

DATA ANALYSIS (CHINOOK)

1

Audience

Sale Department

2

Type of Analyst

Time Series (YoY)

Descriptive Analytics & Diagnostics
Analytics

3

Question

How to **increase revenue** of a digital
media store (music) in the next year?

4

Recommendation

Focus on key genre & markets, consider
new sales challenges for employees can
increase \$214 in 2014, equivalent to
+47.5% current yearly revenue



DATA STORYTELLING

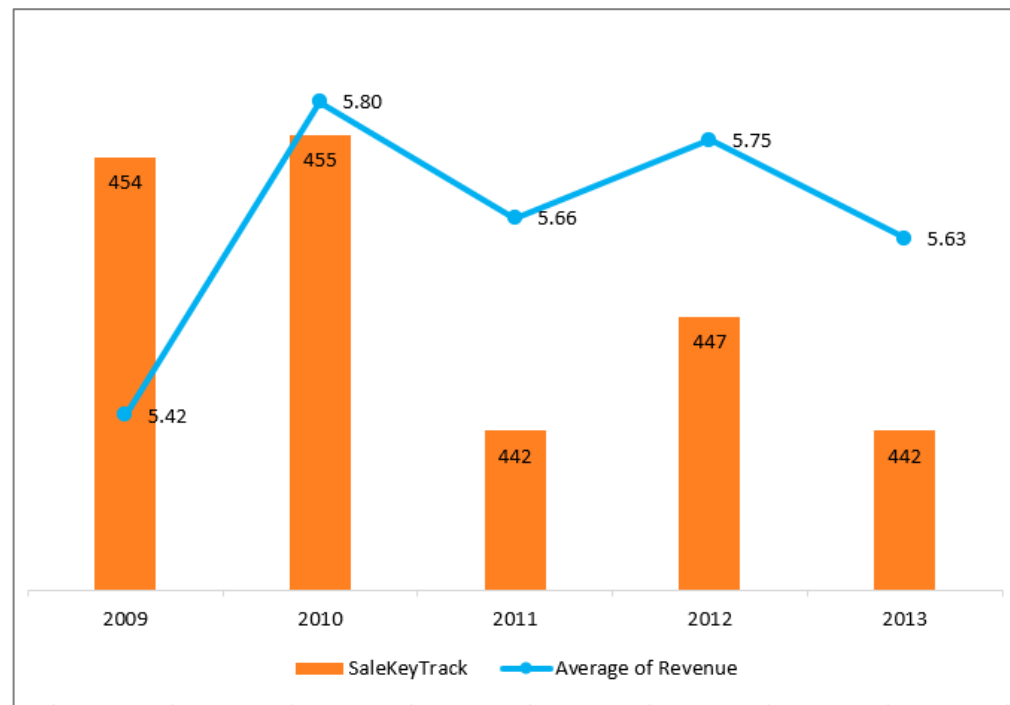
Improvement revenue of a digital media store
(music) in 2014



