

.conf2013

**YOUR DATA
NO LIMITS**

**Splunk as a BI Tool:
Business metrics to know everything
about your product**

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Analyst, PLAY
#splunkconf

splunk>

About Me

- Turning machine data into business valuable information:
 - Data inputs preparing and integrating with Splunk Enterprise
 - Querying with spl language, SQL
 - Visualizing query results in dashboards
- Maintaining company's Splunk Enterprise infrastructure
- Exploring, utilizing Splunk apps and new features
- Teaching and consulting co-workers in Splunk Enterprise issues

About PLAY

- PLAY – leading video on demand service in Russia in premium segment
- www.playfamily.ru
- Presented on TV, WEB, MOB platforms though focused on smart TV platform



About PLAY

- Features: streaming, downloading, subscription, HD, 3D, no advertising, >4700 movies
- Partnership with >50 film studios including all major Hollywood ones
- Application is preinstalled on TV devices of main vendors

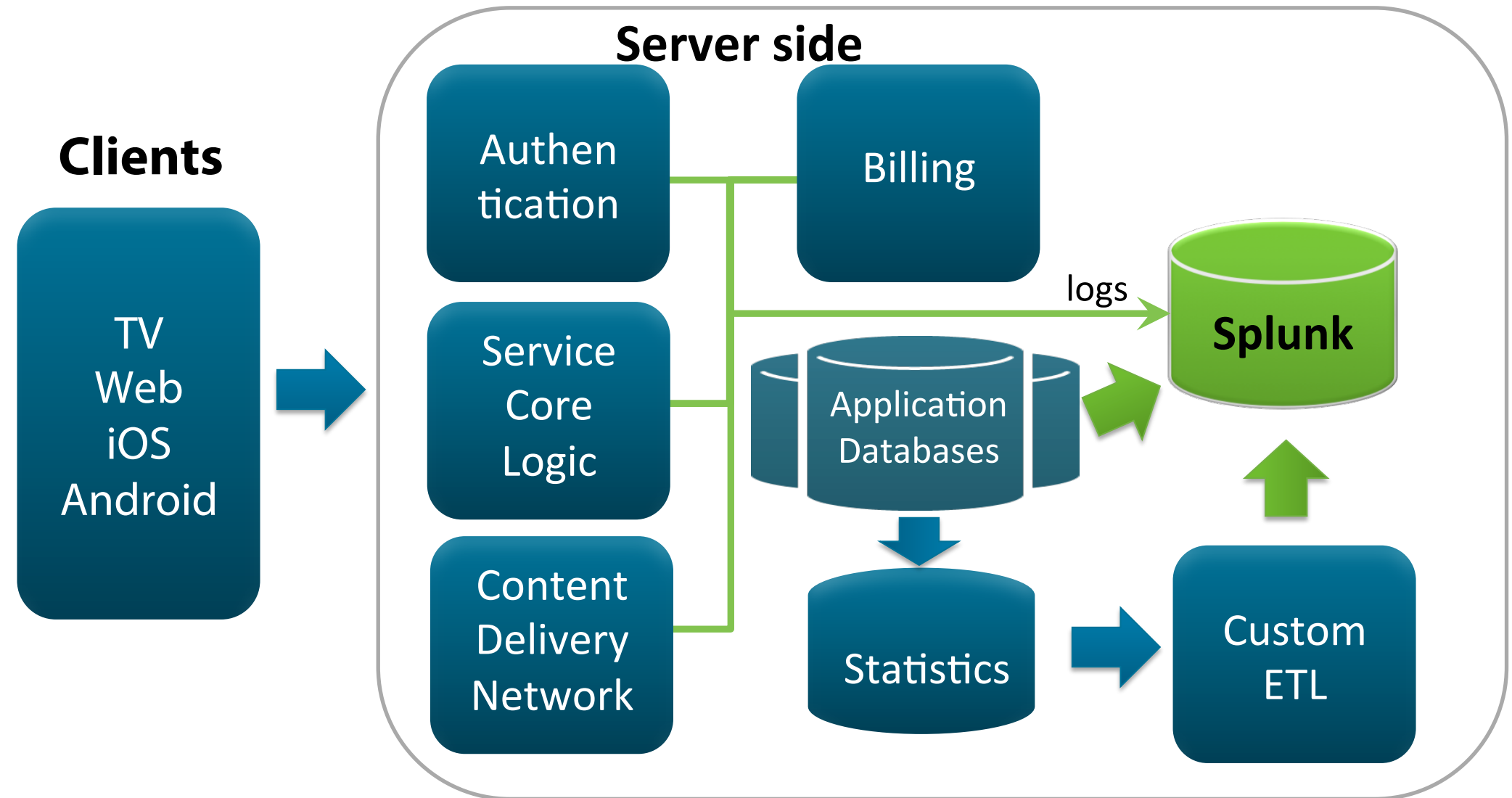


Agenda

- PLAY & Splunk
- What to measure?
- How should we estimate business success?
- Who are our customers?
- How do they use our service?
- What is interesting for them in our content?
- How to calculate and implement it all in Splunk?

PLAY & Splunk

- Log-files navigation
 - >70 servers
 - >20 applications
 - Up to 1Gb logs per day
- Business statistics



What to Measure?

- ❑ How should we estimate business success?
- ❑ Who are our customers?
- ❑ How do they use our service?
- ❑ What is interesting for them in our content?

- ❑ How to calculate it all?



Starting to Estimate Business Success

→ Define key user's action in your service:

Visit

Rate

Registration

Monetary purchase

Watch

Promo purchase

Bookmark

Basic Metrics to Start With

→ Elementary metrics to start with:

- ① Revenue
- ② Number of customers



- ③ $\text{ARPU} = \text{Revenue} / \text{Number of customers}$

ARPU (Average Revenue Per User)

A measure of the revenue generated by one customer per time unit, typically per month or year

Index Metric

→ Index

Percent change of estimated value per time unit in comparison with value in previous time unit

$$\text{Index} = 100 * (\text{currentValue} - \text{previousValue}) / \text{previousValue}$$

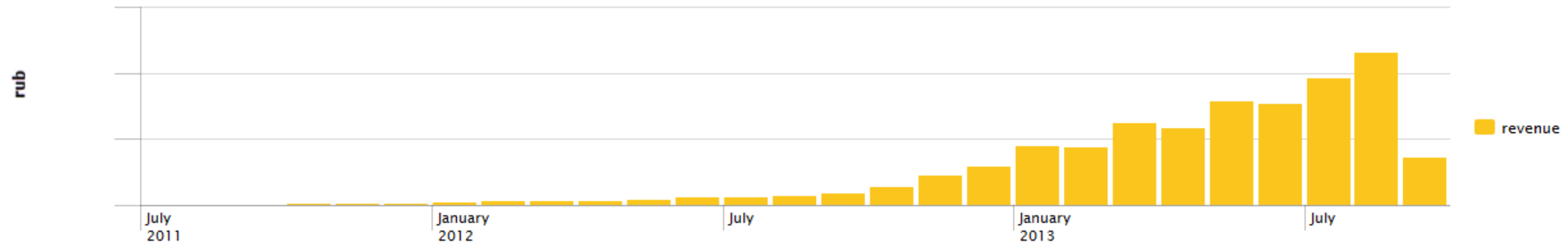
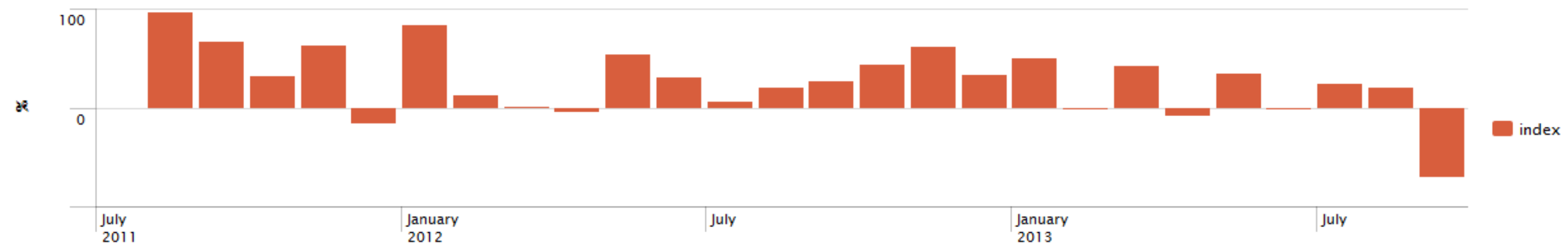


Chart type



Mean Revenues

→ Mean revenue per day

Mean revenue per day = Revenue for the period / Number of days

① Per weekend day

```
...  
| where (like(date_wday, "saturday") OR like(date_wday, "sunday"))
```

+ add implicitly official holidays of your country

② Per working day

Exclude weekend days and official holidays

Who are Our Customers?

