

## BIPROJECT TCBDA14

# Happy Insurance LTD



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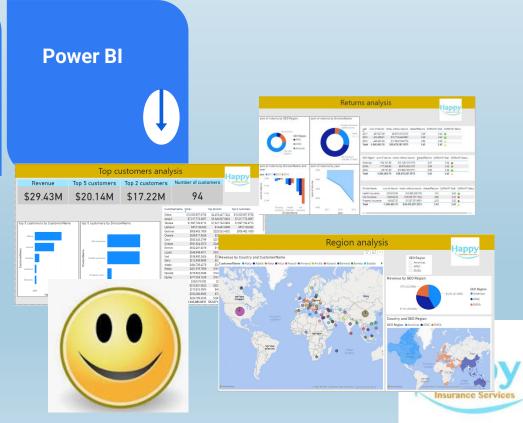
#### **Milestones**



Excel =

Power
Query
(Dim, Fact tables)

Power
Pivot 
Star
scheme



#### **Assumptions**

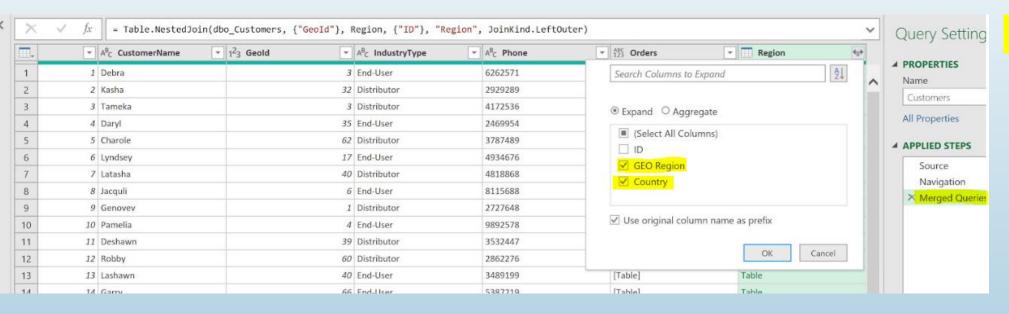
- 1. Negative revenue is refund to the customer.
- 2. Happy insurance started to be active in 2011.



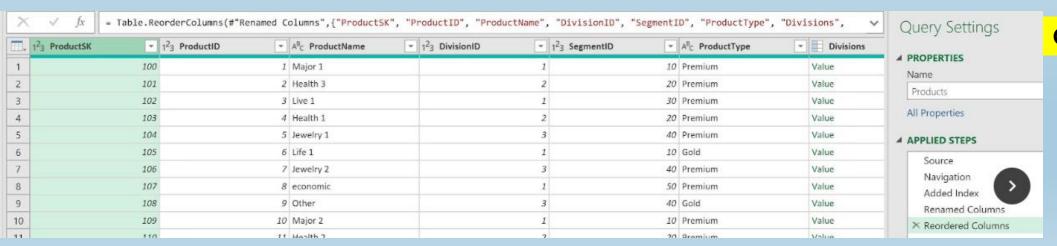
### **Problems**

Problem		Solution
Duplicate rows a table	ppeared in the fact	Not to create column Quarter and year in Dim Date merged with the fact table. The solution is to merge the column (imported from the orders table to the fact) to the existing DateKey in Dim Date (already created)
	vas displayed in ILS er were displayed in	Define the measure currency to dollar (USD)    Year   Revenue   Sameperiodlastyear growth
One of the Dim tak	oles did not load	Enter Power Query from the Power Bi interface $\rightarrow$ change the setting of the same table that was not loaded $\rightarrow$ Right click $\rightarrow$ enable data