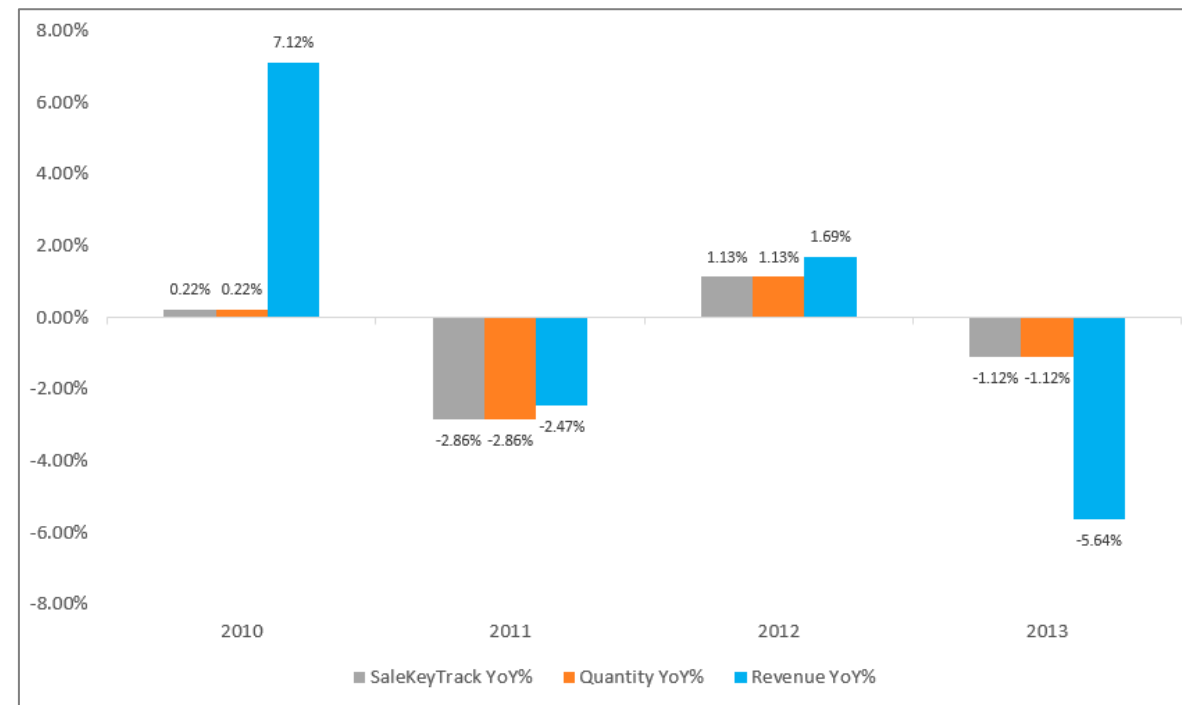
Proposed by Nhi Tran

Revenue dropped \$27 & YoY -5.64% in 2013

Sale by SaleKey (per Track) & Avg Revenue



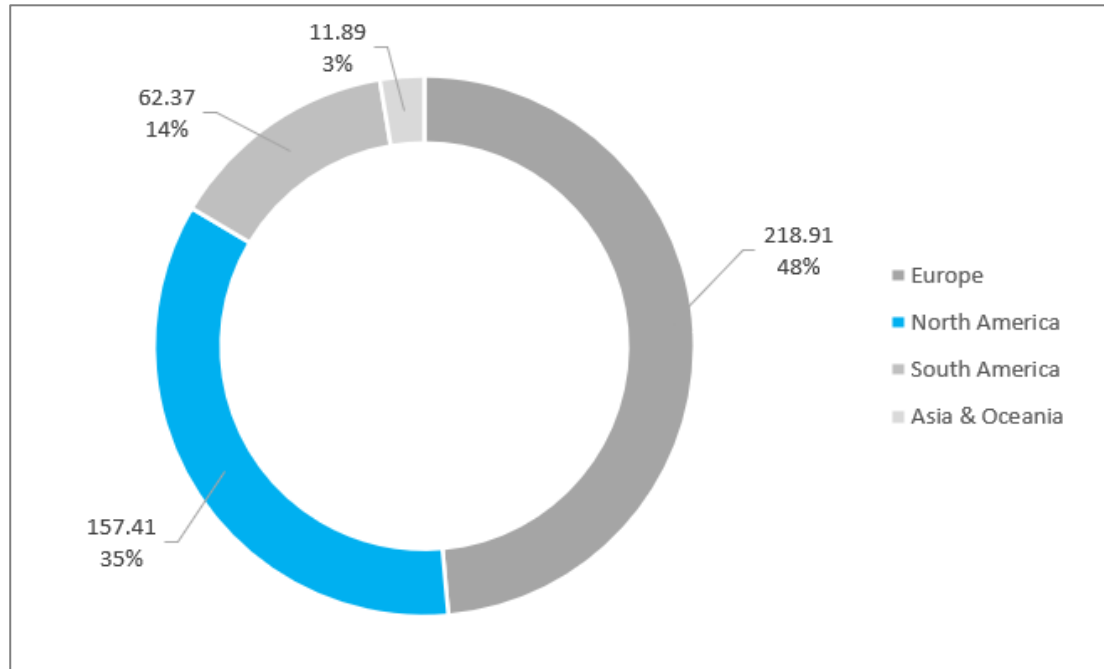
Revenue YoY% by Year



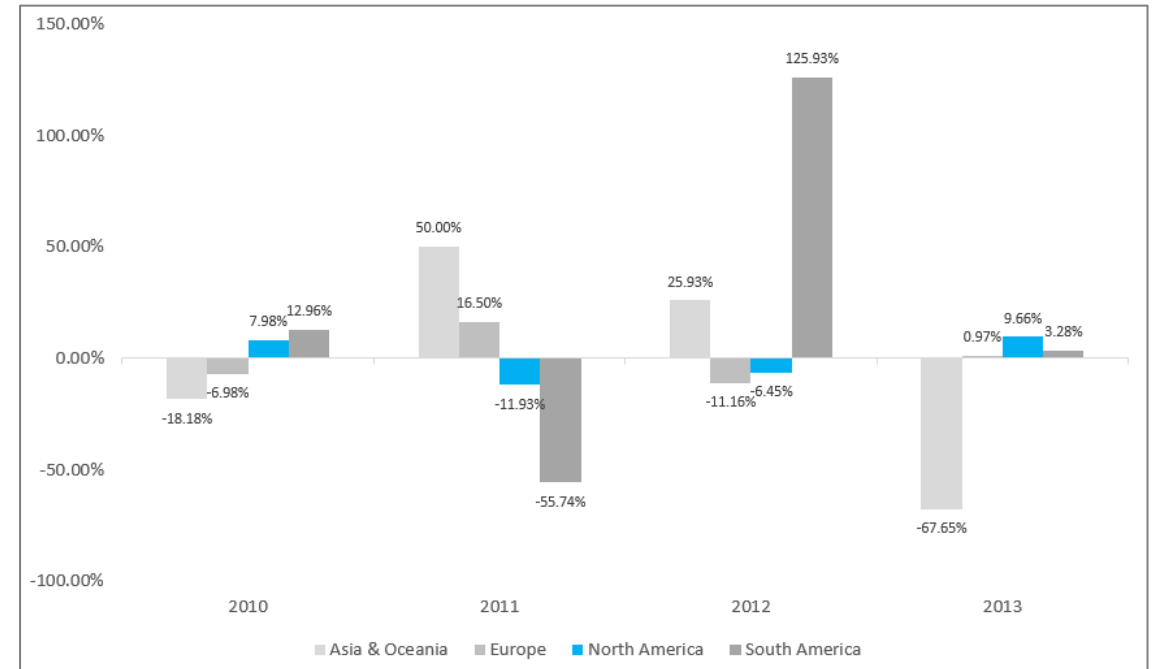
Revenue YoY decreased because transaction (per track) and AVG revenue by transaction decreased YoY.