→ Users' segmentation

① Visitor

Visitor of the service without registration

② Prospect user

Registered user without any purchase

③ Promo user

Registered user with only promo purchase

④ Customer user

Registered user with monetary purchase (can have promo purchases as well)

⑤ Buyer user

Registered user with any purchase (promo/monetary/both)

Customers' Segmentation

Customer groups

Active

At least one monetary purchase in the last 30 days

Inactive

Latest monetary purchase was more than 30 days ago

New

First monetary purchase was made in the last 30 days

React

Monetary purchase in the last 30 days, no purchases in the previous 30 days and monetary purchase earlier

Regular

Monetary purchases in the last AND in the previous 30 days

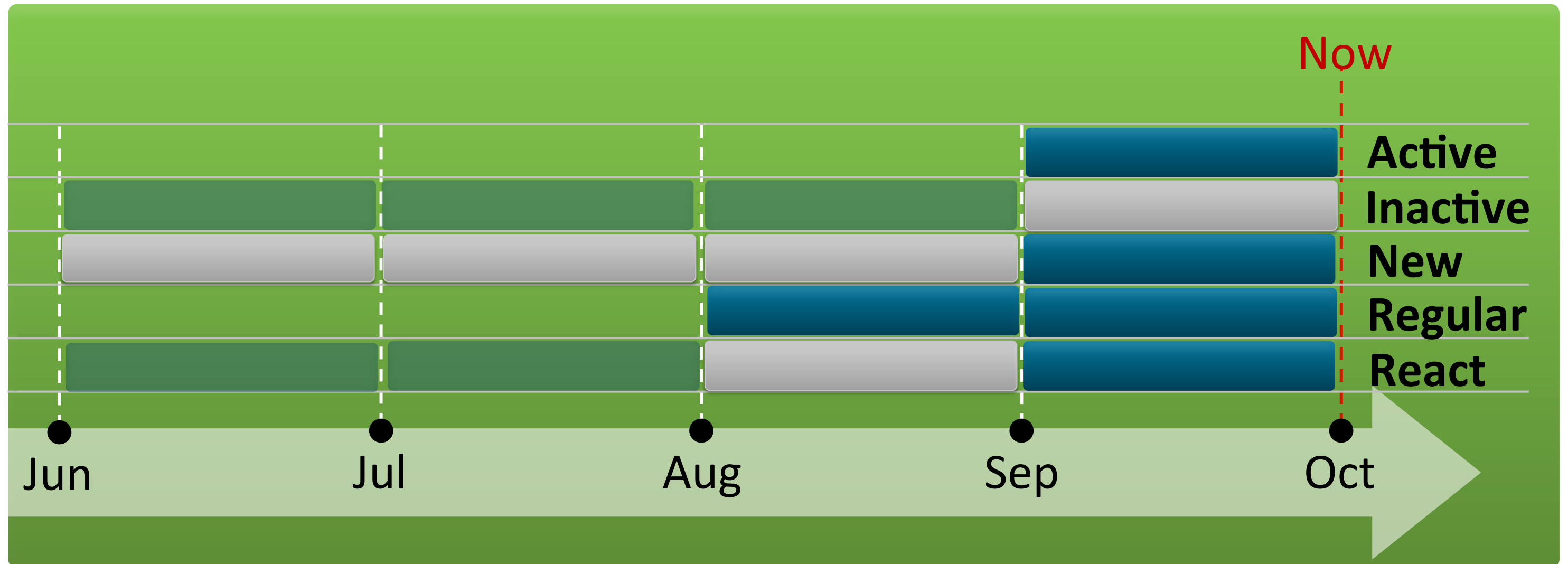
30-60 days

90-120 days

60-90 days

>120 days

Customers' Segmentation on Timeline



- Dark Blue: Monetary purchase in each colored month
- Light Blue: Monetary purchase at least in one of the months

- Grey: No monetary purchases in any month

Active / Inactive Customers: How?

```
source="transactions_view" tx_amount>0
| addinfo
| eval limit_time=if(isnum(info_max_time), info_max_time, time())
| stats dc(eval(_time>= limit_time-2678400)) as active, dc(eval(_time<
limit_time-2678400)) as inactive by user_uid
| eval usage=case(active>0, "ACTIVE users", inactive>0 AND active=0, "INACTIVE
users")
| stats dc(user_uid) as count by usage
```

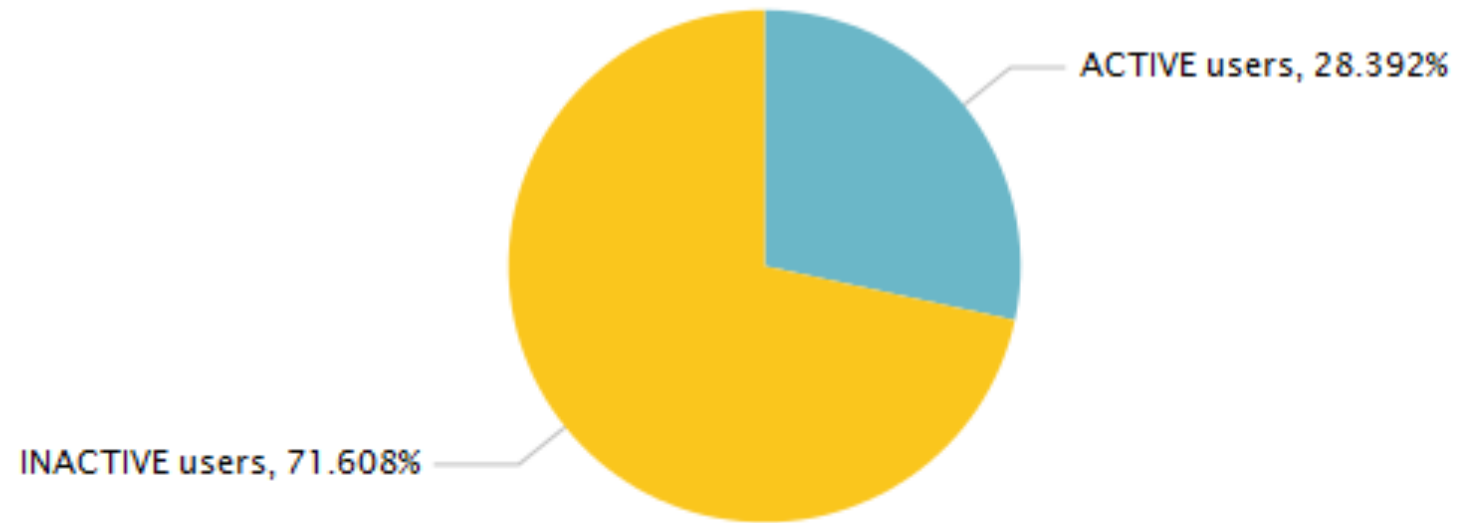
New / Regular / React Customers: How?

```
...
| addinfo
| eval limit_time=if(isnum(info_max_time), info_max_time, time())
| stats dc(eval(_time>= limit_time-2678400)) as this_month_purchase,
dc(eval(_time<limit_time-2678400 AND _time >= limit_time-2*2678400)) as
previous_month_purchase, dc(eval(_time < limit_time-2*2678400)) as preprevious_month_purchase
by user_uid
| eval group=case(preprevious_month_purchase>0 AND previous_month_purchase=0 AND
this_month_purchase>0, "REACT", previous_month_purchase>0 AND this_month_purchase>0,
"REGULAR", preprevious_month_purchase=0 AND previous_month_purchase=0 AND
this_month_purchase>0, "NEW")
```