#### The process- screen shots: Setting the data



Merge

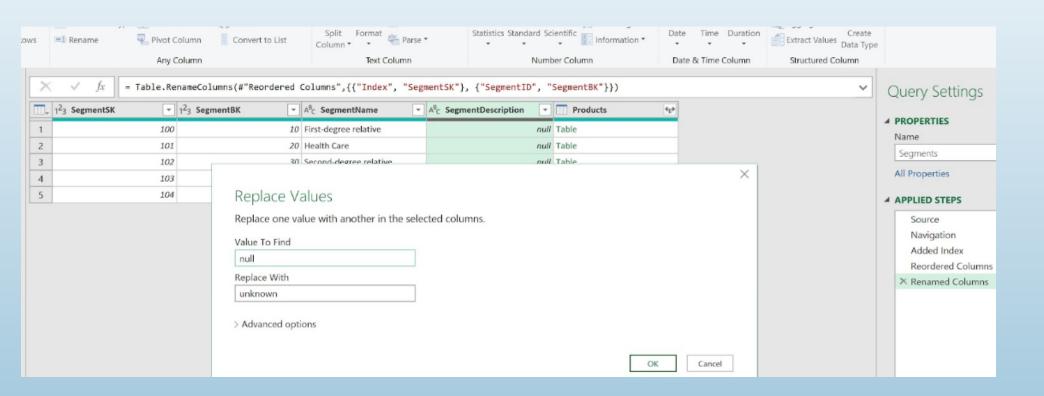


**Creating SK** 



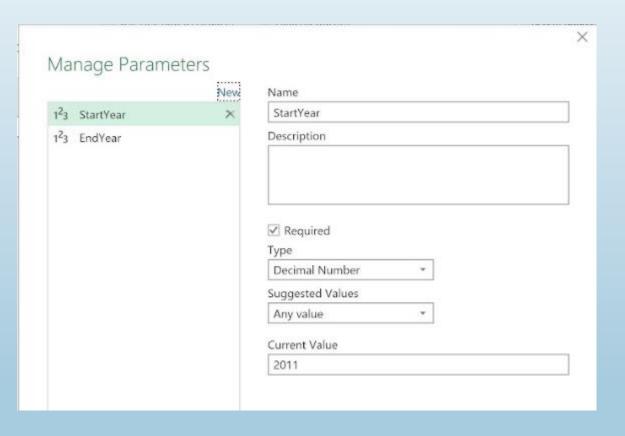
The process

#### **NULL** handling





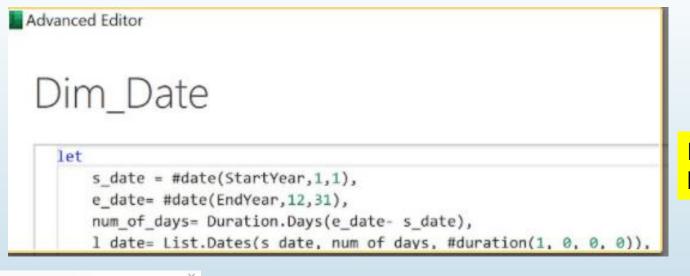
#### **Dim date**



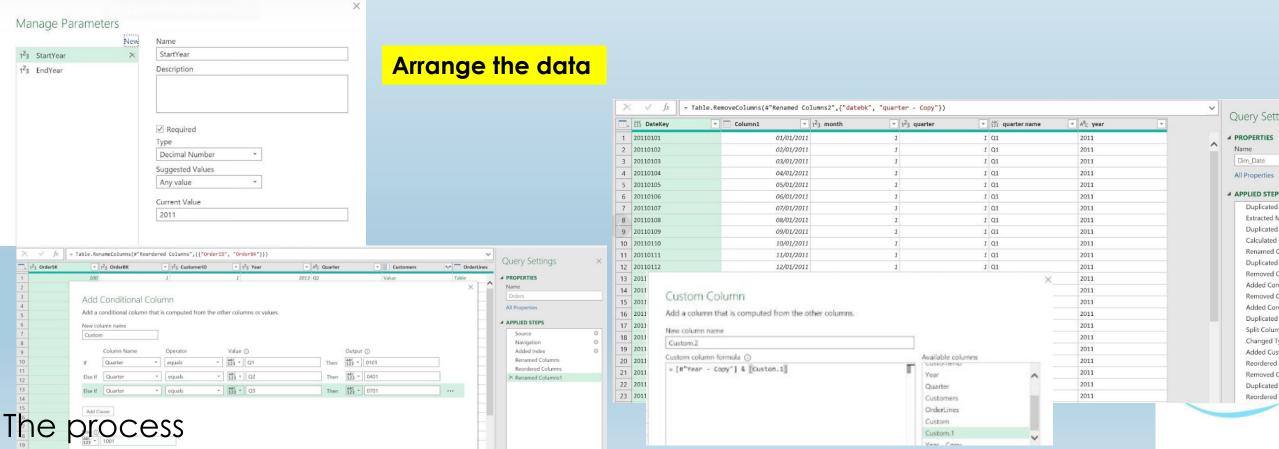
**Create parameters -**

- 1. StartYear
- 2. EndYear

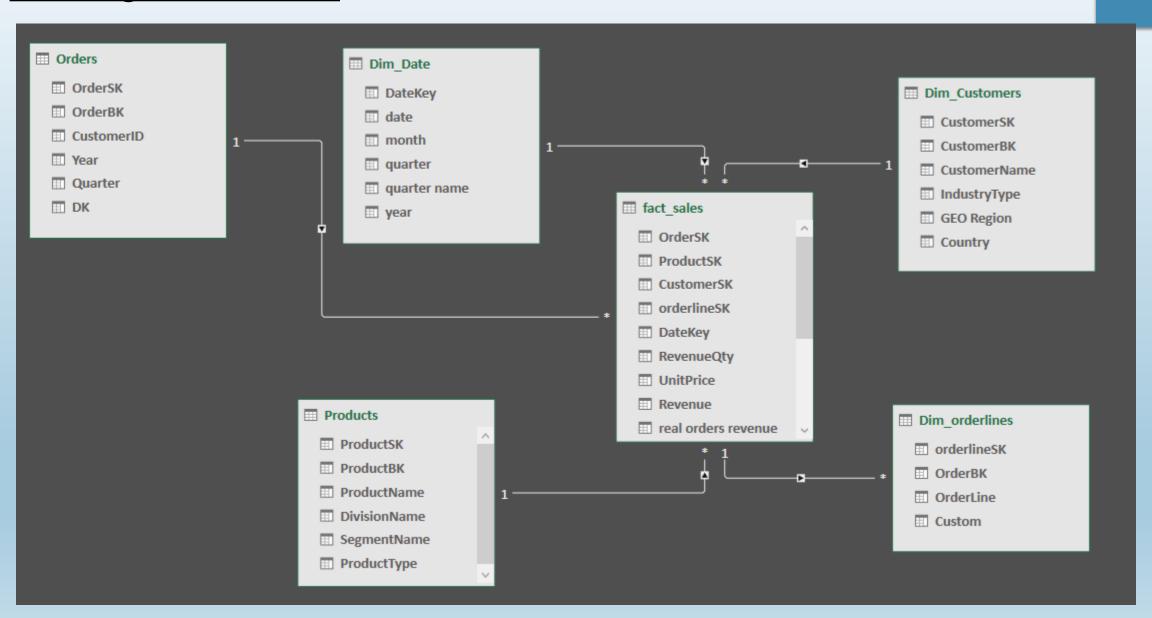




