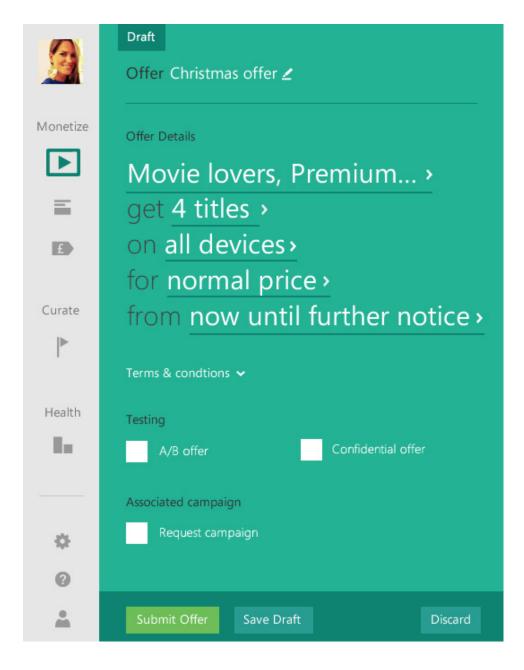


1. Operator selects from the analytics the data which they are interested in.

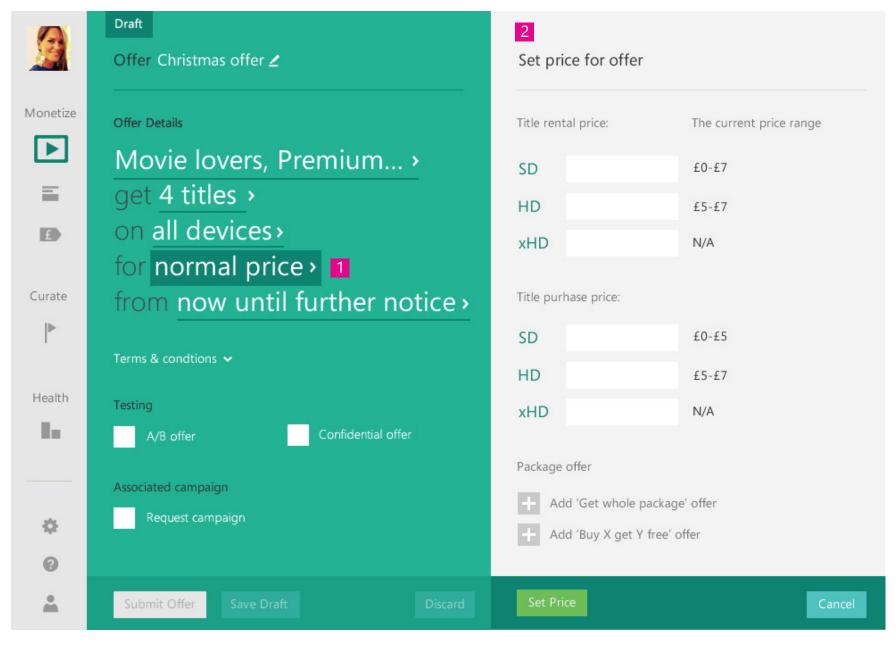


Title list is updated and shows only the titles corresponding to the selection made on the graph.

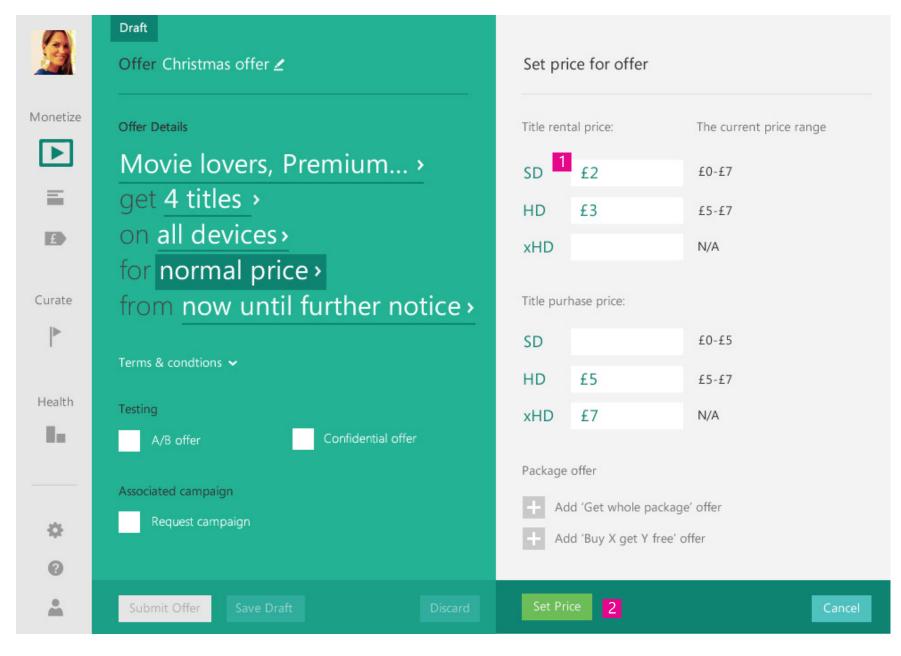
1. Operator confirms the selection.