#1: Increase Transactions at North America (Canada)

Revenue Contribution of NA in 2013



Transaction YoY% at NA

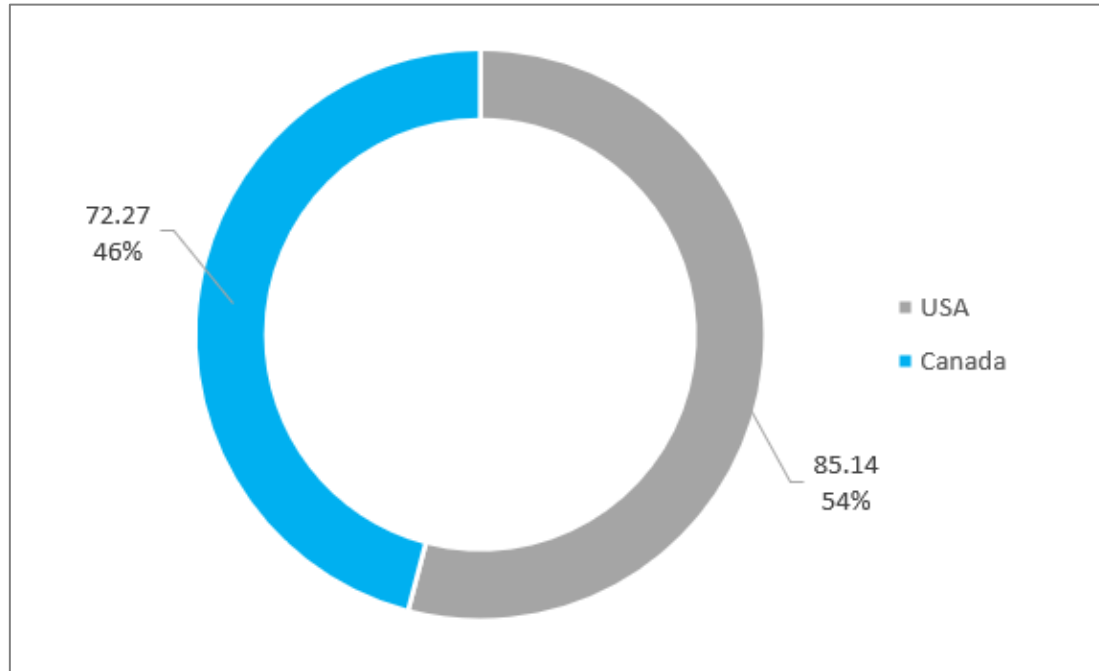


North America Market

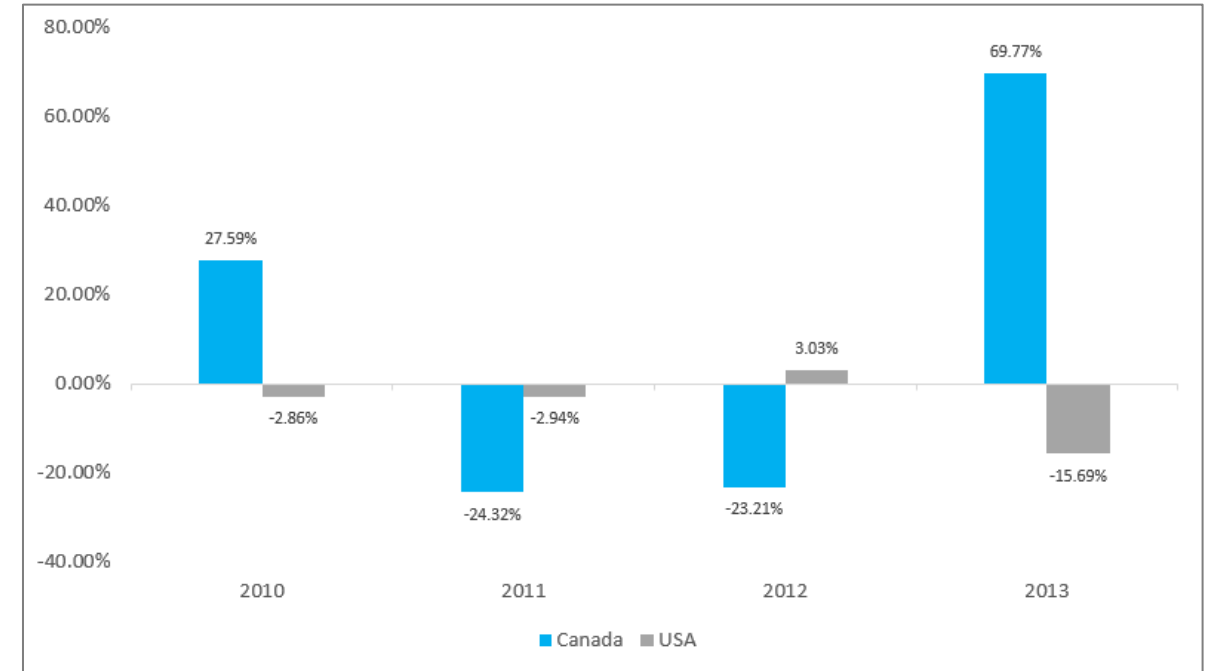
In 2013, North America market contributes 35% of total revenue, YoY reaches about 10% in increasing transaction (significantly increased compared to other markets).

#1: Increase Transactions at North America (Canada)

Revenue Contribution of NA (by Country) in 2013



Transaction YoY% at NA (by Country)



North America Market currently includes 2 countries, USA and **Canada**

While the USA has a negative YoY, Canada's YoY has increased dramatically, reaching around **70% in increasing transaction** in 2013, maintaining this growth for the next year will result in **~\$50 additional revenue**.