Implement Dim Date with M language

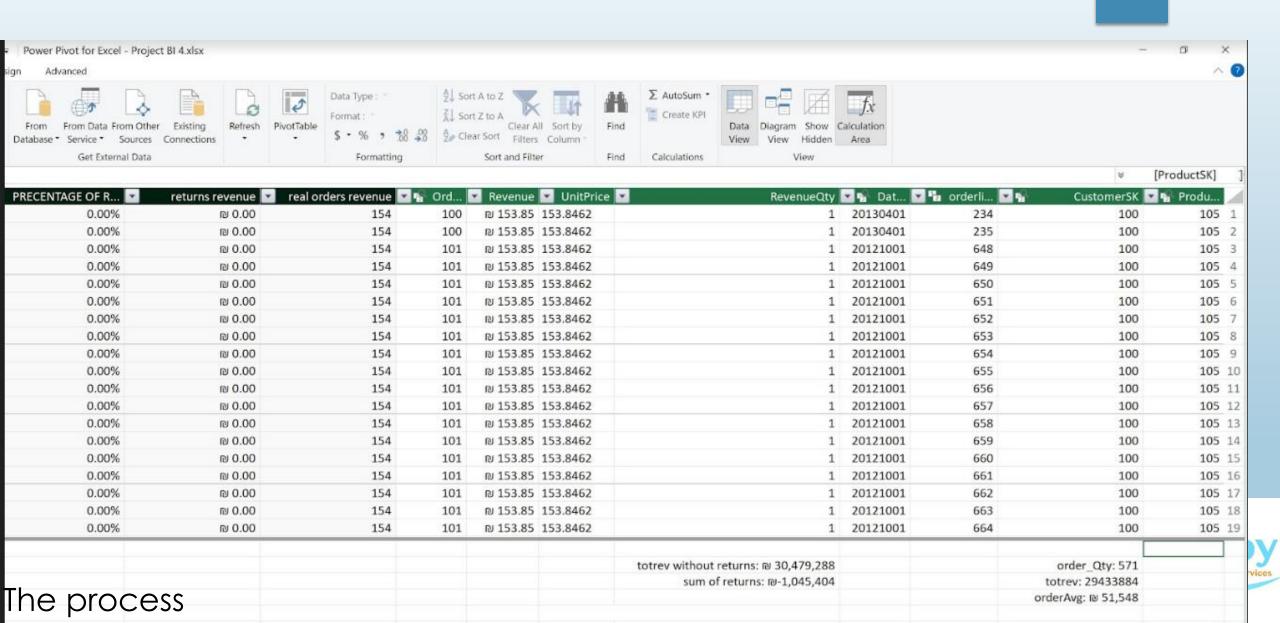


#### <u>creating Star scheme</u>





#### **Creating measures in Power Pivot**



#### Creating pivot tables and pivot charts

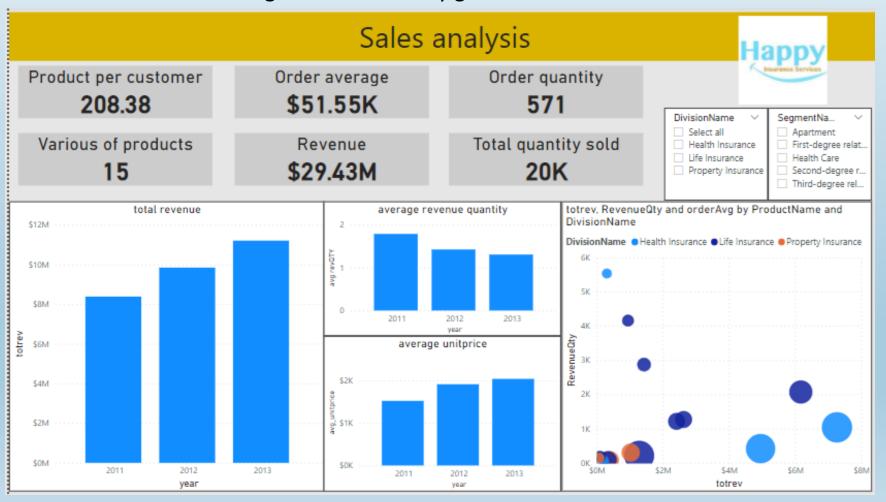




#### Sales analysis

In years 2012 and 2013

- orders quantity and the various of products per customer decreased but
- ☐ but the order average has consistently grown.