Diagrams Active/Inactive, New/Regular/React

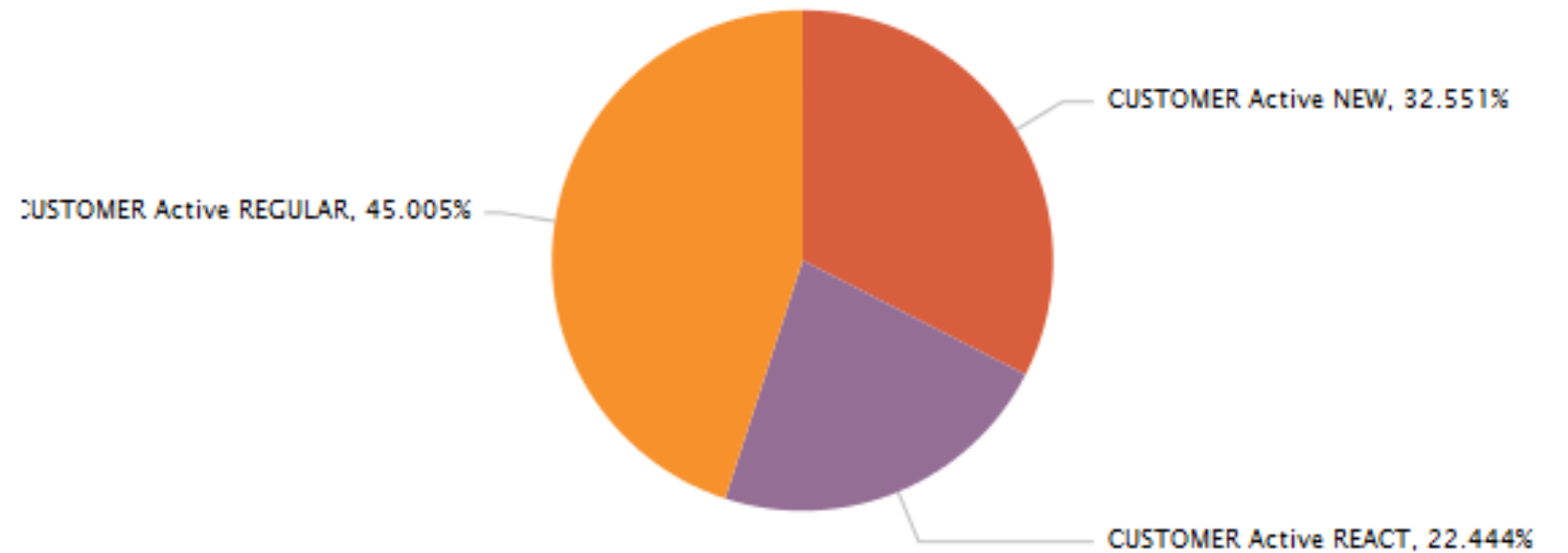
Active/Inactive CUSTOMER users

All time | Custom time



New, Regular, React CUSTOMER users

All time | Custom time



Export

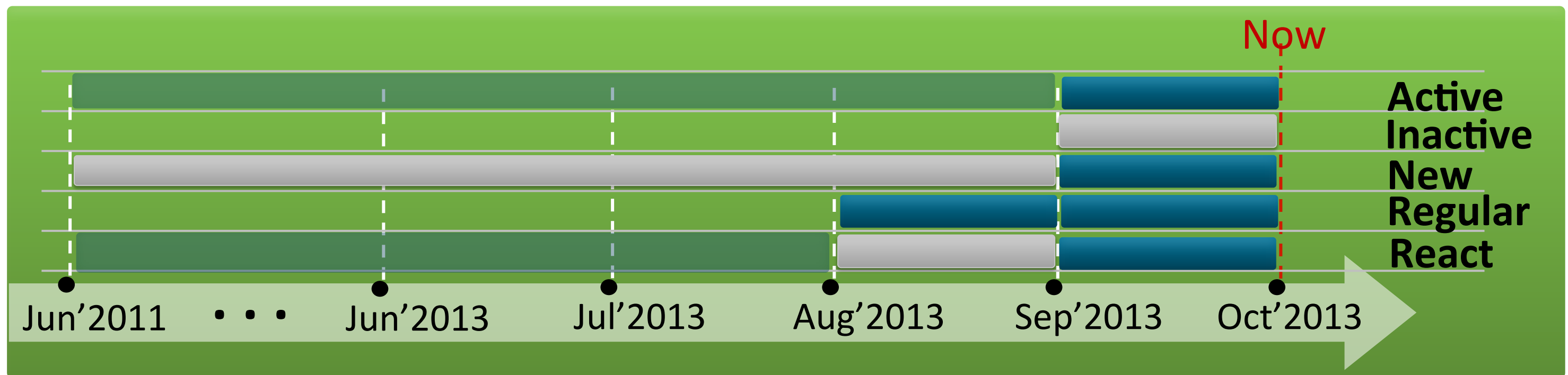
ACTIVE - users that had purchases during the latest 30 days

INACTIVE - users that had purchases earlier than the latest 30 days

Export

Calculating Historical Data

→ Active, Inactive, New, Regular, React –
Each time the need to count till the very beginning...



→ Solution: **summary indexing**

Summary Indexing

« Back to YotaPlay

splunk> Manager » Searches and reports » active_inactive_customers

active_inactive_customers

Search

```
source="transactions_view" service_id="YotaVideo" (tx_type="purchase" OR tx_type="upgrad
tx_status_id="COMPLETED" (tx_amount>0 OR offer_uid="*COUPON*")
| dedup transaction_id
| addinfo
| eval limit_time=if(isnum(info_max_time), info_max_time, time())
| stats dc(eval(_time>= limit_time-2678400)) as active, dc(eval(_time< limit_time-267840
inactive by user_uid
| eval usage=case(active>0, "ACTIVE users", inactive>0 AND active=0, "INACTIVE users")
| stats dc(user_uid) as count by usage
```

Schedule and alert

Schedule this search

Schedule type *

Cron

Cron schedule

12 01 ***

Enter a cron-style schedule.

For example */5 * * * * (every 5 minutes) or '0 21 * * * (every day at 9 PM).

12 01 ***

Enter a cron-style schedule.

For example */5 * * * * (every 5 minutes) or '0 21 * * * (every day at 9 PM).

Summary indexing

Enable

Select the summary index

summary

Only indexes that you can write to are listed.

Add fields

=

Delete

[Add another field](#)

Cancel

Save

Backfill Script

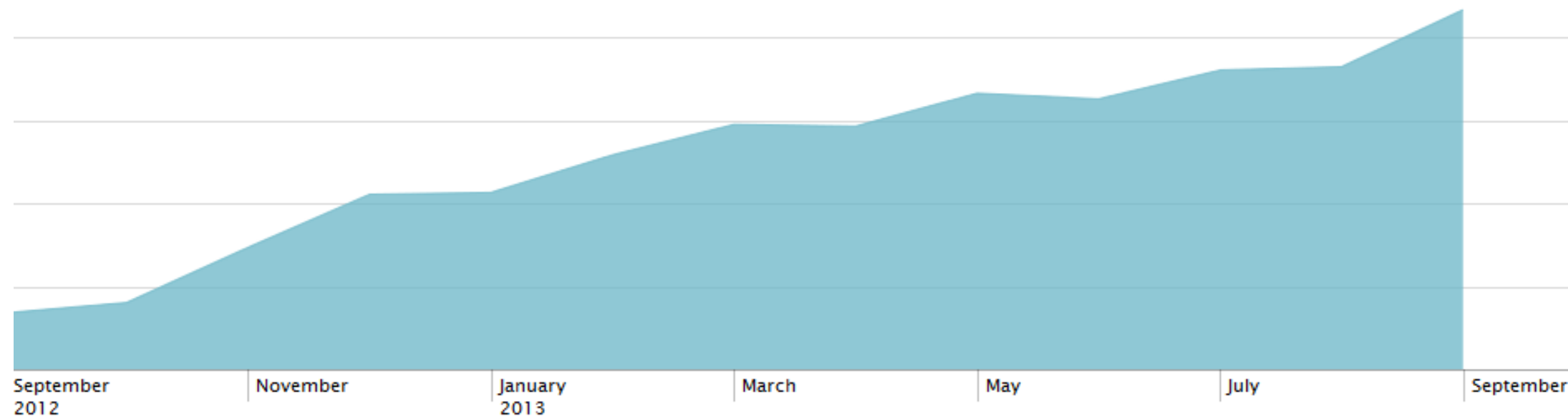
→ How to get historical data for our active/inactive customers and other time critical characteristics?