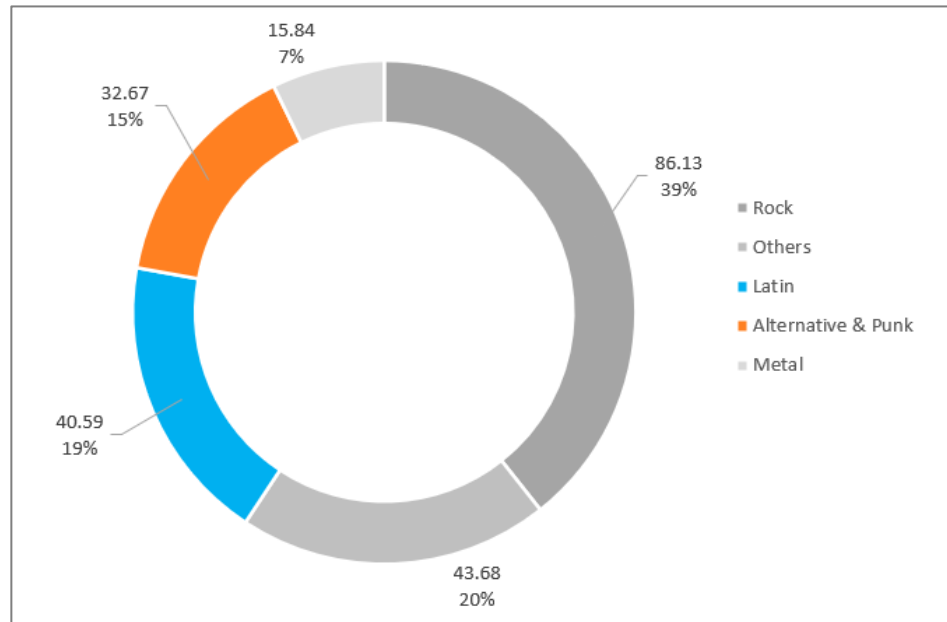
2013: \$72.27



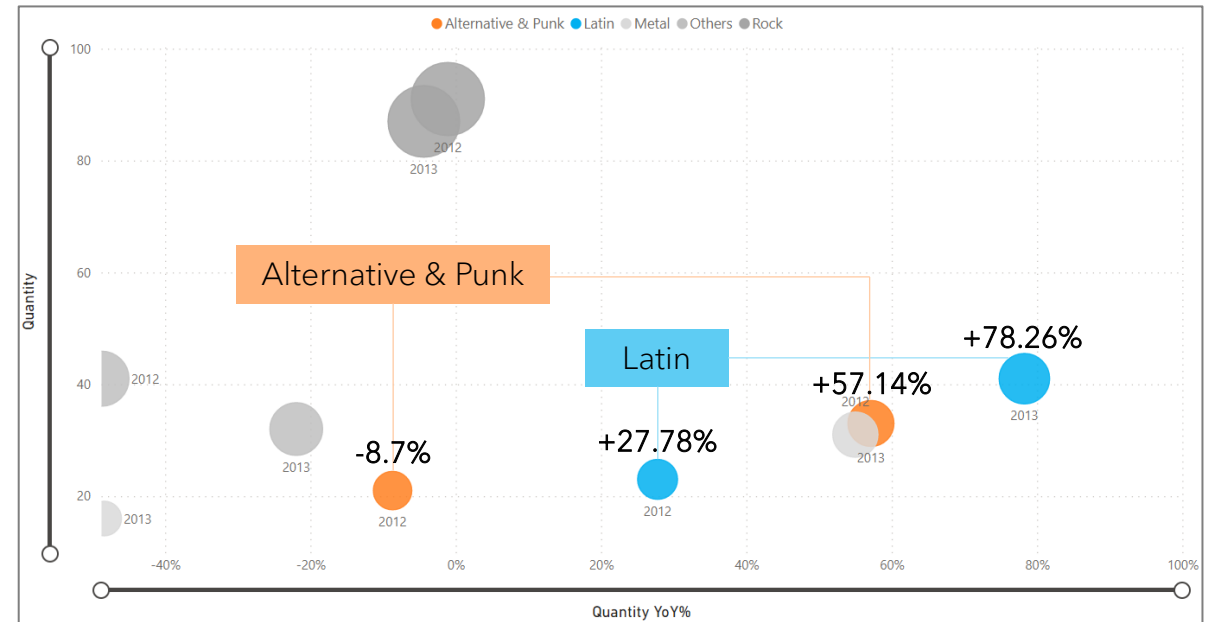
2014: +\$50

#2: Increase Quantity of Alternative & Punk + Latin music in Europe

Revenue Contribution of Alternative & Punk + Latin in 2013 in Europe



Quantity YoY% of Alternative & Punk + Latin in Europe



Genre: Alternative & Punk/ Latin in Europe

These 2 genres contributed 34% of total revenue in Europe in 2013. In 2014, quantity YoY is expected to increase:

- +80% (~\$32) for Latin music in Europe.
- +60% (~\$20) for Alternative & Punk music in Europe.

