



BIWA SUMMIT 2017 WITH SPATIAL SUMMIT

THE Big Data + Analytics + Spatial + Cloud + loT + Everything Cool User Conference
January 31 - February 2, 2017

Data Visualization at SoundExchange – A Case Study

Oliver (Olly) Wray, Business Intelligence Manager, SoundExchange

Speaker Bio



- Oliver (Olly) Wray Business Intelligence Manager at SoundExchange
- 20+ years working with Oracle
 - Oracle Forms and Reports Development
 - Performance Tuning Contracting in UK and Australia
 - Java ORM tuning and database layer consultant
- Joined SoundExchange in 2014

Agenda



- Introduction
- Objectives
- SoundExchange at a Glance
- Perceived Need
- Challenges
- Timeline
- Best Practices Standards Document
- Visual Analyses Evolution plus Use Case
- Future

Objectives



- Examine the evolution of the BI team
- Understand the role BI plays in SoundExchange business
- Look at key visualization techniques
- Use case : Earnings Analysis

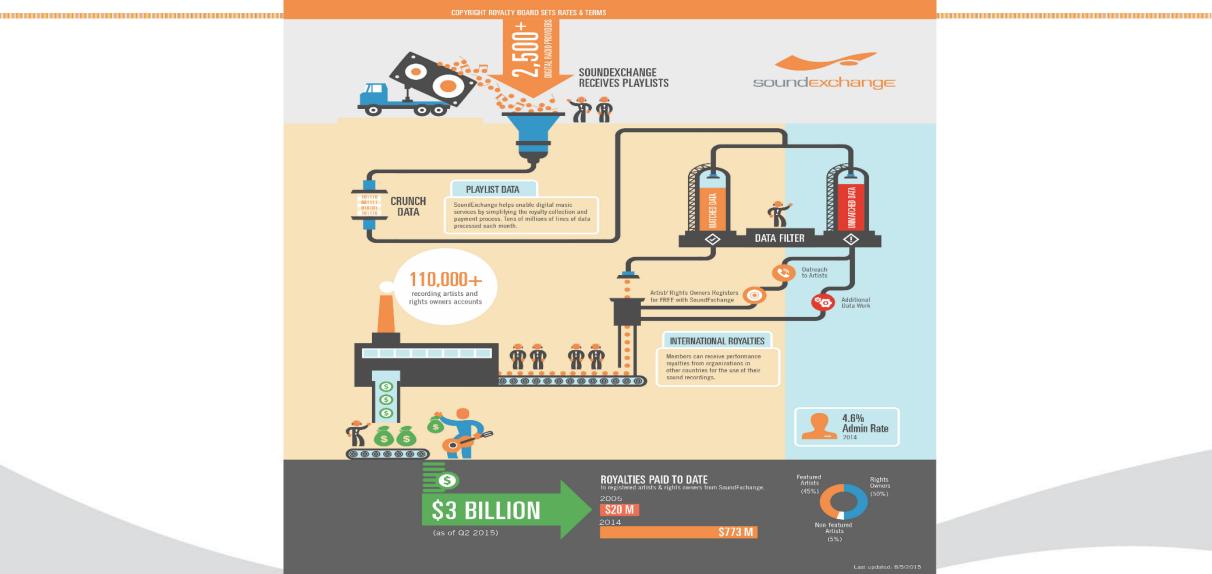
SoundExchange at a glance



- SoundExchange is the independent nonprofit collective management organization that collects and distributes digital performance royalties to featured artists and copyright holders.
- Mandated by the US Congress and located in Washington, DC
- We represent recording artists and master rights owners including major and independent record labels.







Perceived Need



- BI Publisher legacy reports
- Data visualization needs
- Company communication medium
- Personalization of dashboards
- Cross system data analyses