→ Solution: **backfill script**

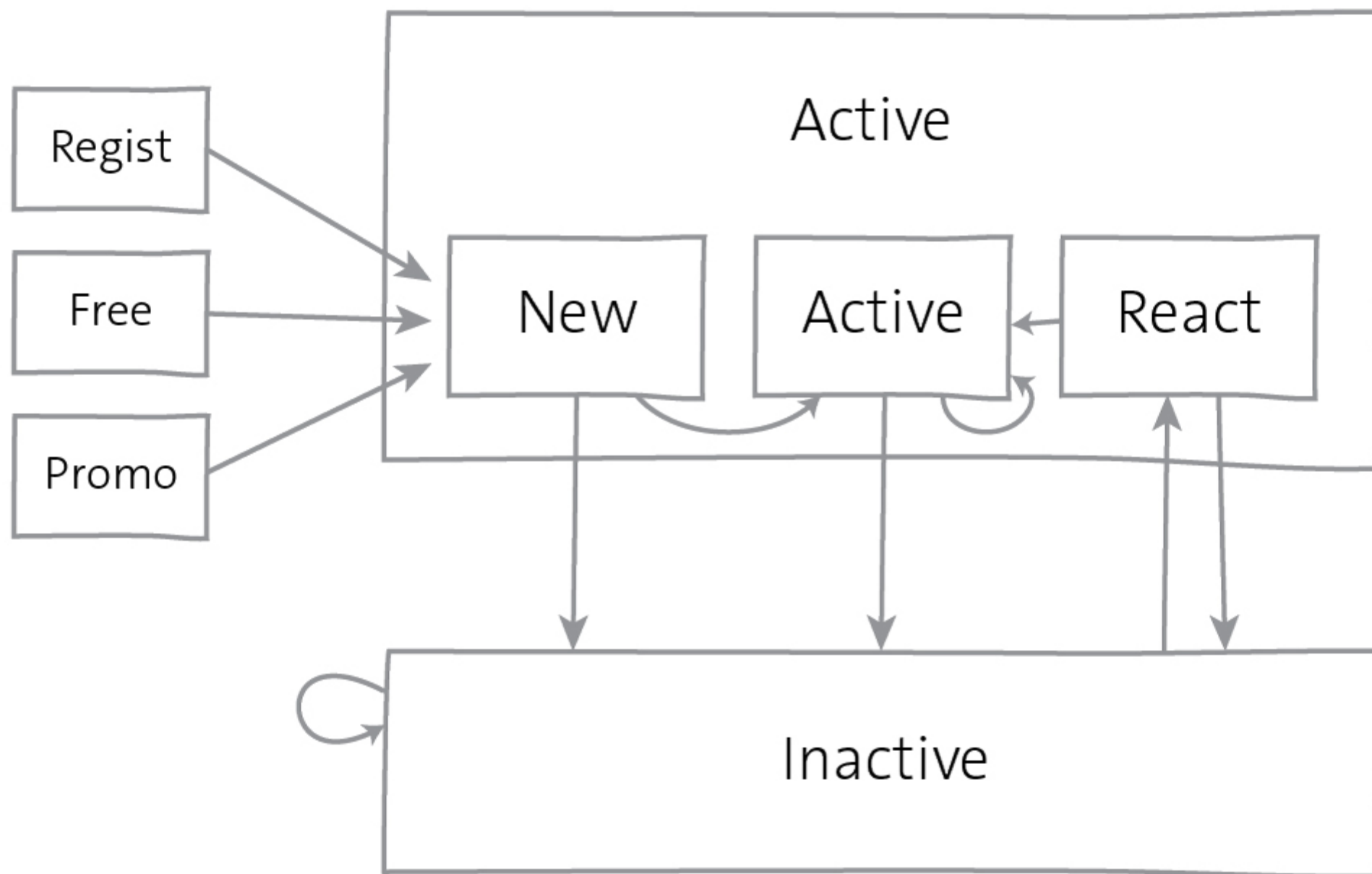
```
./splunk cmd python fill_summary_index.py -app yotaplay -name  
active_inactive_customers -et "1310947200" -lt now
```

→ Usage of summary indexing and backfill results :

```
index=summary source=active_inactive_customers usage="ACTIVE users"  
| timechart span=1mon latest(count) as count
```