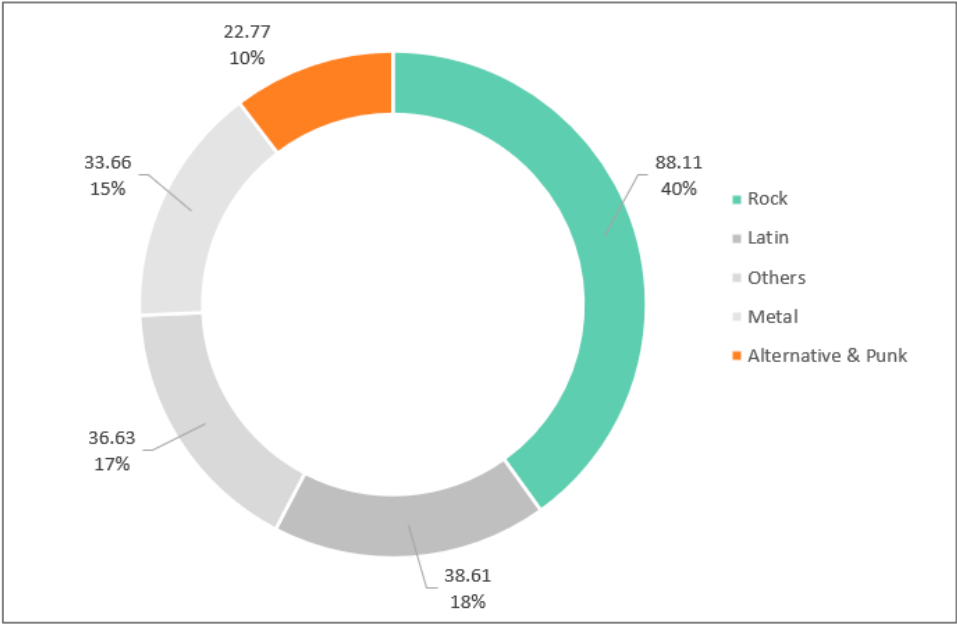
2013: \$73.26



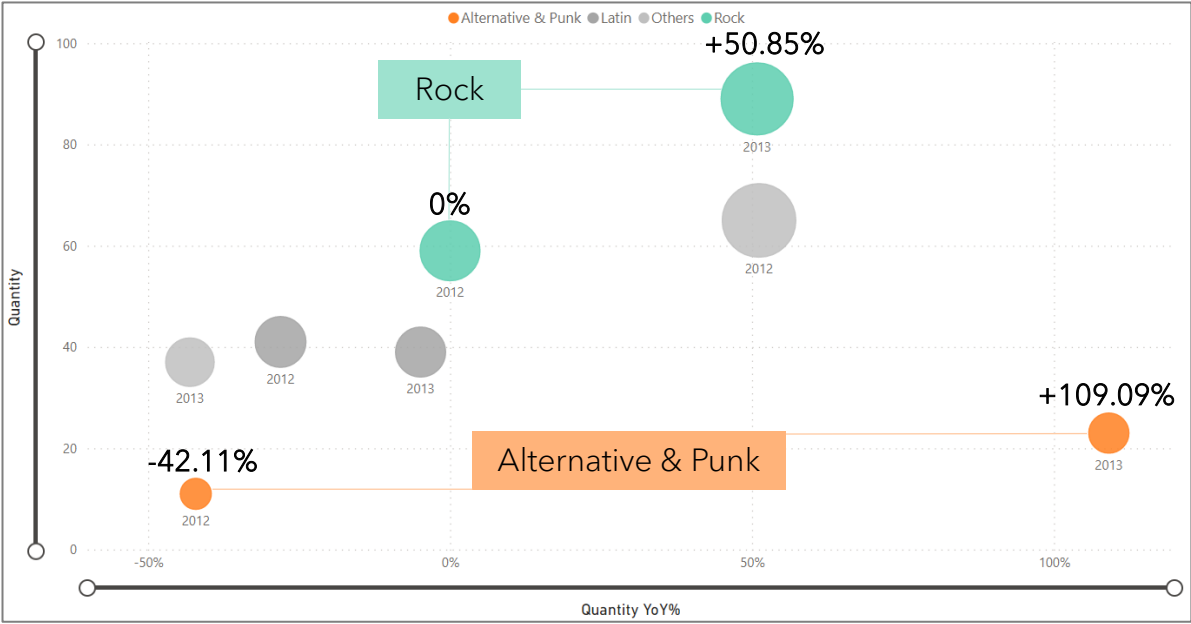
2014: +\$52

#2: Increase Quantity of Alternative & Punk + Rock music in America

Revenue Contribution of Alternative & Punk + Rock in 2013 in America



Quantity YoY% of Alternative & Punk + Rock in America



Genre: Alternative & Punk/ Rock in America (North America & South America)

These 2 genres contributed 50% of total revenue in America in 2013. In 2014, quantity YoY is expected to increase:

- +50% (~\$44) for Rock music in America.
- +100% (~\$23) for Alternative & Punk music in America.