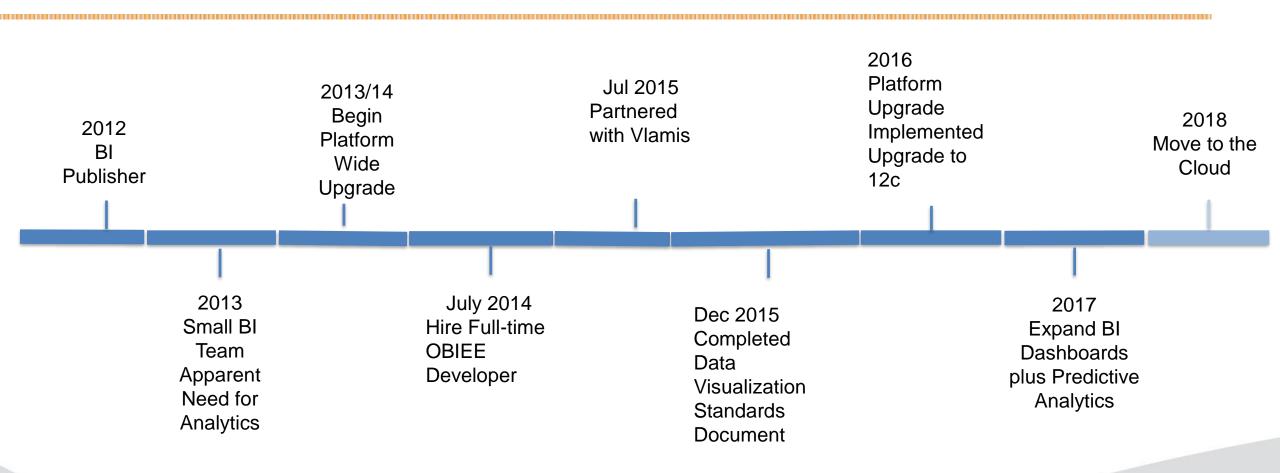
BI Challenges



- Knowledge of what BI "is"
 - Reporting tool?
- Transactional Reporting
- Trust
 - Reliability
 - The "Excel" Factor
- Moving goal posts
- Data Volumes
 - Aggregation limits
 - Pressure to investigate other techs
 - Historic Data

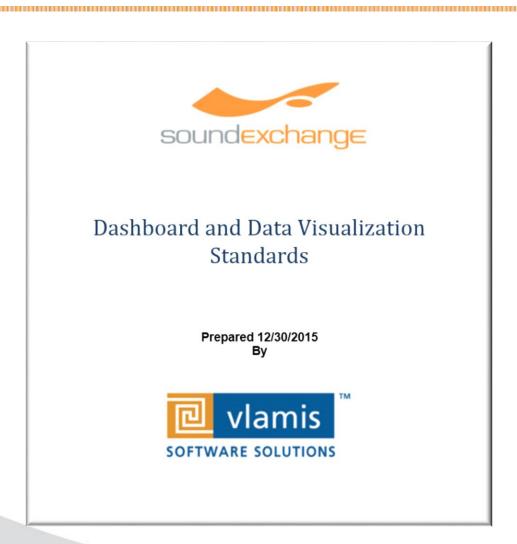
Timeline





Best Practice and Standards Document



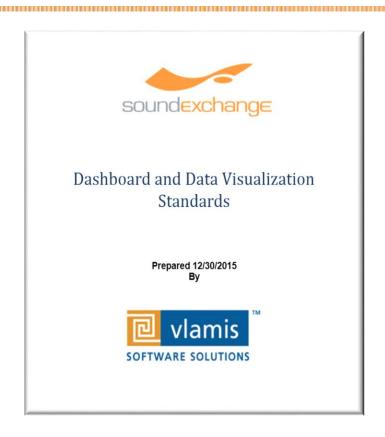


Document includes 40 pages of:

- Best Practices for
 - Graphs
 - Tables
 - Dashboards
- Standards and Best Practices for
 - Colors
 - Fonts
 - Layouts
- Case Study

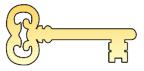
Best Practice and Standards Document





Participants:

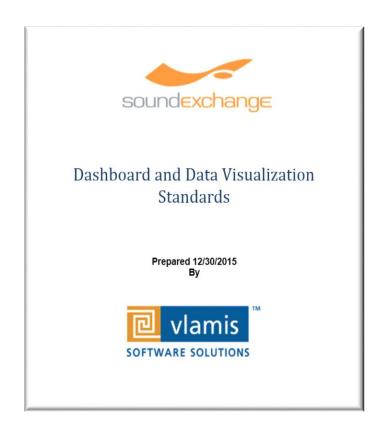
- BI Team
- Expert Consultants
- Executive Sponsor (COO)



