# 2022-06-23 SimRXI Revenue Drop Due to Incorrect PL Attribution

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| **Environment** | Production |
| **Description** | Brief Issue Description:  Impressions for some of SIMRVI/RXI algos dropped by >50%, GMV and PL revenue dropped by >90% on Native top placements from 6/13 in [this release](https://cmpaas.cloud.ebay.com/dashboard/job.jsp?method=jobs&jobid=2022-06-12%7CDeployJob.5ba6456c1810a68b84a7a654ffffef19%7CLSDSMraptor&appserviceid=/ENV66llo64zbny/homesplice-app__ENV66llo64zbny&platform=raptor), fixed on 6/27.  What was failing:  Some SimRXI variants with RVIs in front didn't response with attribute:true for promoted seeds which failed to be treated as PL items. Also, because of the page optimization(PO), the placements of SimRXI are moved to the bottom of the page. Also this issue escaped from our regression tests (also a bug). |
| **Reviewed by** |  |
| **Problem Report** | Incident Ticket  TBD  Timeline (MST):   1. Incident involved: 2022-06-10 [PR#1886](https://github.corp.ebay.com/pl/homesplice/pull/1886) migrated in-request filter to after-response when in enrichment stage 2. Incident happened: 2022-06-12 23:00 homesplice scheduled deployment started 3. Traffic ramped up: 2022-06-13 02:29 deployment completed 4. Incident first reported: 2022-06-23 Prajakta and Jesse reported in slack channel seeing organic items in SimRXI variants 5. Incident confirmed: 2022-06-23 Michelle found PromotedOnlyEnrichmentFilter was removed for SimRXI 6. Fix started: 2022-06-24 Bing submitted [PR#1962](https://github.corp.ebay.com/pl/homesplice/pull/1962) for fixing 7. Fix completed: 2022-06-27 01:33 homesplice deployment completed 8. Analytics: Native PL revenue is mainly impacted by the SIMRVI bug (-$9K daily, fixed on 6/27) [Liu, Yubo](file:////display/~yubliu) |
| **FCI** | Total PL revenue loss is $128.6K (slide from analytics) |
| **Domain Impacted** | PL revenue |
| **Triage** | Big drop in PO metrics. And Alacarte team happened to examine the other related issue [ALACARTE-559](https://jirap.corp.ebay.com/browse/ALACARTE-559) - HS variants returning Seed as organic listing in response for algoType:PL Closed |
| **Examine** | 1. Abnormal metrics in SimRXI revenue, impression, experiments 2. Looked into modifications near the time when abnormal metrics happened 3. Located the PR where caused the PR 4. Fixed it and deployed the code |
| **Root Cause** | Root Cause   * Attribute field in promoted seeds was missing, details: <https://github.corp.ebay.com/pl/homesplice/pull/1962> * Regression tests didn't catch the field attribute in homesplice response for verification |
| **Cure** | Code fixed the issue:  <https://github.corp.ebay.com/pl/homesplice/pull/1962>  Deployment fixed the issue:  <https://cmpaas.cloud.ebay.com/dashboard/job.jsp?method=jobs&jobid=2022-06-26%7CDeployJob.a39a3d561810a68b8645622ffffff5af%7CLSDSMraptor&appserviceid=/ENV66llo64zbny/homesplice-app__ENV66llo64zbny&platform=raptor> |
| **Opportunities** | What can be improved   * Monitoring   + Short term     - Top native Merch placement   + Mid term     - Algo family level in NRT impression, ctr, revenue, purchase   + Long term * Code   + Involve experienced reviewers when PR is huge * Automation   + Fix the bug in regression tool   + Regression testing automation, especially on key fields of homepslice response * Process   + [Automated PR Regression](file:////display/MADSNAP/Automated+PR+Regression)   + <https://console.sherlock.io/d/nCxWO2R4z/hs-business-metrics-variant?orgId=1&var-variant=SimplAMLv5PairwiseWebNoToraCoCoViewsNoHighIdfOrSortByFinalScoreBlenderWithPromotedViewItems> |
| **Flow** | Data/Pool Dependencies |
| **Rollback** |  |
| **Related items** |  |
| **Status** | Incident Status, RCA edit status |