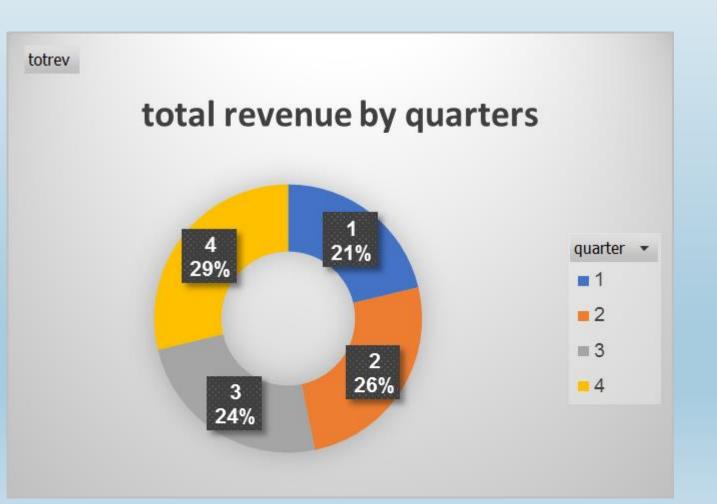


- This is because the average unit price has continuously grown between 2011-2012 and 2012-2013.
- The effect is that in 2012 the revenues were higher than the 2011 revenues, although less products were sold



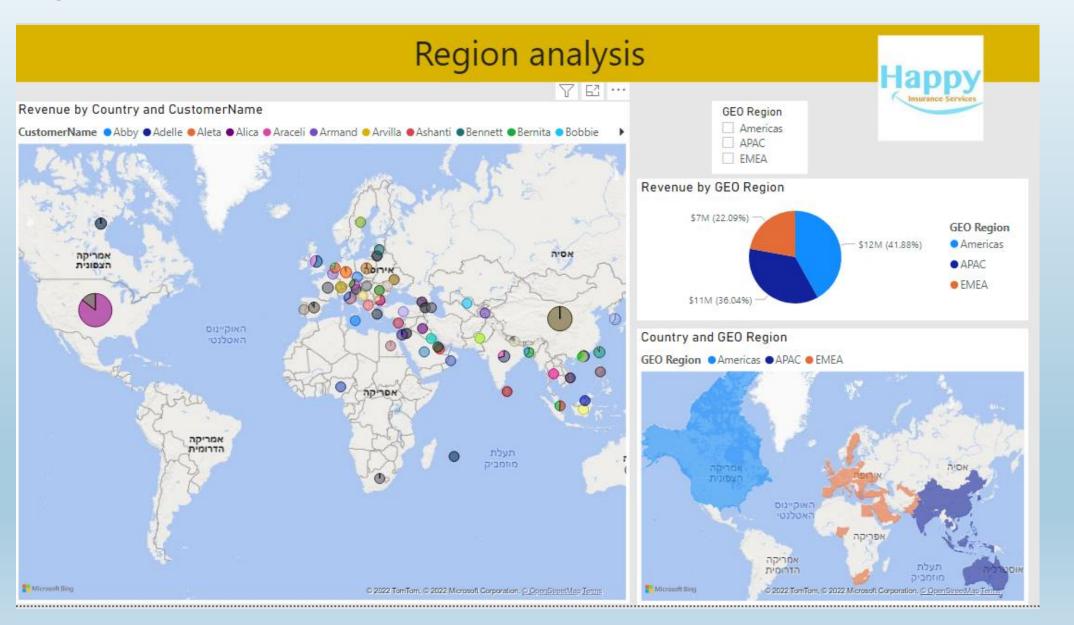
#### **Quarters**

There is a slight advantage to 4th quarter . but it is very small and insignificant. It might be affected from the sells of the closing year events.





#### **Region analysis**





The **American** market comprises only 2 countries (with vast majority of activities in the USA)

The **APAC** market is comprised of relatively high geographically dispersed — with each country has about 7% market share.

In **EMEA** the diversity is the largest, where each country holds less than 2% of market share.