F Key to Success: Active Executive Sponsor

Best Practice and Standards Document



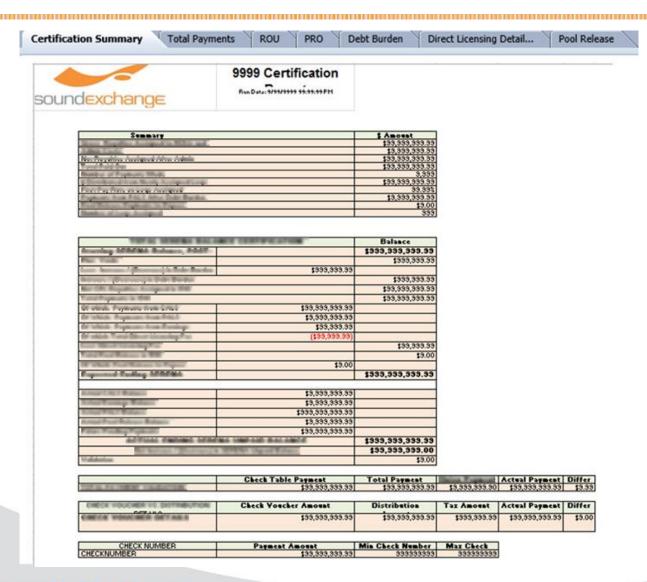


Benefits

- Consistency in Enterprise- wide analyses and dashboards
- More effective analyses and dashboards
- Less time spent focusing on formatting decisions more time spend on content development

Legacy (BI Publisher) Reporting





- Key information hidden in the detail
- Visually busy
- Multiple Pages

Present V2 (is it OBIEE or Excel?)



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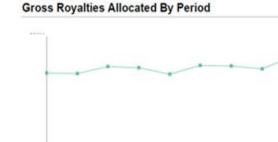
- Consolidated
- One page
- Easier to find key information
- Still visually busy
- Hard to derive insight

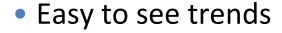
Future V3 (OBIEE)

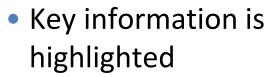


2015 Executive Summary Standards Example

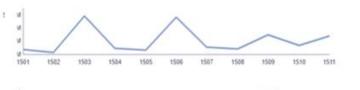








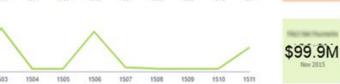


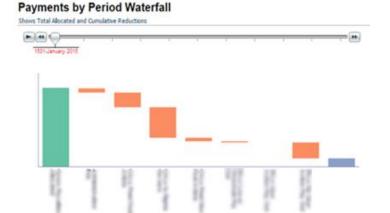




Total Payments

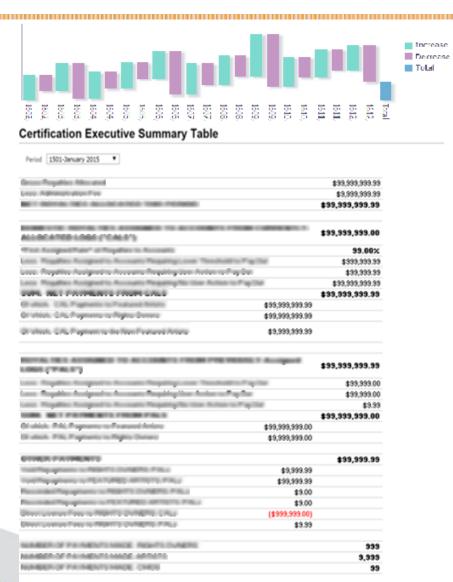






Future V3 (OBIEE)







Use Case: Earnings Analysis



- Who earns what when...
- Developed in conjunction with Vlamis
- Used to identify potential errors before payment
- Aimed at engaging users to spend time in BI
- Visualization techniques geared to aid user familiarity