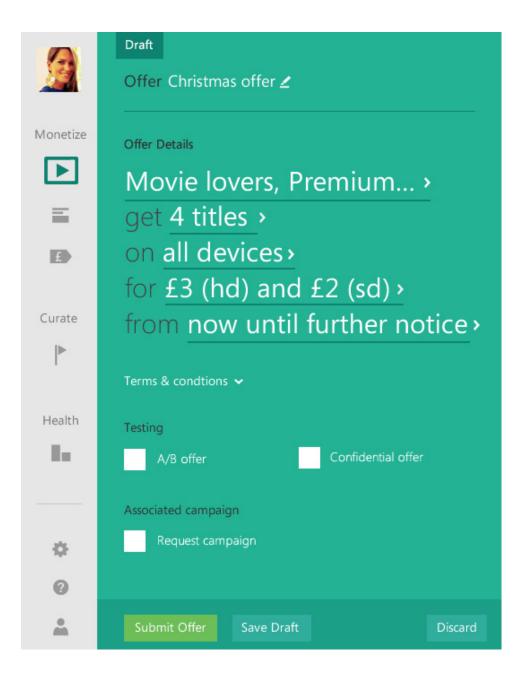
Offer card updated with the titles previously selected.



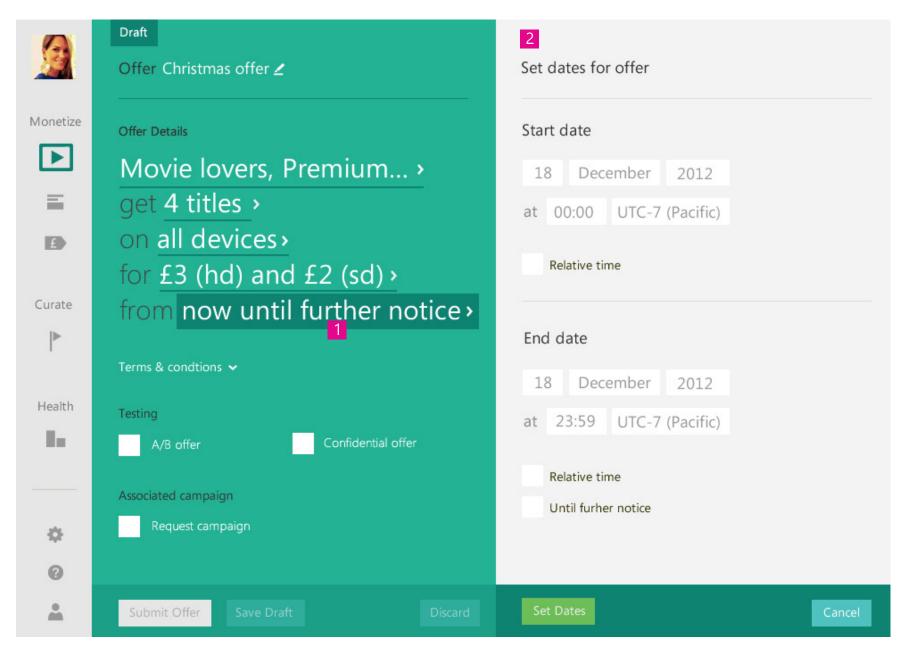
- 1. Operator decides to specify an exact price for the offer.
- 2. Price Editor appears