- On the one hand, the spread of revenues makes the revenue flow more stable and resistant to local risks as political, military, local economy etc'.
- ♦ On the other hand, the operative complexity is significantly higher more local resources and employees are required higher operational costs should be assumed which lowers the profitability of the region



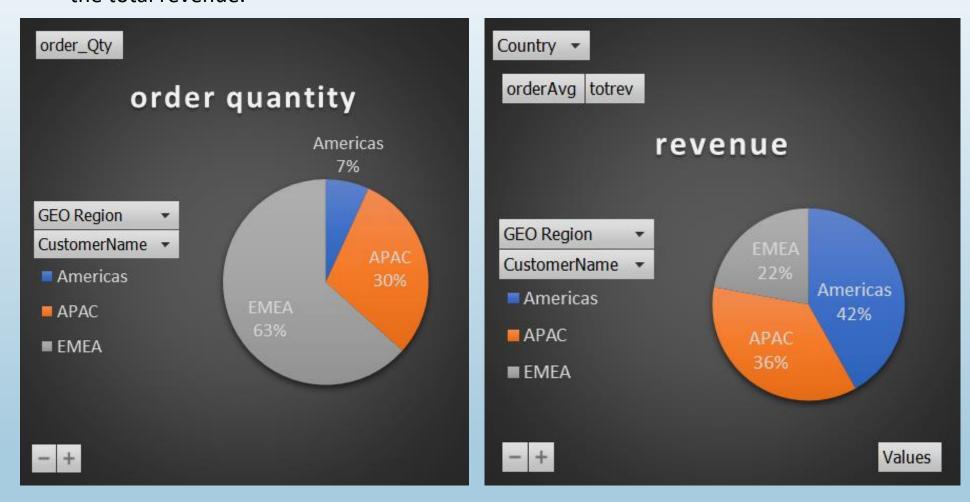






#### **Region analysis**

The American market is only 7% of the order quantity however this market is responsible for 42% of the total revenue.

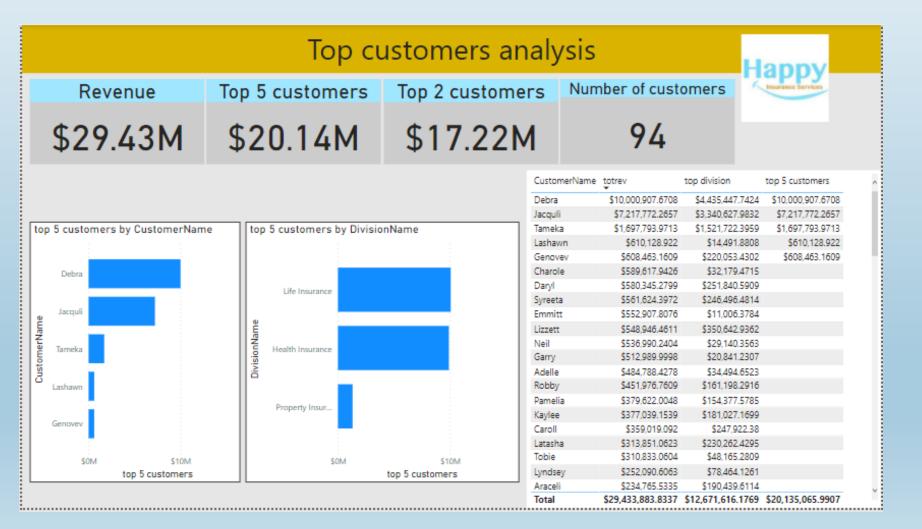


The Vast majority of the revenues is derived from the Americas and APAC. While the total America's orders is 39, APAC's customers ordered 170 orders. That means that the order average of the America's customers is significantly bigger

order_Qty	Row Labels
39	Americas <b>±</b>
170	APAC <b>●</b>
362	EMEA <b>⊕</b>
571	<b>Grand Total</b>

#### Top customers analysis

The Top five customers (there are 94 customers with orders) are responsible for 20 million dollar of the total revenue that sums at 29 million dollar. That means happy insurance company id reliable on those 5 customers.



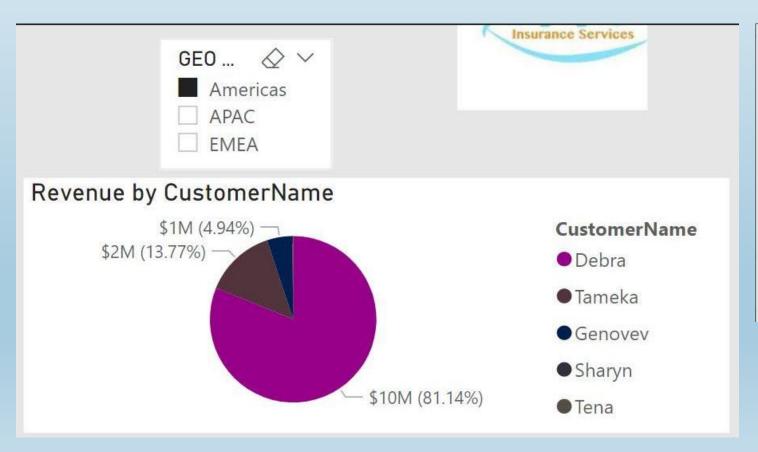


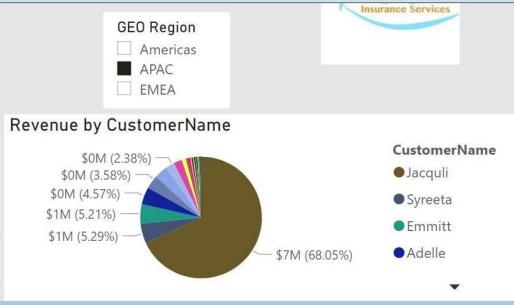
#### Top 2 customers

In the Americas the biggest customer is **Debra** and she is responsible for about 81% of each year revenues from this region.