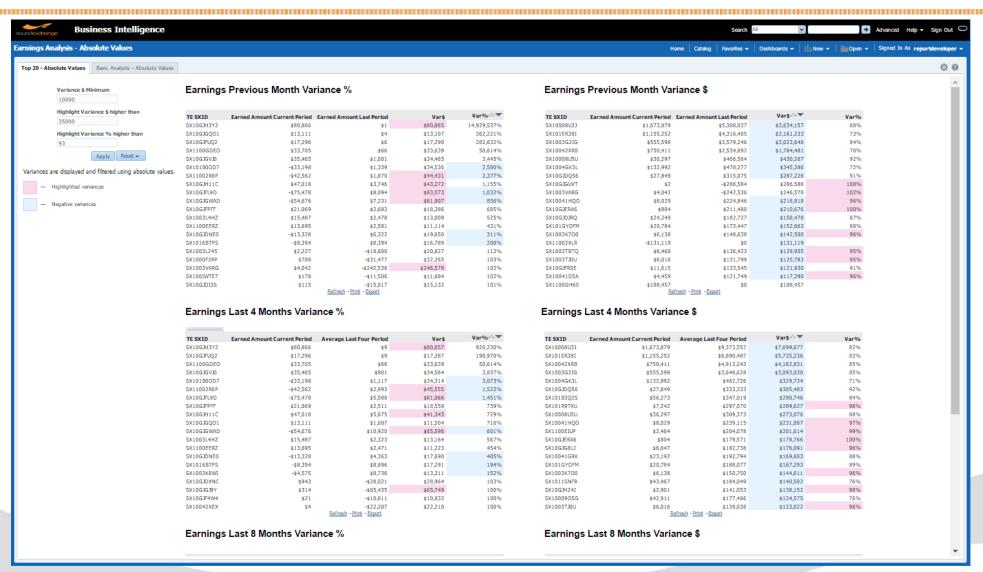
Use Case: Before...



| ound of heigh | Business Intel | igence | | | | | | | | | |
|--|----------------|----------------------------|----------------------|----------------------|-------------------|-------------|------------------|------------------------|------|--|--|
| syment History Analysis | | | | | | | | | | | |
| Payee SXID | Payment Amount | Last Period Payment Amount | I set 4 Douments Ave | 1 set 8 Dayments Avn | Deriod I set Daid | Was On Hold | New Panistration | Difference From Last 4 | nsos | | |
| rajes and | 50.02 | 543.77 | \$63.89 | | December 2016 | No | No | (983.87) | 0 | | |
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| process a | 50.83 | \$409.56 | \$276.19 | | December 2016 | No | No | (\$275.00) | | | |
| and the same of the same of | 524.94 | \$10,397.65 | 55,440.37 | | December 2016 | No. | No | (35,415,43) | | | |
| proposition. | 50.24 | \$3.73 | 544.22 | | December 2016 | No | No | (\$43.98) | | | |
| Married Prints | \$19.83 | \$5,572.64 | \$3,597.84 | | December 2016 | No | No | (\$3,578.01) | | | |
| der minutes and the | 5245.34 | \$272.51 | \$37,839.51 | | December 2010 | No | No | (\$37,594.17) | | | |
| per management of | \$0.40 | \$47.00 | 356.04 | | December 2016 | No | No | (\$55.64) | | | |
| promotor. | \$105.40 | 5126.74 | \$13.193.80 | | December 2016 | No | No | (\$13,088.40) | | | |
| personal frame | 50.21 | 544.74 | \$25.17 | | December 2016 | No | No | (\$24.96) | | | |
| personal residence | \$2.35 | \$137.34 | \$272.00 | | December 2016 | No | No | (\$209.74) | | | |
| personal do- | 5161.36 | \$188.55 | 517.332.44 | | December 2016 | No | No | (\$17,171.08) | | | |
| Bernand Co. | \$101.12 | 5138.13 | \$9,840.91 | - | November 2016 | No | No | (99,739,79) | | | |
| - | \$8.69 | 530.23 | \$737.69 | | December 2016 | No | No | (\$728.99) | | | |
| per male departs | \$106.25 | \$52,878.68 | \$13,679.44 | | December 2016 | No | No | (\$13,513,20) | | | |
| Name and Post Of the Owner, where | \$131.92 | \$707.55 | \$10,754.05 | | December 2016 | No | No | (\$10,622.13) | | | |
| parameters: | 5260.14 | \$301.53 | \$20,850,45 | | December 2016 | No | No | (\$20,590.31) | | | |
| No. of Concession, Name of Street, or other Designation, Name of Street, Name | \$1.36 | \$10.58 | \$109.16 | | December 2016 | No | No | (\$107.78) | | | |
| Service State Com- | \$109.40 | \$179.78 | \$7,870.50 | | December 2016 | No | No | (\$7,789.09) | 1 | | |