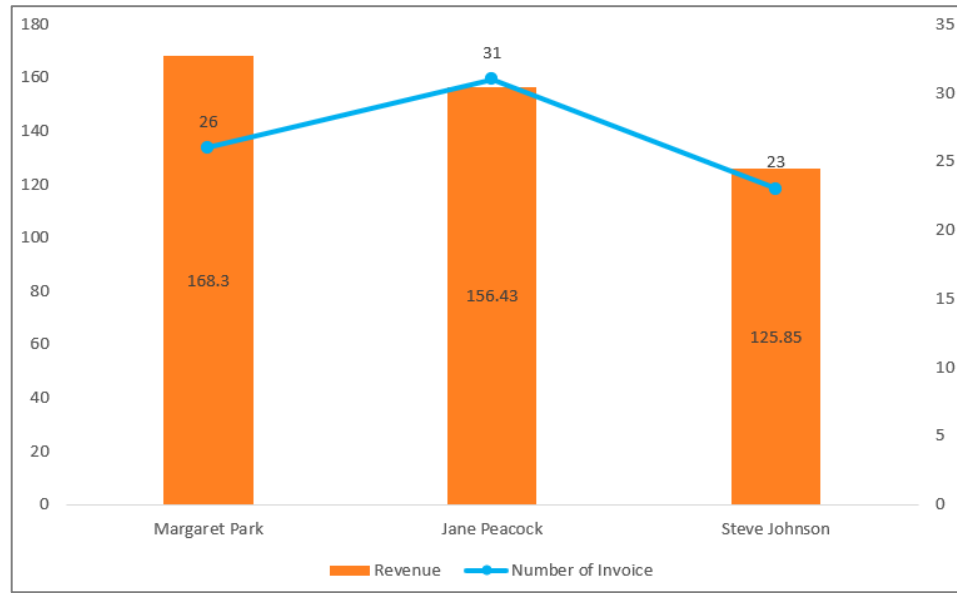
2013: \$110.88

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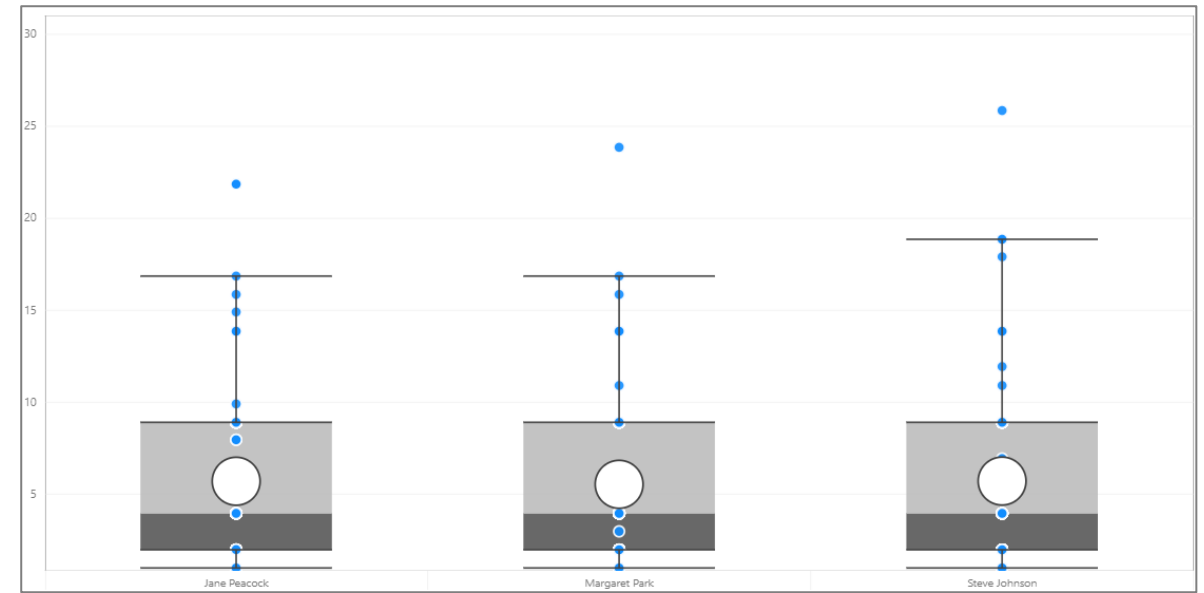
2014: +\$67

#3: Establish additional sales targets for employees

Revenue by employee in 2013



Revenue by employee for each Invoice



Establish additional sales targets:

- In 2013, **Jane Peacock** had the most orders, although her overall sales for the year were less than **Margaret Park's**. However, the variation in sales among all employees is insignificant.
- The **median** sale for **all** Sale Support Agents is **\$3.96**. Value of invoices mainly from \$1.98 to \$3.96 with the number of tracks purchased is from 2-3 songs. Individual sales revenue should be **increased by 10%** in 2014 over 2013, equivalent to **+\$45 total revenue**.

(More information in Appendix 2)

2013: \$450.58



2014: +\$45

CONCLUSION



+\$214 in 2014

Focus on key genre & markets,
consider new sales challenges for
employees can increase \$214/
year, equivalent to **+47.5%**
current yearly sales

Solutions & Next Steps

1. Increasing Number of Transactions: promote sales in North America market, specifically Canada.
2. Improving Sale Quantity of popular genre songs in the relevant markets:
 - Alternative & Punk + Latin music in Europe.
 - Alternative & Punk + Rock music in America.
3. Set reasonable sales growth targets for each Sale Support Agent to maximize revenue.