In APAC the biggest customer is **Jackuily** and she is responsible for about 68% of the yearly revenues from this region.

Losing one or more of those 2 customers can bring Happy Insurance to insolvency in a flash.

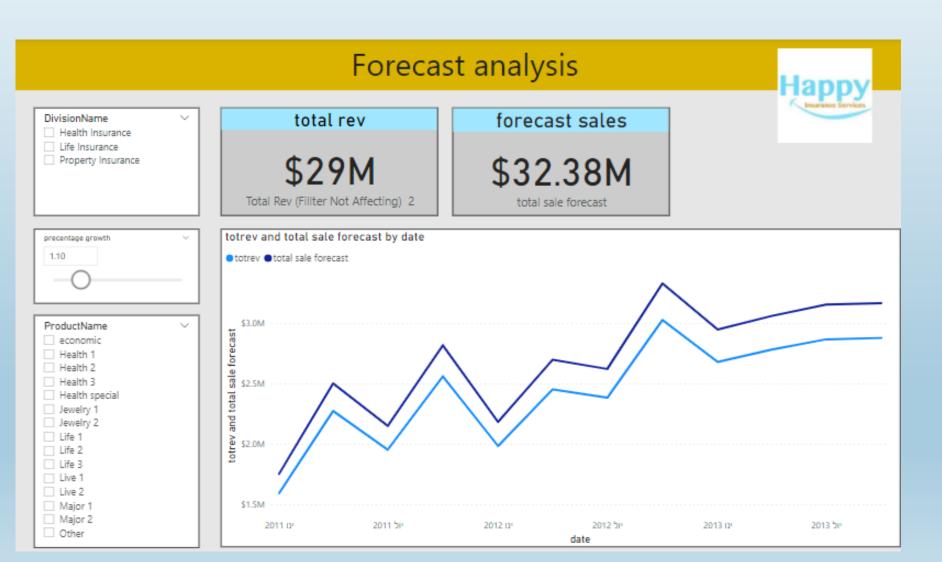






#### Forecast analysis

Using "what if" to show target of percentage growth.

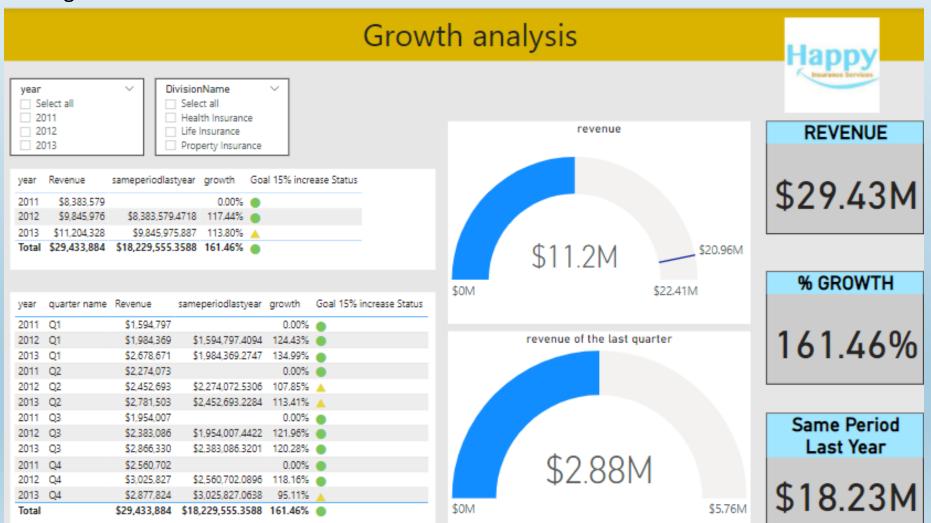




#### **Growth analysis**

Creating KPI to show hands on target.

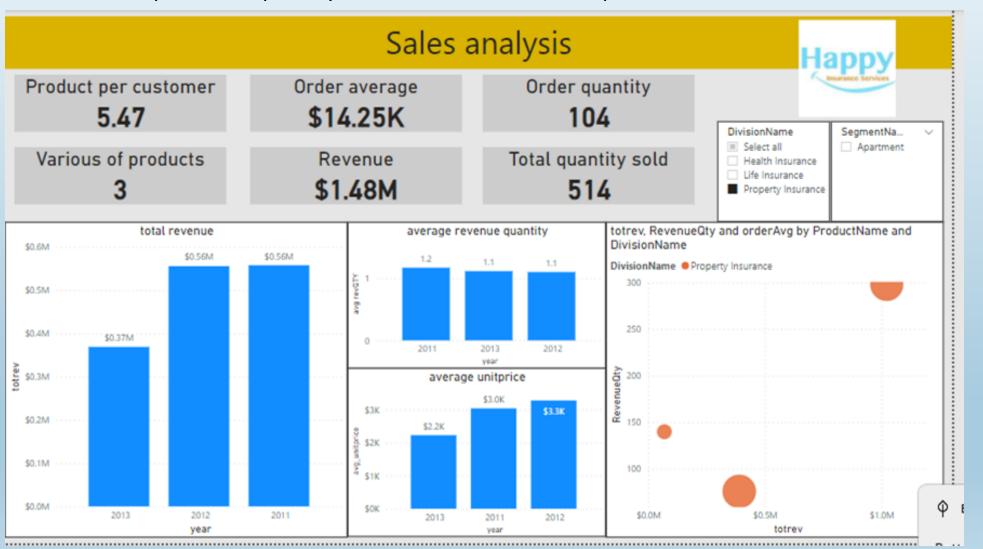
Target - 15% increase of sales.