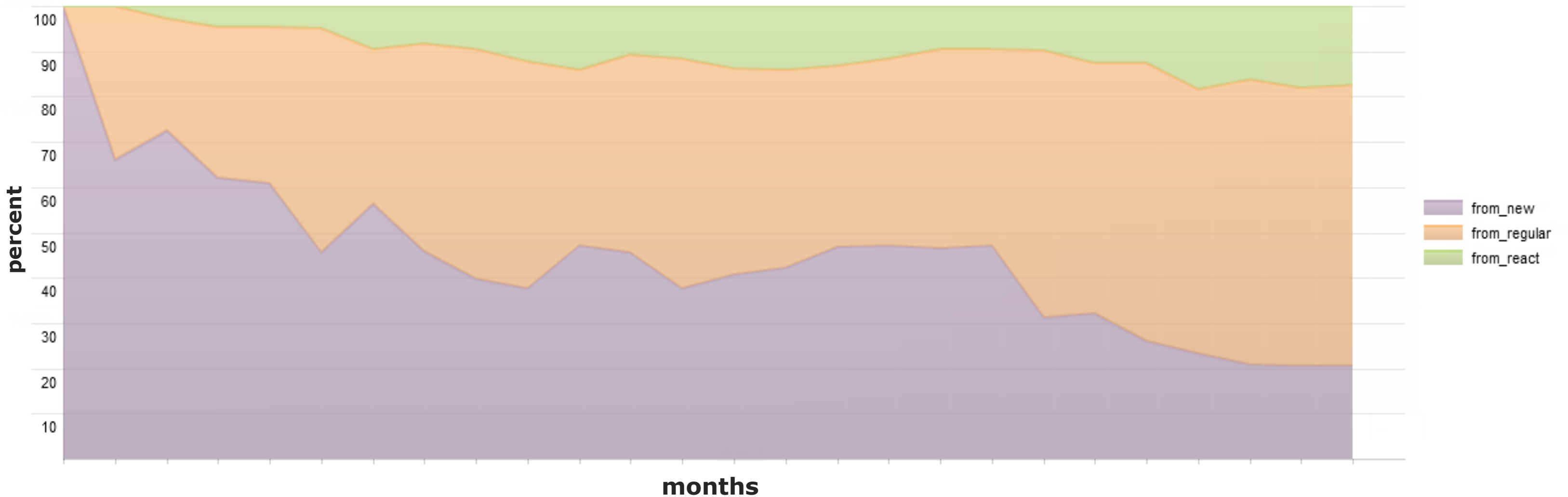


Status Map of Users' Pre-history

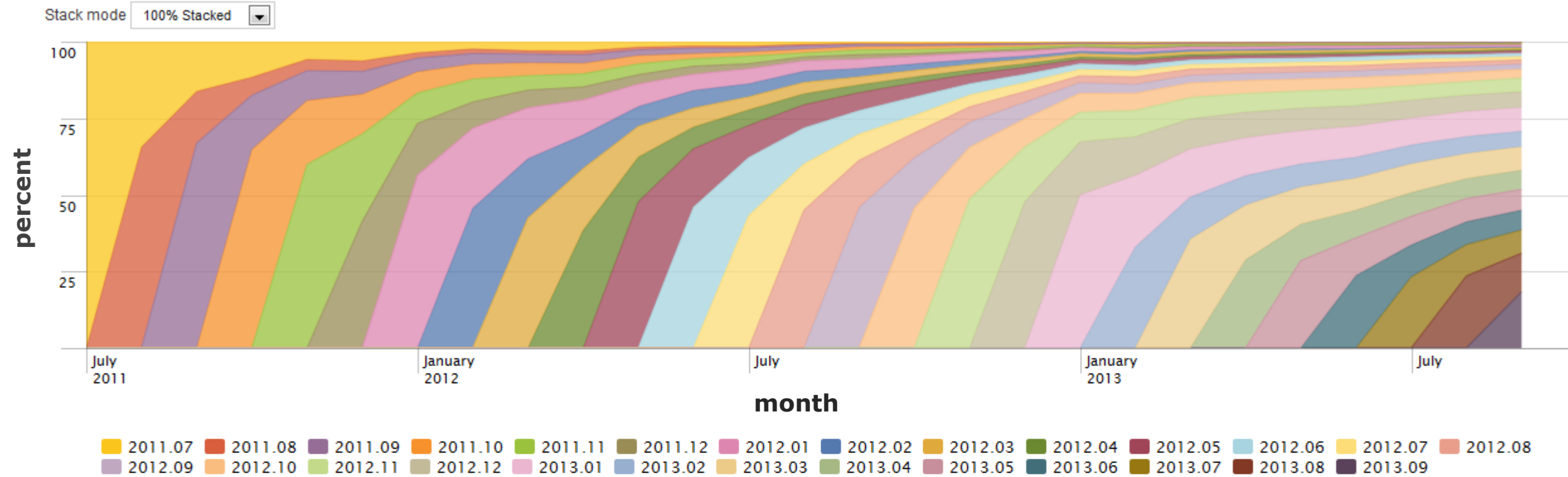


Map of Users' Pre-history

[Origin and dynamics of New CUSTOMER users](#) | [Origin and dynamics of Regular CUSTOMER users](#) | [Origin and dynamics of Inactive CUSTOMER users](#)



New Customers Cohorts Diagram



Percent of each cohort in amount of month revenue

« prev 1 2 3 next »

Time	2011.07	2011.08	2011.09	2011.10	2011.11	2011.12	2012.01	2012.02	2012.03	2012.04	2012.05	2012.06	2012.07	2012.08	2012.09	2012.10	2012.11	2012.12	2013.01	2013.02	
1	100.0 %																				
2	67.6 %	100.0 %																			
3	53.2 %	43.2 %	100.0 %																		
4	50.2 %	19.9 %	34.9 %	100.0 %																	
5	40.7 %	20.6 %	31.2 %	52.5 %	100.0 %																
6	37.1 %	16.1 %	20.0 %	27.6 %	40.0 %	100.0 %															
7	39.1 %	15.4 %	22.2 %	27.1 %	25.6 %	75.3 %	100.0 %														
8	28.6 %	14.8 %	19.3 %	21.6 %	21.7 %	43.0 %	52.1 %	100.0 %													
9	36.1 %	10.9 %	16.3 %	18.9 %	13.9 %	29.3 %	33.7 %	43.1 %	100.0 %												
10	35.6 %	12.6 %	15.3 %	14.8 %	12.2 %	20.8 %	22.3 %	23.7 %	45.9 %	100.0 %											

Lookup Tables (1)

→ “Dynamic fields lookup feature adds fields to your events with information from an external source, such as a static table (CSV file) or an external (Python) command.” **Creating lookup table with new customers id-s:**

- 1 Create saved search that should be run daily by a schedule

```
...
| eval group="NEW"
| stats earliest(first_purchase_month) as first_purchase_month,
earliest(first_purchase_month_day) as first_purchase_month_day by
user_uid group
| outputlookup append=f group_new_customers.csv
```

- 2 In the file props.conf file, located in either \$SPLUNK_HOME/etc/system/local/ or \$SPLUNK_HOME/etc/apps/<app_name>/local/, put:

```
[source::transactions_view]
LOOKUP-group_new_customers = group_new_customers user_uid OUTPUTNEW group
first_purchase_month first_purchase_month_day
```

Lookup Tables (2)

③ Restart Splunk

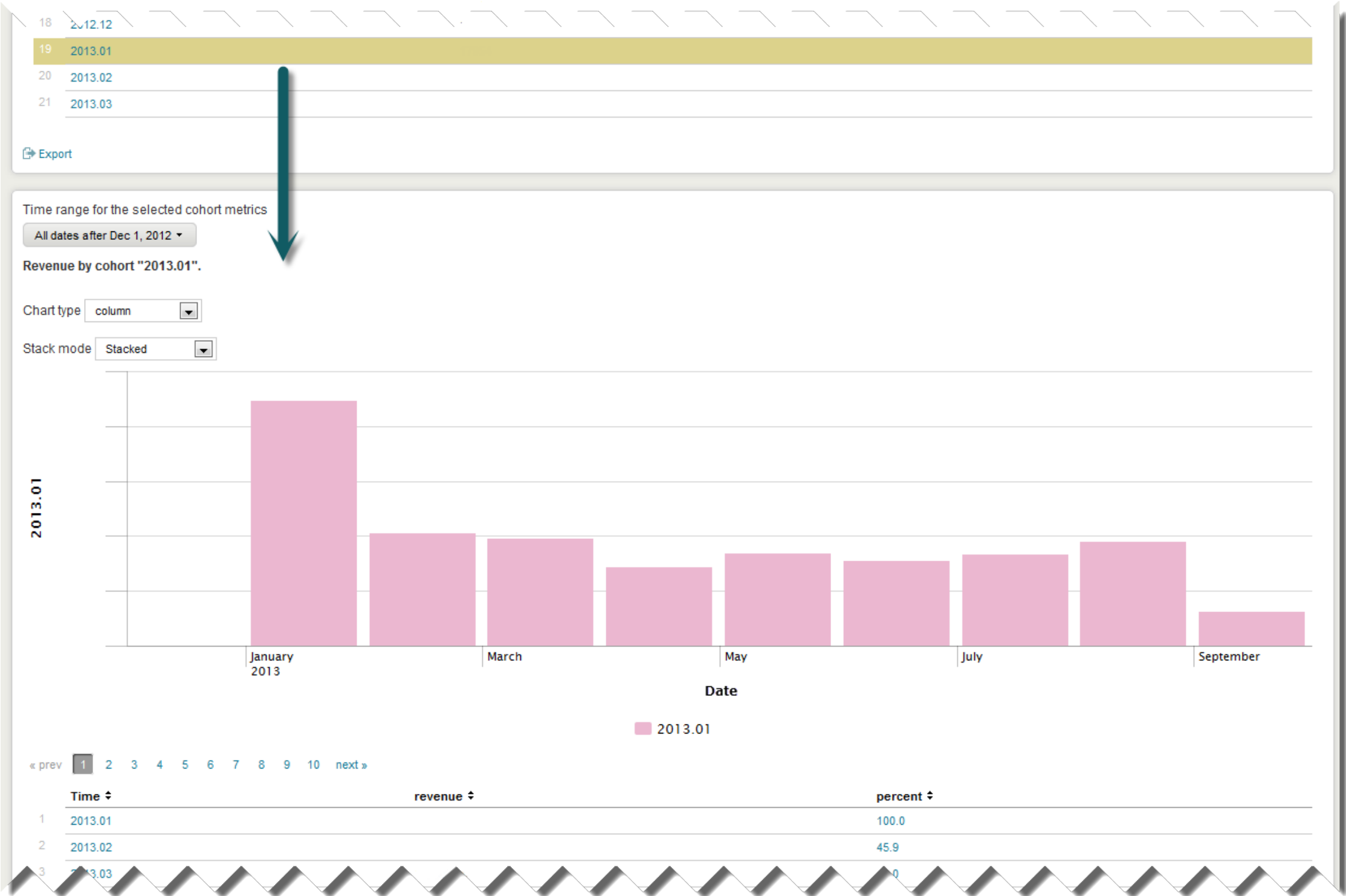
☑ Result: New fields are added to events

```
| tx_date=2013-09-01 23:59:42.916 | tx_status_id=COMPLETED | tx_type=purchase | user_uid=942237 | device_manufacturer=Samsung | date_hour=23 | date_mday=1 | date_minute=59 | date_month=september | date_second=42 | date_wday=sunday | date_zone=local | date_year=2013 | host=pgpool.scartel.dc:5433 | index=main | linecount=1 | punct==="" | source=transactions_view | sourcetype=context | splunk_server=splunk.yotaplay.ru | timeendpos=58 | timestartpos=35 | group=NEW | auto_renewal=null | first_purchase_month=2013.09 | first_purchase_month_day=2013.09.01
```

```
9/1/13 11:59:16.280 PM transaction_id=7840959594 tx_date="2013-09-01 23:59:16.280" tx_amount=299.0 tx_currency=RUB tx_status_id=COMPLETED tx_description= tx_ext_uid= element_uid=1568a5f6-9a05-48bb-aceb-7138fcd93132 element_type=movie mediatype=vquality=720p showcase_id=alpha service_id=YotaVideo user_uid=407006 ip_address=176.99.191.22 region=RU device_type=TV device_manufacturer=Samsung device_model=UE55ES8000 device_id=SSTVC1138804543 account_type=PLAY to_user_uid= comes_from="Samsung TV" from_friend= consumption_mode=dto tx_type=purchase subscription_uid= user_subscription_uid= subscription_start= subscription_end= offer_uid= consumption_mode_from= mediatype_from= tx_from= partner_id=null comes_from_url=null title="Now You See Me" russian_title="Иллюзия обмана" licensor="Central Partnership" licensor_id=225 category_id=331 category_name="Current I" lvr_date= release_year=2013 auto_renewal=null account_type=PLAY | category_id=331 | category_name=Current I | comes_from=Samsung TV | comes_from_url=null | consumption_mode=dto | device_id=SSTVC1138804543 | device_model=UE55ES8000 | device_type=TV | element_type=movie | element_uid=1568a5f6-9a05-48bb-aceb-7138fcd93132 | ip_address=176.99.191.22 | licensor=Central Partnership | licensor_id=225 | mediatype=vquality=720p | partner_id=null | region=RU | release_year=2013 | russian_title=Иллюзия обмана | service_id=YotaVideo | showcase_id=alpha | title=Now You See Me | transaction_id=7840959594 | tx_amount=299.0 | tx_currency=RUB | tx_date=2013-09-01 23:59:16.280 | tx_status_id=COMPLETED | tx_type=purchase | user_uid=407006 | device_manufacturer=Samsung | date_hour=23 | date_mday=1 | date_minute=59 | date_month=september | date_second=16 | date_wday=sunday | date_zone=local | date_year=2013 | host=pgpool.scartel.dc:5433 | index=main | linecount=1 | punct==="" | source=transactions_view | sourcetype=context | splunk_server=splunk.yotaplay.ru | timeendpos=58 | timestartpos=35 | group=NEW | auto_renewal=null | first_purchase_month=2012.10 | first_purchase_month_day=2012.10.09
```

```
9/1/13 11:59:12.132 PM transaction_id=7840959593 tx_date="2013-09-01 23:59:12.132" tx_amount=199.0 tx_currency=RUB tx_status_id=COMPLETED tx_description= tx_ext_uid= element_uid=1568a5f6-9a05-48bb-aceb-7138fcd93132 element_type=movie mediatype=vquality=large showcase_id=alpha service_id=YotaVideo user_uid=303396 ip_address=95.27.10.157 region=RU device_type=WEB device_manufacturer="Mac OS X" device_model="Opera 10 12.16" device_id=FAKE_WEB_DEVICE account_type=PLAY to_user_uid= comes_from=playfamily.ru from_friend= consumption_mode=dto tx_type=purchase subscription_uid= user_subscription_uid= subscription_start= subscription_end= offer_uid= consumption_mode_from= mediatype_from= tx_from= partner_id=
```