| per money from | \$349.03 | \$711.90 | \$21,246,37 | \$11.451.70 | December 2016 | No | No | (\$20,897.33) | 2 | | |
| AND DESCRIPTION OF THE PERSON NAMED IN | \$349.03 | 9675.55 | \$21,237,28 | 511,447.15 | December 2018 | No | No | (\$20,688.25) | 2 | | |
| personations | \$112.00 | \$346.48 | 56,778,36 | | December 2016 | No | No | (50,600,00) | | | |
| No. of Concession, | \$100.67 | \$167.82 | 50,225.53 | \$3,167.89 | December 2016 | No | No | (\$6.121.85) | | | |
| personal Physics | \$25.29 | \$2,903.20 | \$1,484.55 | | December 2016 | No | No | (\$1,459.26) | | | |
| Bernand and | \$81.82 | \$17.700.62 | 54,669,62 | | December 2016 | No. | No | (\$4,587.80) | | | |
| per residence | 5142.31 | 58.082.95 | \$8,082.95 | | December 2016 | No | No | (\$7,940.64) | | | |
| percentage | \$187.70 | \$858.46 | \$10,327,24 | \$8,996,14 | December 2016 | No | No | (\$10,109,54) | | | |
| Annual Property | 5093.21 | \$547.15 | \$38,078.29 | | December 2016 | No | No | (\$37,385,09) | 2 | | |
| programme. | \$823.21 | \$697.00 | \$28,435,78 | \$14,590.74 | December 2016 | No | No | (\$27.912.57) | 2 | | |
| personal regions | \$3.64 | \$717.52 | \$182.83 | \$93.88 | December 2016 | No | No | (\$179.18) | 2 | | |
| Section (Section) | \$222.55 | 5420.14 | \$11,169.57 | \$5,851.87 | December 2016 | No | No | (\$10,947.00) | 2 | | |
| personal control | \$406.84 | \$325.21 | \$20,329.01 | \$10,402.84 | December 2016 | No | No | (\$19,922.17) | .2 | | |
| person franch | \$441.00 | 9820.72 | \$20,805.49 | | December 2016 | Na | No | (\$20,364.40) | | | |
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| Name and Post Office and Part of the Part | \$1.11 | 907.72 | \$48.43 | \$73.58 | December 2016 | No | No | (\$47.00) | 2 | | |
| dermination. | \$5,902.40 | \$257,239.81 | 5257,239.61 | \$257,239.81 | December 2016 | No | No | (\$251,337.41) | | | |
| periodical four | \$3.24 | \$165.56 | \$140.79 | | December 2016 | No | No | (\$137.54) | | | |
| personal de ser | \$907.76 | \$5,644.40 | \$39,655,65 | | December 2016 | No | No | (\$38.717.90) | | | |
| personal recolor | \$1,090.39 | \$5,030.25 | \$45,150.46 | | December 2016 | No | No | (\$44,000.07) | | | |
| terminal (| 5126.29 | \$189.82 | \$5,135.72 | \$2,648.25 | December 2016 | No | No | (\$5,009.42) | | | |
| per concession and co | \$102.67 | \$49.18 | \$4,132.53 | E2 121 22 | December 2016 | No | No | (\$4,029.86) | | | |