THANK YOU

Nhi Tran

APPENDIX

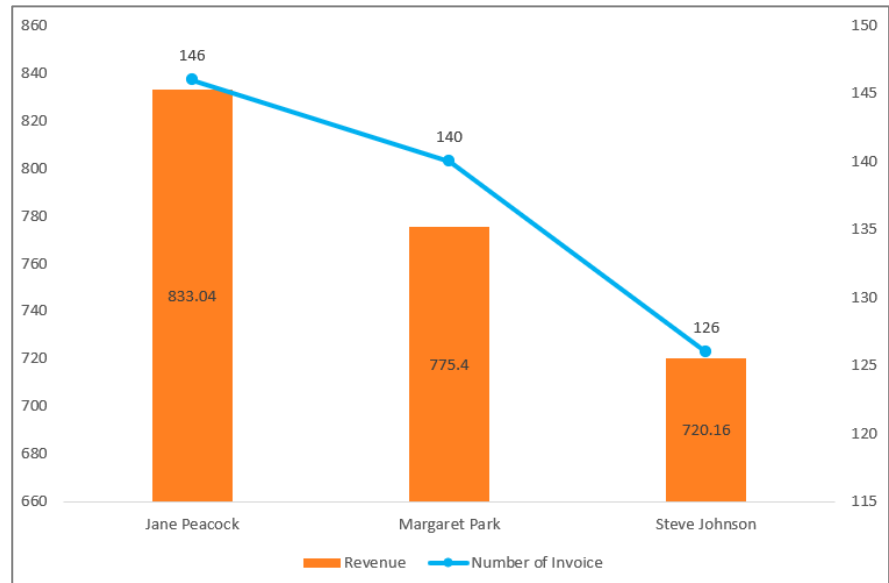


#Appendix 1 – Total Revenue YoY by Location

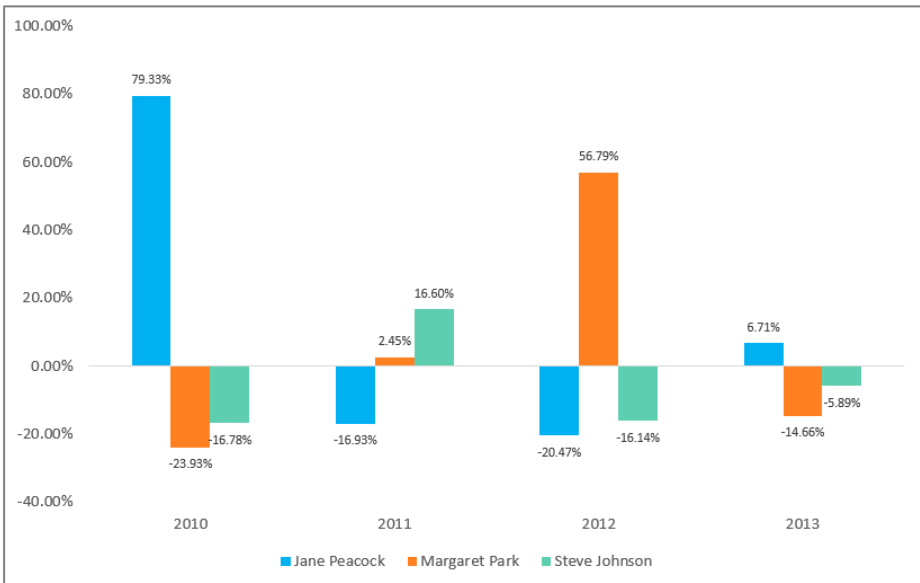
	2009			2010			2011			2012			2013			Total
	Revenue	%	YoY%	Revenue	%	YoY%	Revenue	%	YoY%	Revenue	%	YoY%	Revenue	%	YoY%	Revenue
Asia & Oceania	21.78	0.94%		18.82	0.81%	-13.59%	26.73	1.15%	42.03%	33.66	1.45%	25.93%	11.89	0.51%	-64.68%	112.88
Australia	11.88	0.51%		0.99	0.04%	-91.67%	1.98	0.09%	100.00%	22.77	0.98%	1050.00%			-100.00%	37.62
India	9.9	0.43%		17.83	0.77%	80.10%	24.75	1.06%	38.81%	10.89	0.47%	-56.00%	11.89	0.51%	9.18%	75.26
Europe	212.85	9.14%		212	9.10%	-0.40%	257.67	11.07%	21.54%	212.93	9.14%	-17.36%	218.91	9.40%	2.81%	1114.36
Austria	1.98	0.09%		27.77	1.19%	1302.53%			-100.00%	11.88	0.51%		0.99	0.04%	-91.67%	42.62
Belgium	6.93	0.30%				-100.00%	24.75	1.06%				-100.00%	5.94	0.26%		37.62
Czech Republic	10.89	0.47%		9.9	0.43%	-9.09%	12.87	0.55%	30.00%	19.83	0.85%	54.08%	36.75	1.58%	85.33%	90.24
Denmark	5.94	0.26%		6.93	0.30%	16.67%			-100.00%	15.84	0.68%		8.91	0.38%	-43.75%	37.62
Finland	8.91	0.38%				-100.00%	15.88	0.68%		0.99	0.04%	-93.77%	15.84	0.68%	1500.00%	41.62
France	35.64	1.53%		39.6	1.70%	11.11%	42.61	1.83%	7.60%	36.66	1.57%	-13.96%	40.59	1.74%	10.72%	195.1
Germany	53.46	2.30%		25.74	1.11%	-51.85%	48.57	2.09%	88.69%	18.81	0.81%	-61.27%	9.9	0.43%	-47.37%	156.48
Hungary				32.75	1.41%				-100.00%	11.88	0.51%		0.99	0.04%	-91.67%	45.62
Ireland	6.93	0.30%				-100.00%	32.75	1.41%				-100.00%	5.94	0.26%		45.62
Italy	1.98	0.09%		10.89	0.47%	450.00%			-100.00%	15.84	0.68%		8.91	0.38%	-43.75%	37.62
Netherlands	8.91	0.38%		1.98	0.09%	-77.78%	12.9	0.55%	551.52%	0.99	0.04%	-92.33%	15.84	0.68%	1500.00%	40.62
Norway	10.89	0.47%				-100.00%	17.84	0.77%		8.91	0.38%	-50.06%	1.98	0.09%	-77.78%	39.62
Poland	15.84	0.68%		8.91	0.38%	-43.75%			-100.00%	11.88	0.51%		0.99	0.04%	-91.67%	37.62
Portugal	11.88	0.51%		6.93	0.30%	-41.67%	8.91	0.38%	28.57%	24.77	1.06%	178.00%	24.75	1.06%	-0.08%	77.24
Spain	0.99	0.04%		1.98	0.09%	100.00%	22.77	0.98%	1050.00%			-100.00%	11.88	0.51%		37.62
Sweden	5.94	0.26%		7.93	0.34%	33.50%			-100.00%	24.75	1.06%				-100.00%	38.62
United Kingdom	25.74	1.11%		30.69	1.32%	19.23%	17.82	0.77%	-41.94%	9.9	0.43%	-44.44%	28.71	1.23%	190.00%	112.86
North America	161.37	6.93%		179.24	7.70%	11.07%	158.45	6.80%	-11.60%	170.55	7.32%	7.64%	157.41	6.76%	-7.70%	827.02
Canada	57.42	2.47%		76.26	3.27%	32.81%	55.44	2.38%	-27.30%	42.57	1.83%	-23.21%	72.27	3.10%	69.77%	303.96
USA	103.95	4.46%		102.98	4.42%	-0.93%	103.01	4.42%	0.03%	127.98	5.50%	24.24%	85.14	3.66%	-33.47%	523.06
South America	53.46	2.30%		71.39	3.07%	33.54%	26.73	1.15%	-62.56%	60.39	2.59%	125.93%	62.37	2.68%	3.28%	274.34
Argentina				11.88	0.51%		0.99	0.04%	-91.67%			-100.00%	24.75	1.06%		37.62
Brazil	37.62	1.62%		41.6	1.79%	10.58%	19.8	0.85%	-52.40%	53.46	2.30%	170.00%	37.62	1.62%	-29.63%	190.1
Chile	15.84	0.68%		17.91	0.77%	13.07%	5.94	0.26%	-66.83%	6.93	0.30%	16.67%			-100.00%	46.62
Grand Total	449.46	19.34%		481.45	20.70%	7.12%	469.58	20.17%	-2.47%	477.53	20.51%	1.69%	450.58	19.35%	-5.64%	2328.6