#### <u>Division analysis- Property Insurance division</u>

- The property insurance is the least lucrative division.
- The total revenues from this division is only 1.48 M\$ for all 3 years.
- Both unitprice and quantity of sales decreased for this product\*\*\*



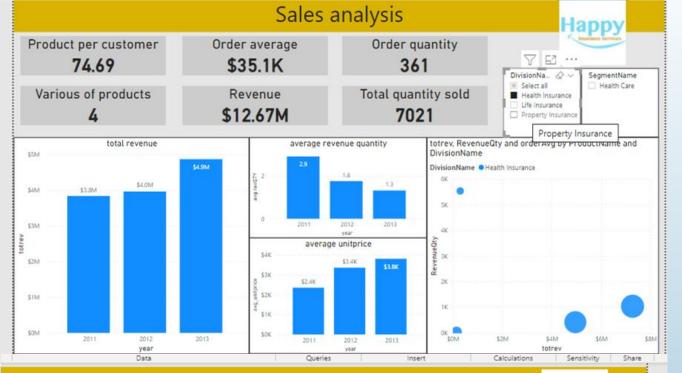


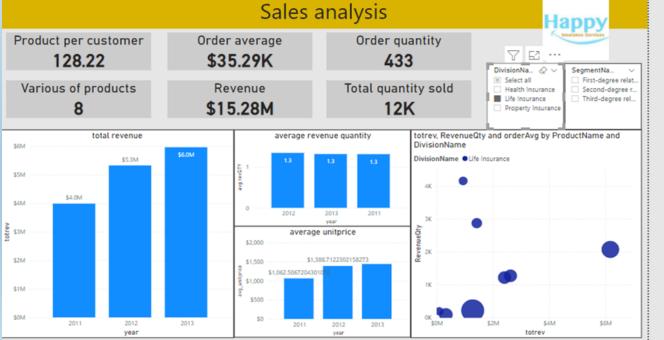
	2011	2013
Unit price\$	3,037	2,224
Average amount sold K\$	14	11



#### <u>Division analysis-</u> <u>Life and Health insurance</u> <u>divisions</u>

While the revenues in both life and health insurance are consistently increasing, it seem that Happy insurance is reducing the property division.

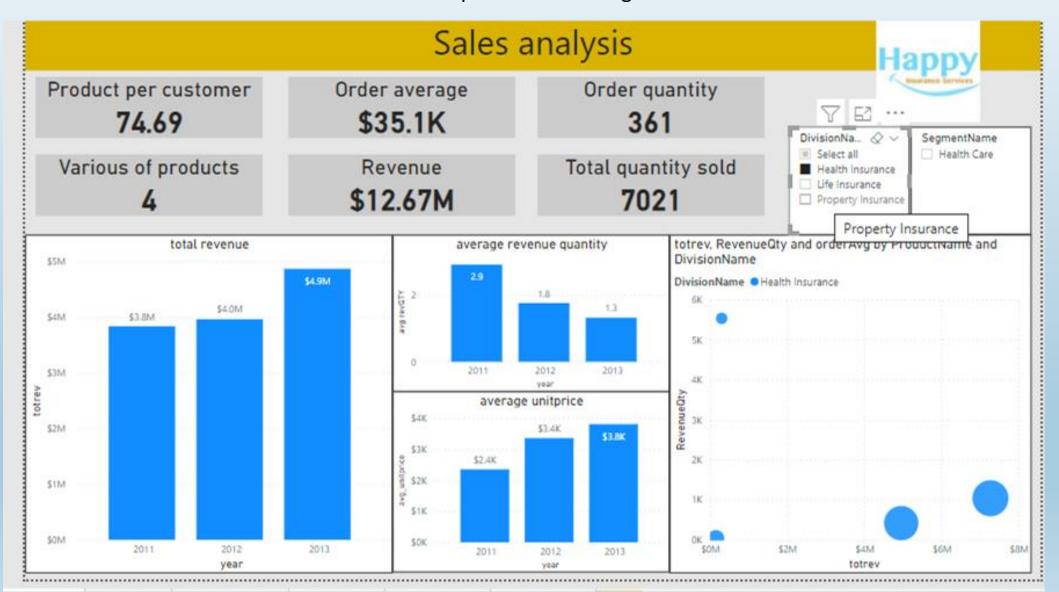






#### **Division analysis- Health Insurance**

In the health insurance division the order average is the largest due to the expensive unit price in this division. Which means that few orders are responsible for the good revenue.