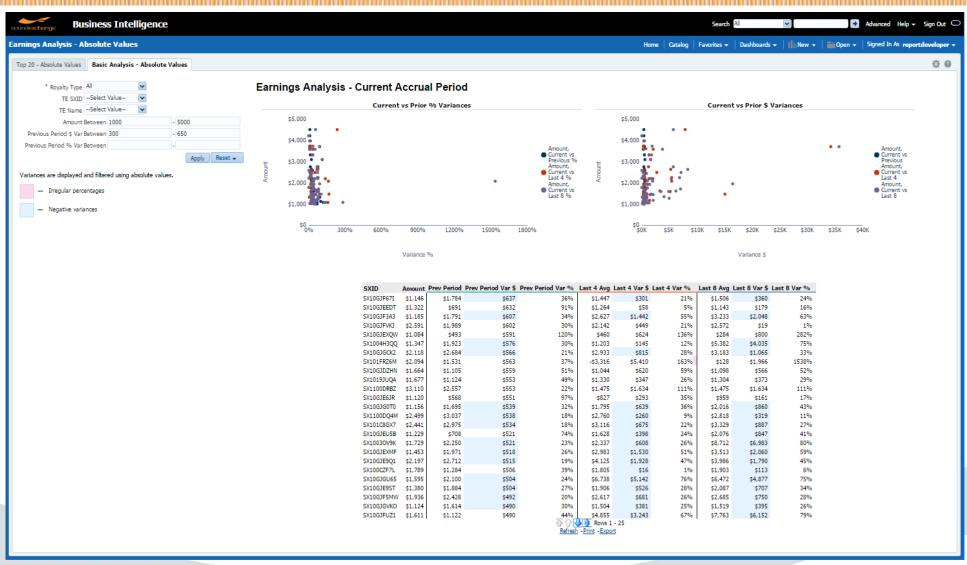
Use Case: Earnings Analysis





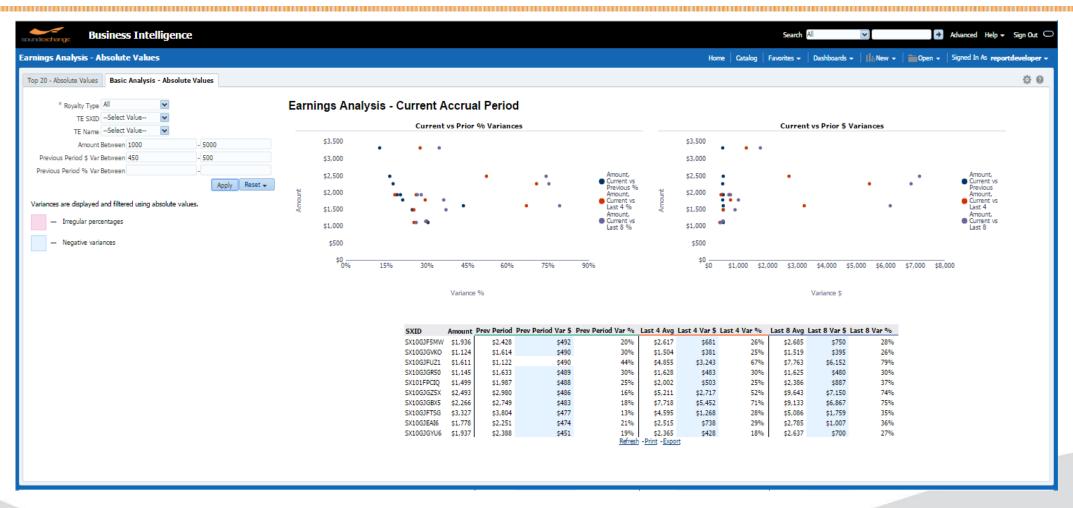
Use Case: Earnings Analysis





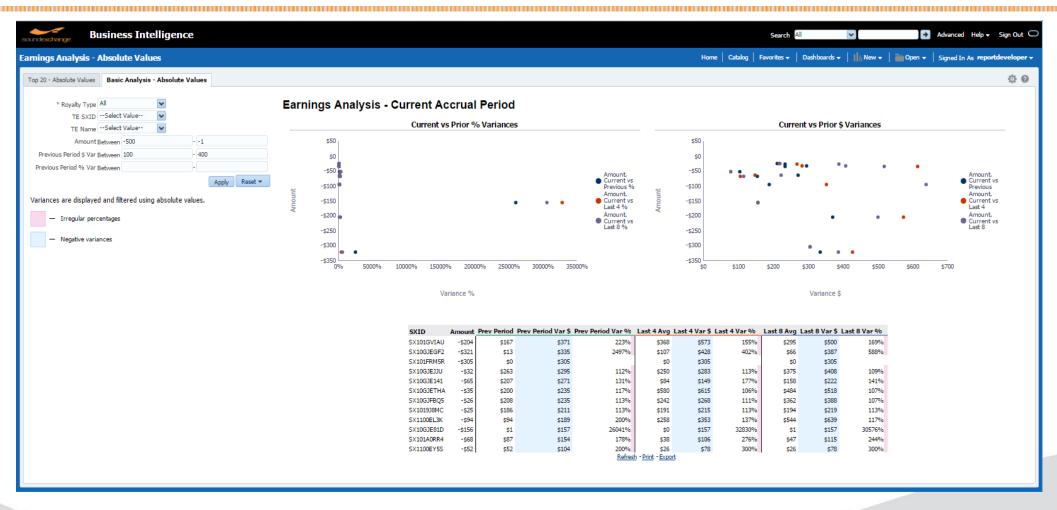












Earnings Analysis – What's Next?



- False positives
 - Total allocated payment amounts fluctuate
 - New Artists
 - The "I was on the list last month" conundrum
- Enhancements
 - Eradicate false positives
 - Incorporate actual payments into an 'index' of sorts
 - Provide negative to positive (or vice versa) prompts for %

Future



- Predictive Analytics
 - Next big thing before it's big?
- Dashboard Expansion
- Cloud?
- 12c Features

Key Takeaways



- Executive Sponsorship makes a big difference
- Educating users is in everyone's best interests
- Look us up! <u>www.soundexchange.com</u>







Thank you for listening!

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