Drilldown into Details



Drilldown Into Details Without “Intentions”

→ Ease drilldown usage (and lot more) with SideviewUtils app

```
<?xml version='1.0' encoding='utf-8'?>
<view onunloadCancelJobs="False" autoCancelInterval="100" template="dashboard.html">
  <!-- autoCancelInterval is set here to 100 -->
  <label>Cohorts by new customers</label>
  <module name="AccountBar" layoutPanel="appHeader" />
  <module name="AppBar" layoutPanel="navigationHeader" />
  <module name="SideviewUtils" layoutPanel="appHeader" />
  <module name="Message" layoutPanel="messaging">
    <param name="filter">*</param>
    <param name="clearOnJobDispatch">False</param>
    <param name="maxSize">10</param>
  </module>
  <module name="SimpleResultsTable">
    <param name="entityName">results</param>
    <param name="drilldown">row</param>
    <param name="allowTransformedFieldSelect">True</param>
  </module>
  <module name="TimeRangePicker" layoutPanel="panel_row3_col1" >
    <param name="selected">All time</param>
    <param name="searchWhenChanged">True</param>
    <param name="label">Time range for the selected cohort metrics</param>
    <module name="Search" autoRun="True" >
      <param name="search">
        source="transactions_view" first_purchase_time="$click.value$" group="NEW" tx_amount>0
        | timechart span=1month sum(tx_amount) as revenue by first_purchase_time where revenue>0
      </param>
      <module name="SimpleResultsHeader">
        <param name="entityName">results</param>
        <param name="headerFormat">Revenue by cohort "$click.value$".</param>
      </module>
      <module name="HiddenChartFormatter">
        <param name="charting.chart">column</param>
        <param name="charting.chart.layout">auto</param>
      </module>
    </module>
  </module>

```

Flux Analysis

→ Flux analysis – revenue alteration from the customer in the current month compared with previous month revenue

Calculated for each customer with monetary purchases:

- ① Revenue for the previous month (Revenue1) and revenue for the current month (Revenue2)
- ② Revenue difference: $MoM_Change = Revenue2 - Revenue1$
- ③ Revenue difference in percent:
 $\% Change = MoM_Change / Revenue1$
- ④ Customer is assigned a group according the value of % Change:

Attrition (Change = -100%)

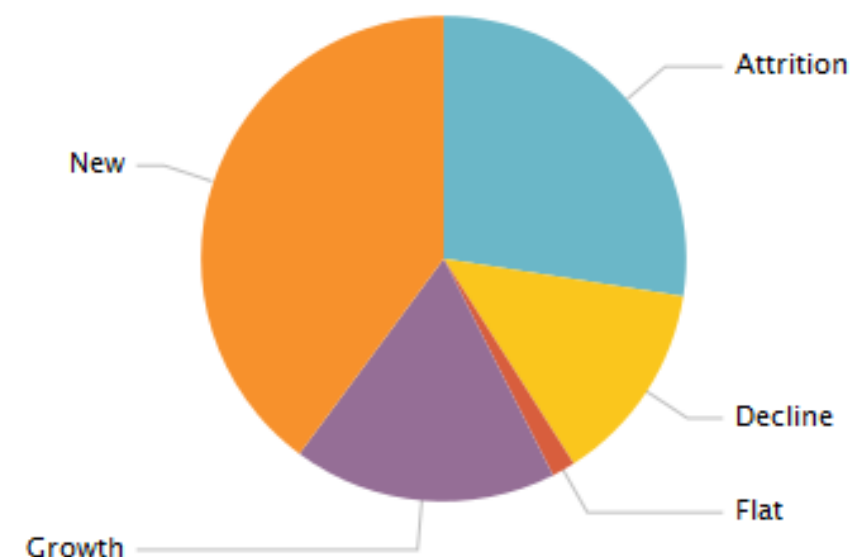
Decline (Change < 0%)

Flat (Change = 0%)

Growth (Change > 0%)

New (previous period revenue is null, Change = 100%)

Flux analysis



Group	Users	MoM_Change sum	Users' perce
Attrition (Change = -100%)			27.5 %
Decline (Change < 0%)			13.5 %
Flat (Change = 0%)			1.6 %
Growth (Change > 0%)			17.6 %
New (Change = 100%)			39.9 %

Tier Analysis

→ Tier Analysis - customers' distribution by price for the period

Groups example:

<100 rub

> 100 < 500 rub

> 500 < 1000 rub

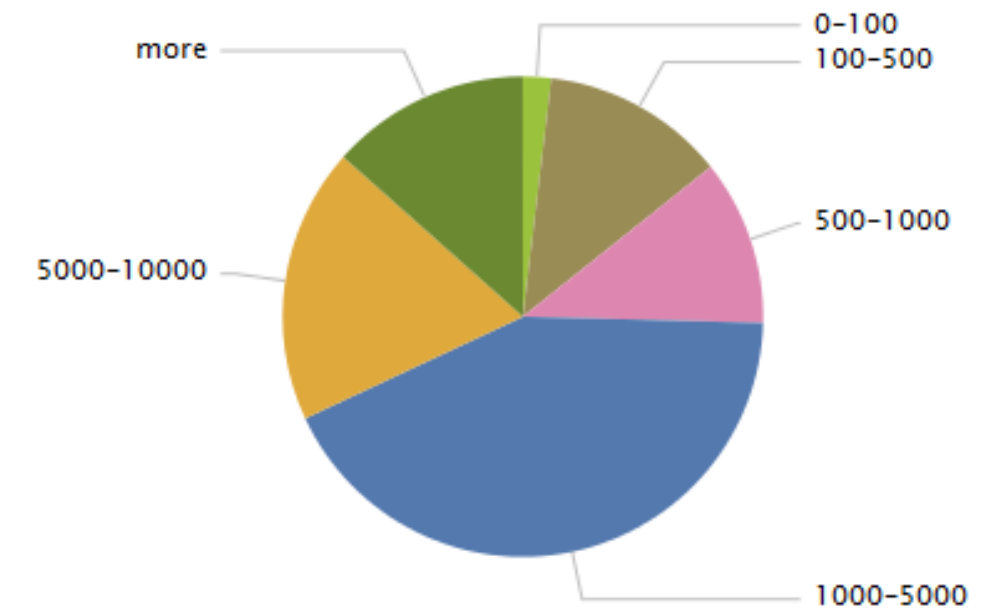
> 1000 < 5000 rub

> 5000 < 10000 rub

> 10000 rub

```
...
| chart sum(tx_amount) as revenue, count as
purchases by user_uid
| rangemap field=revenue 0-100=1-100
100-500=101-500 500-1000=501-1000
1000-5000=1001-5000 5000-10000=5001-10000
more=10001-10000000
| chart sum(revenue) as Revenue,
count(purchases) as "Number of Customers"
by range
```

Tier Analysis - Customers' distribution by price



range ↕	Revenue ↕	Number of Customers ↕
1	0-100	
2	100-500	
3	500-1000	
4	1000-5000	
5	5000-10000	
6	more	

Acquisition Costs

→ **CAC** – customer acquisition cost

$$CAC = \text{expenses} / \text{new_customers}$$

→ **RUAC** – registered user acquisition cost

$$RUAC = \text{expenses} / \text{new_users}$$

Play – статистика Ekaterina Kopt

Yota Play - Статистика Users Money Offers Content Play Family By platform Devices Other Search

CAC, RUAC | Actions

Start time for the search (MM/DD/YYYY:hh:mm:ss): End time for the search (MM/DD/YYYY:hh:mm:ss): Expences for the period:

Acquisition Costs: Form Search

“A form is a Splunk view similar to a dashboard, but provides an interface for users to supply values to one or more search terms, typically using text boxes, dropdown menus, or radio buttons.”

<http://docs.splunk.com/Documentation/Splunk/5.0.4/Viz/Buildandeditforms>

```
<?xml version='1.0' encoding='utf-8'?>
<form>
  <label>CAC, RUAC</label>
  <fieldset>
    <input type="text" token="start">
      <label>Start time for the search (MM/DD/YYYY:hh:mm:ss):</label>
      <default>07/19/2011:00:00:00</default>
      <seed>07/19/2011:00:00:00</seed>
    </input>
    <input type="text" token="end">
      <label>End time for the search (MM/DD/YYYY:hh:mm:ss):</label>
      <default>09/19/2011:00:00:00</default>
      <seed>09/19/2011:00:00:00</seed>
    </input>
    <input type="text" token="expences">
      <label>Expences for the period:</label>
      <default>1000</default>
      <seed>1000</seed>
    </input>
  </fieldset>
  <row grouping="2">
    <single>
      <title>Registered User Acquisition Cost (RUAC)</title>
      <searchString>
        source="profiles" earliest=$start$ latest=$end$
        | stats dc(user_uid) as new_customers
        | eval Expences=$expences$
        | eval RUAC=round(Expences/new_customers,3)
        | stats values(RUACb) as RUAC
      </searchString>
      <option name="field">RUAC</option>
      <option name="beforeLabel">RUAC:</option>
    </single>
  </row grouping>
</form>
```

More Wonderful Metrics

CHURN - the value of losing active customers

$$CHURN = B/A * 100$$

A = active customers in previous 30 days
B = inactive customers in current month, that were active in previous month

Attrition - difference between this month and previous month inactive Customers

$$attrition = inactive_current - inactive_previous$$

Grow rate – the value of new Customers in the service within active Customers of previous month

$$Grow = new_current/active_previous * 100$$

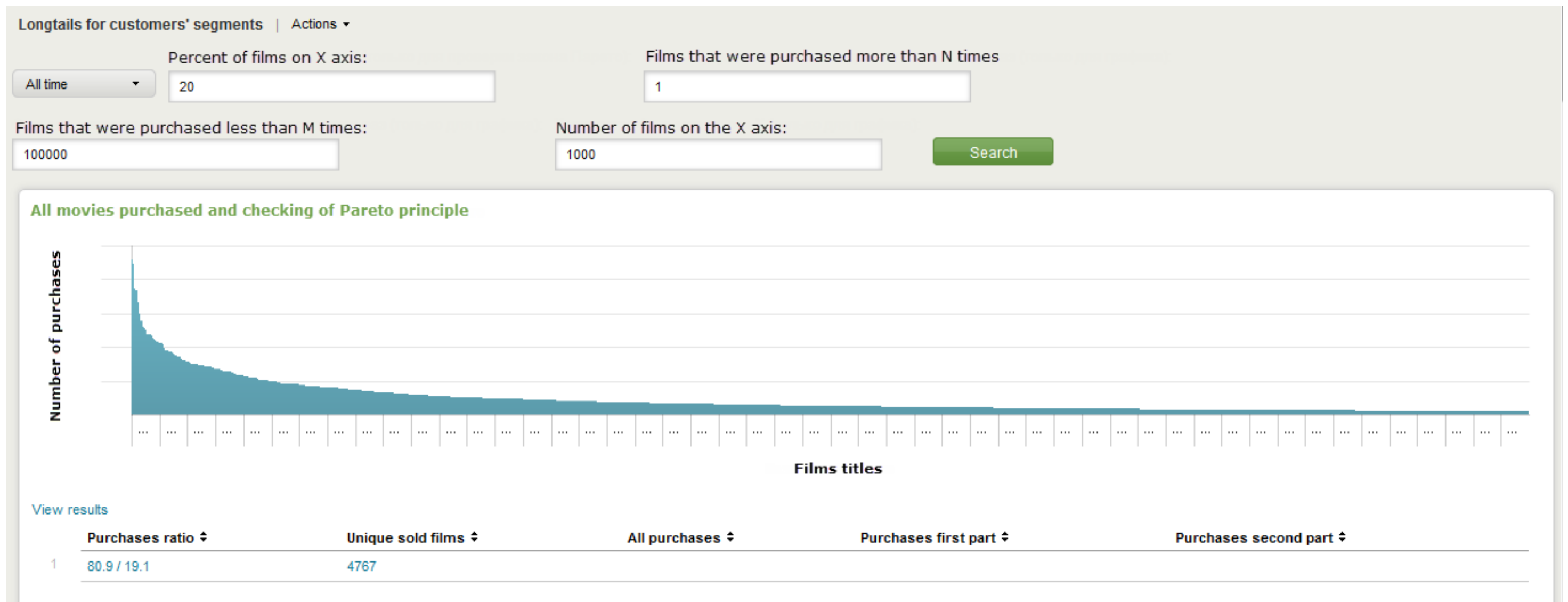
Retention - the value of active Customers percent in target month within all Customers in the previous month

$$Retention = 100 * active_current / total_previous$$

Checking of Pareto Principle in Your Business (80–20 Rule)

“For many events, roughly 80% of the effects come from 20% of the causes.”