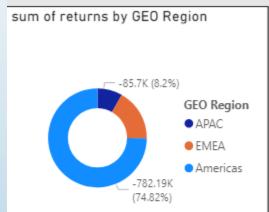


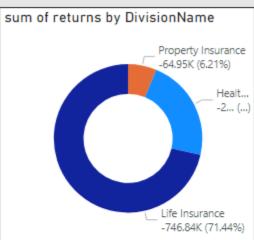


### Returns analysis

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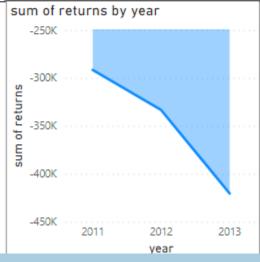






year	sum of returns	totrev without returns	share of Returns	SoRforKPI Goal	SoRforKPI Status
2011	-291,527.56	\$8,675,107.0273	3.36	3.42	
2012	-333,468.81	\$10,179,444.6981	3.28	3.42	
2013	-420,407.40	\$11,624,735.8719	3.62	3.42	<u> </u>
Total	-1,045,403.76	\$30,479,287.5973	3.43	3.42	_

sum of returns by DivisionName and year	
year ● 2011 ● 2012 ● 2013	
0.0M ···· M0.0	
-0.1M -0.2M -0.2M -0.2M	
ъ -0.2М ·····	
-0.3M	
Property Health Life Insurance Insurance Insurance DivisionName	



	GEO Region	sum of returns	totrev without returns	shareofReturns	SoRforKPI Goal	SoRforKPI Status
l	Americas	-782,191.98	\$13,108,133.7075	5.97	3.42	•
1	EMEA	-177,509.98	\$6,678,358.1227	2.66	3.42	
l	APAC	-85,701.80	\$10,692,795.7671	0.80	3.42	
l	Total	-1,045,403.76	\$30,479,287.5973	3.43	3.42	<u> </u>

DivisionName	sum of returns	totrev without returns	share of Returns	SoRforKPI Goal	SoRforKPI Status
Health Insurance	-233,612.58	\$12,905,228.755	1.81	3.42	•
Life Insurance	-746,843.93	\$16,026,707.1522	4.66	3.42	<b>•</b>
Property Insurance	-64,947.25	\$1,547,351.6901	4.20	3.42	•
Total	-1,045,403.76	\$30,479,287.5973	3.43	3.42	<u> </u>





#### **Returns analysis**

- ❖ KPI was created. The goal was defined as 3.42% (average of returns in the last 3 years + 10% = 4.1%)
  - ➤ Less than 3.42 < Green
  - ➤ Greater than 4.1 > Red
  - Between Yellow

Returns – over the years 2011-2013 the share of returns out of the revenues is basically constant at approx. 3% and relatively low – a vote of confidence of the company's customers.

It is possible that dividing the revenues into geographic segments reveals the cultural differences between the customers regions:

while <u>in APAC the customers do not tend to return their purchases (0.8%)</u>, customers in the <u>America's</u> are more picky and tend to <u>return more orders – (6%)</u> (<u>EMEA Customers</u> are somewhere in between, with a share of <u>returns of 2.7%</u>.

An alternative reason for the differences in share of return can be the diligent work of the company's employees in APAC that make an effort to custom the right product to the costumers needs (there is not enough data to show the actual reasons for the share of return differences). Regarding the share of return in the product segments, it is clear that the rate of return is significantly lower in the Health division (1.8%) as on the other 2 divisions the rate is higher than 4%.

year	sum of return	ns totrev	without	returns	shareof	Returns	SoRfo	rKPI Goa	SoRfo	rKPI St	atus	
2011	-291,527.5	66	\$8,675,1	07.0273		3.36		3.42				
2012	-333,468.8	31 \$	10,179,4	44.6981		3,28		3.42				
2013	-420,407.4	10 5	11,624,7	35.8719		3,62		3.42	_			
Total	-1,045,403.7	76 <b>\$</b> 3	0,479,28	7.5973		3.43		3.42	<u> </u>			
GEO R	legion sum o	f returns	totrev w	ithout re	eturns ş	hareofR	eturns	SoRforK	PI Goal	SoRfo	rKPI Status	
4meri	cas -78	2,191.98	\$13	,108,133	3.7075		5.97		3.42	•		
MEA	-17	7,509.98	\$6	,678,358	3.1227		2.66		3,42	•		
APAC	-8	5,701.80	\$10	,692,795	.7671		0.80		3,42	•		
Total	-1,04	5,403.76	\$30,	479,287	.5973		3.43		3.42	<b>A</b>		
Divisio	nName	sum of n	eturns t	otrev wit	thout ret	urns sh	areofRe	eturns S	oRforKP	l Goal	SoRforKPI	Stat
Health	Insurance	-233 (	512.58	\$12	,905,228	755		1.81		3.42		
	surance		843.93		026,707.1			4.66		3.42		
	rty Insurance		947.25		547,351.6			4.20		3.42	*	
Total	ny maarance	-1,045,4			79,287.5			3.43		3.42	Ĭ.	
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