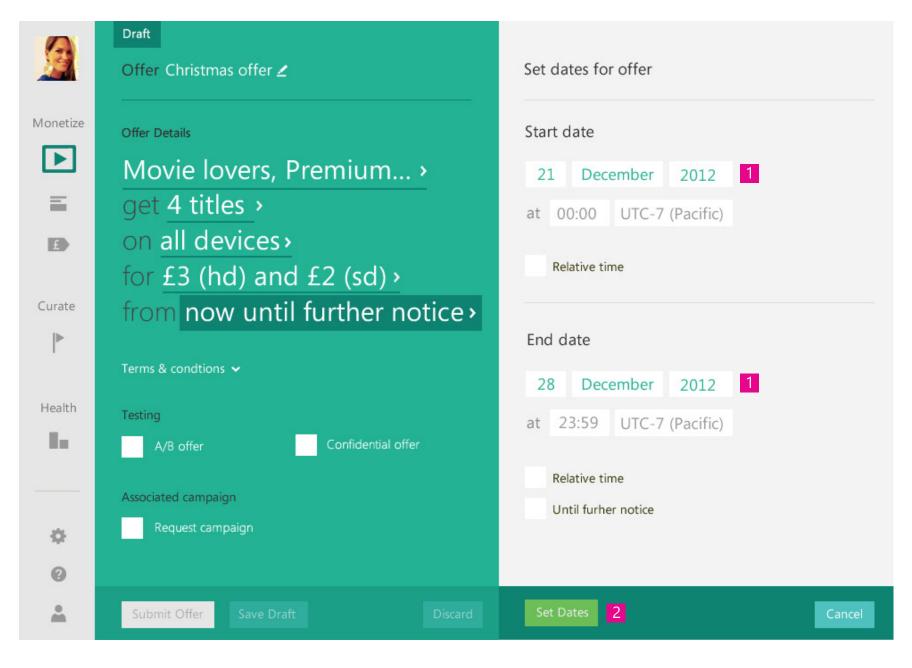
- 1. Operator sets different price conditions.
- 2. Operator confirms the conditions.



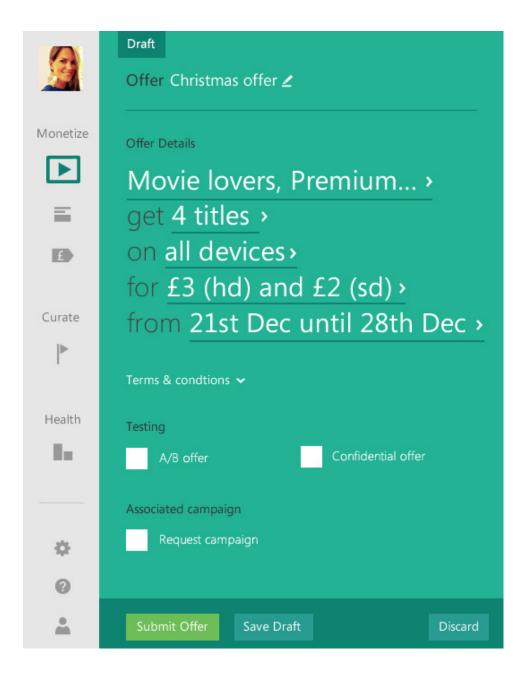
Offer card updated with prices.



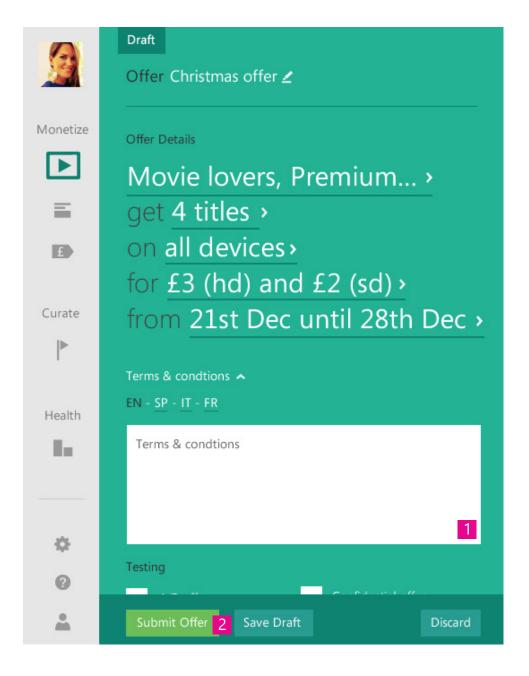
- 1. Operator decides to specify an exact duration for the offer.
- 2. Calendar editor appears.



- 1. Operator sets the duration for the offer.
- 2. Operator confirms the dates.



Offer card updated with duration of the offer.



- 1. Operator edits terms and conditions field.
- 2. Operator submits the offer.