Joseph M. Juran
business-management consultant



Query for Checking Pareto Principle

```
...
1. | stats count as sold_films by ru_title
2. | eval counter=1
3. | accum counter
4. | sort 0 - sold_films
5. | eventstats max(counter) as all_films
6. | eval film_number_for_percent=all_films*$percent$/100
7. | stats sum(eval(if(counter<=film_number_for_percent, sold_films, null()))))
   as sold_films_first,
   sum(eval(if(counter>film_number_for_percent, sold_films, null())))) as
   sold_films_second,
   sum(sold_films) as all_purchases, max(all_films) as all_films
8. | eval purchases_ratio=round(sold_films_first*100/all_purchases, 1)." /
   ".round(sold_films_second*100/all_purchases, 1)
9. | table purchases_ratio all_films all_purchases sold_films_first
   sold_films_second
```

Specifying Series of Results in a Dashboard

The screenshot shows a dashboard titled "Play – статистика" with a user profile "Ekaterina Koptilina" and navigation links for "App", "Manager", "Alerts", "Jobs", and "Logout". Below the header is a navigation bar with "Yota Play - Статистика" and several dropdown menus: "Users", "Money", "Offers", "Content", "Play Family", "By platform", "Devices", "Other", and "Search". There are also links for "Help" and "About".

The main content area is titled "Покупки (+по устройствам)" and includes an "Actions" dropdown. A "Last 7 days" filter is present. Below this are four search filters:

- Device type:** A dropdown menu with options: All, TV, TBL, BDP, MOB.
- Device manufacturer:** A dropdown menu with options: All, Samsung, LG, Apple, samsung.
- Device model:** A dropdown menu with options: All, UE46ES8007, UE40ES6307, UE46ES7507, UE55ES8007.
- Fee:** A dropdown menu with options: All, Monetary, Free.

A green "Submit" button is located to the right of the filters. Below the filters is a large white rectangular area containing five sets of three dots "...".

Have seen such header first in [S.o.S - Splunk on Splunk](#) (Thanks!)

→ Pulldown module + `layoutPanel="mainSearchControls"`

Specifying Series of Results in a Dashboard (2)

```
</module>
<module name="Search" layoutPanel="mainSearchControls" autoRun="True">
  <param name="search">source="transactions_view" | table device_type device_manufacturer device_model tx_amount offer_uid
  <module name="TimeRangePicker">
    <param name="selected">Last 7 days</param>
    <param name="searchWhenChanged">True</param>
    <param name="label"> </param>
  </module>
  <module name="JobProgressIndicator"></module>
  <module name="Pulldown">
    <param name="name">device_type</param>
    <param name="template">${name}=${value}</param>
    <param name="postProcess"> stats count by $name$ | sort - count </param>
    <param name="label">Device type :</param>
    <param name="float">left</param>
  </module>
  <param name="size">5</param>
  <param name="separator">+OR+</param>
  <param name="outerTemplate"> ( $value$ )</param>
  <param name="searchFieldsToDisplay">
    <list>
      <param name="label">device_type</param>
      <param name="value">device_type</param>
    </list>
  </param>
  <module name="Pulldown">
    <param name="name">device_manufacturer</param>
    <param name="template">${name}=${value}</param>
    <param name="postProcess">search $device_type$ | stats count by $name$ | sort - count </param>
    <param name="label">Device manufacturer :</param>
    <param name="float">left</param>
  </module>
  <param name="value">>false</param>
</list>
</param>
<module name="Button">
  <param name="allowSoftSubmit">False</param>
  <param name="allowAutoSubmit">False</param>
  <param name="label">Submit</param>
</module>
<module name="Search" layoutPanel="panel_row1_col1" autoRun="True">
  <param name="search">
    source="transactions_view" service_id="YotaVideo" $device_type$ $device_manufacturer$ $device_model$
    (tx_type=purchase OR tx_type=upgrade) tx_status_id=COMPLETED
    | `monetary`
    | search $monetary$
    | `coupon_price`
    | eval price=round(if(isnotnull(coupon_price) coupon_price, tx_amount), 1)
    | addcols name="price"
  </param>
</module>
```

Service Health Indexes

Service health indexes | Actions ▾

Registrations

Registrations in latest 30 days ▾ Registrations grow index ▾

1 _____ 22 %

ARPU

ARPU in latest 30 days, rub. ▾ ARPU grow index ▾

1 _____ 16 %

Revenue

Revenue in latest 30 days, rub. ▾ Revenue grow index ▾

1 _____ 40 %

Metrics

	Metric ▾	Index, % ▾	Value in latest 30 days ▾	date ▾	Value in previous 30 days ▾	date1 ▾
1	CHURN	-10	43 %	2013.09.09	48 %	2013.08.09
2	Grow	15	39 %	2013.09.09	34 %	2013.08.09
3	Retention	11	31 %	2013.09.09	28 %	2013.08.10
4	LT	10	69 days	2013.09.08	63 days	2013.08.08
5	LTV	14		2013.09.09		2013.08.09
6	New	22		2013.09.09		2013.08.09
7	Attrition	-31		2013.09.09		2013.08.10

Customers

	Metric ▾	Index, % ▾	Value in latest 30 days ▾	date ▾	Value in previous 30 days ▾	date1 ▾
1	Active Customers	20		2013.09.09		2013.08.09
2	New Customers	22		2013.09.09		2013.08.09
3	Regular Customers	15		2013.09.09		2013.08.09
4	React Customers	29		2013.09.09		2013.08.09
5	Inactive Customers	7		2013.09.09		2013.08.09

Offers

	Offer name ▾	Purchases in latest month ▾	Purchases in previous month ▾	Purchases grow index ▾	Conversion ▾	Customer users ▾	Promo users ▾
1	FREE_PURCHASES_REGISTRATION			37 %			
2	FREE_PURCHASES_REGISTRATION			6 %			

Service Health Indexes: Schedule

Play – статистика

Yota Play - Статистика Users Money Offers

Service health indexes Actions

Registrations

Registrations in last 24 hours	growth
1	22 %

Schedule PDF Delivery

Stop Scheduling this PDF

Delete the current schedule to stop PDF delivery [Stop Scheduling](#)

Service health indexes

To send email you must set a valid MTA in email alert settings. [Learn more.](#)

Email Schedule

Cron...

Enter a cron-style schedule.

For example (every 5 minutes) or (every day at 9 PM).

Deliver To

Enter comma-separated email addresses.

Paper Setup

Preview

[Send Test Email](#)

Repeat at Home

Metrics:

- Revenue
- Number of customers
- ARPU
- Index metric
- Mean revenue per day, weekday, working day
- Visitor, Prospect, Promo, Customer, Buyer
- Active, Inactive
- New, Regular, React
- By absence periods

- Map of users' pre-history
- Cohorts diagram
- Flux analysis
- Tier analysis
- CAC
- RUAC
- CHURN
- Attrition
- Grow rate
- Retention
- Longtail and Pareto principle
- Service health indexes

Techniques:

- Summary indexing
- Backfill script
- Lookup tables
- Drilldown
- Form search
- Pulldown



One Splunk, One Love

What do we value most in Splunk:

- Acceleration of business and IT processes in the company
- Velocity of operating
- Browser-like search
- Search language and interface
- Neat dashboards design

Direct assistance in:

- Product management
- Content management
- Financial management
- Business strategy planning
- IT-operations management

“Splunk is a dashboard with almost endless number of leverages to drive your business right in the direction you need.”

Vitaly Grigorash

Product director

Summary

- Splunk gives Play key business insights from machine data
 - **Churn** – The value of losing active customers
 - **Attrition** – The difference in inactive customers between this month & previous month
 - **Growth** – the value of new customers this month
 - **Retention** – the value of active existing customers
- Splunk gives us the ability to accelerate business and IT processes
- With Splunk we now have a higher operating velocity

Next Steps

1 Download the .conf2013 Mobile App

If not iPhone, iPad or Android, use the Web App

2 Take the survey & **WIN A PASS FOR .CONF2014...** Or one of these bags!

3 View all of the “Beyond IT” sessions

All sessions are available on the Mobile App

Videos will be available shortly



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Questions and Answers

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THANK YOU

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