#Appendix 2 – Improve sales through developing people

Revenue by employee from 2009 to 2013



Revenue YoY% by employee

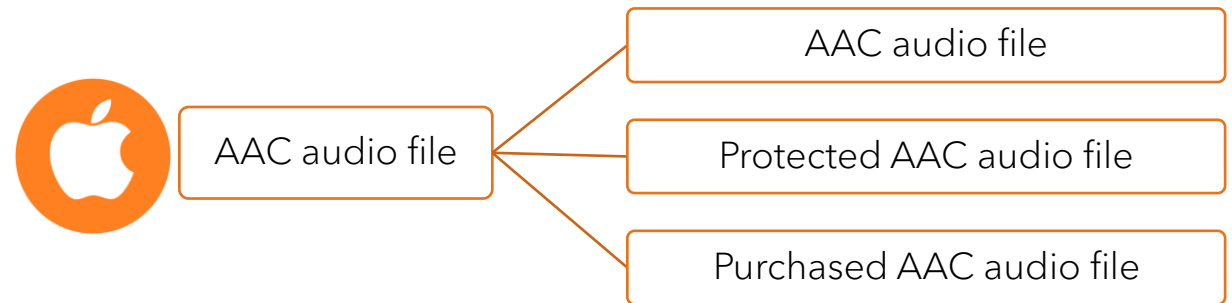
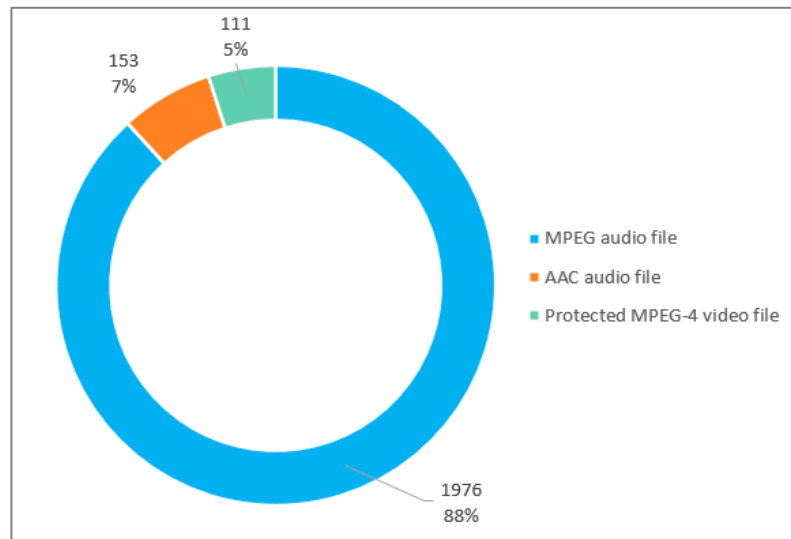


Employee	Date of Hiring
Jane Peacock	01-04-2002
Margaret Park	03-05-2003
Steve Johnson	17-10-2003

- Jane had the most overall sales from 2009 to 2013, followed by Margaret and Steve. Jane also has the longest working experience as a Sales Support Agent. Margaret and Steve joined the company more than a year after Jane, but revenues were also strong. As a result, job experience is proportionate to sales contribution.
- Individual sales, on the other hand, have been inconsistent over the years.
Recommend:
- Manager utilizes Margaret and Steve's sales potential; they contribute significantly to sales. Empower and optimize Jane's sales skills.
- Consider annual bonus if sales targets are exceeded, and long-term growth.

#Appendix 3 – Consider **increasing** the media type category as an **AAC file** for **Apple users**

Transaction per Track of MediaType



- With 88% of track traded, **MPEG audio file dominates the market** because it is a standard MP3 file, the classic digital audio format and supported by the vast majority of devices.
- However, **AAC audio files are the default format for Apple products with superior sound quality**. Despite accounting for 7% of transactions, there is a significant potential for growth in the future as Apple devices become more popular.
Recommend:
- Consider **increasing** the media type category as an **AAC file for Apple users**.