

# CHANNEL REWAMP - CHARITY

# SIGMALYTICS



Sarah Hammoutene B00712035



André Faddoul B00724759



Dóra Kocsis B00714326



Noémie Quéré B00719656

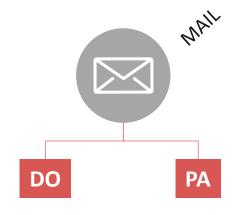
Group 1 - Tuesday

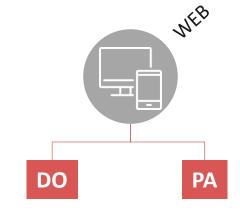
### **EXECUTIVE SUMMARY**

#### PROBLEM FORMULATION

### OUTLINE

#### 4 main channels exist:





First donation on Oct-2013



#### **CHANNEL ANALYSIS**

- Last 3 years considered as baseline for cross-channel comparisons
- Development of last 5 years considered for the more granular channel analyses



#### **SEGMENTATION**

Same process performed on each channel



#### **SEGMENT TRANSITIONS**

 Transition matrices are shown per channel over the last year divided into two 6-months-long periods



- Overall overview of channel performance
- Behavior of donators per channel
- Prediction of donator segments per channel
- Cross-channel transitions



#### **CUSTOMER LTV ANALYSES**

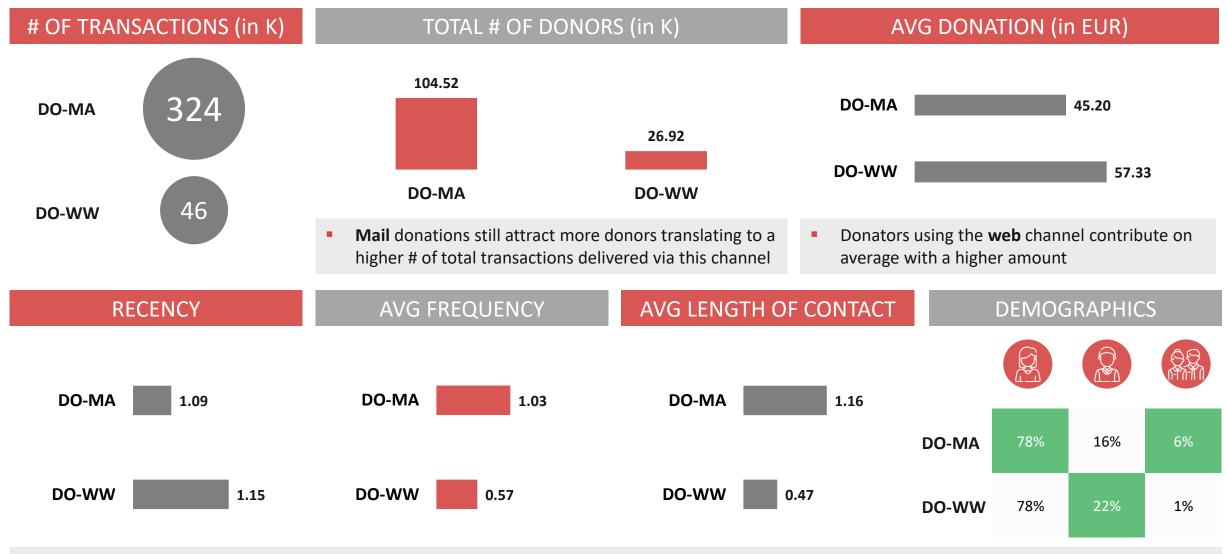
 Transition matrices are shown per channel over the last year divided into two 6-months-long periods



#### **CONCLUSIONS & RECOMMENDATIONS**

 Projections for # of donators for the next 3 years and expected revenues per channel are shown in this section

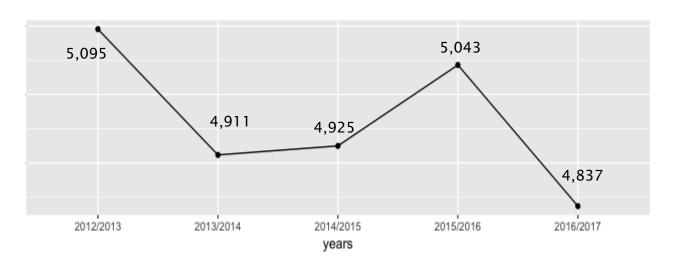
# **CHANNEL COMPARISON DASHBOARD:** DO



- While web donators made more recent contributions on average, donators using the **mail** channel contribute more than once every year on average over the last 3 years
- Demographic analysis on the # of transactions shows, that women donate more frequently, while there is a tendency towards web for men

# **CHANNEL ANALYSIS: DO-MAIL**

#### **EVOLUTION: AMOUNT DONATED (in EUR K)**



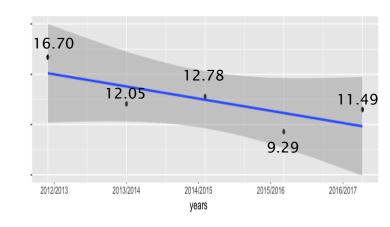
#### **HIGHLIGHTS**

- This year, the amount donated has reached its lowest in the past 5 years
- The evolution of donations have been on a slow decrease
- The donator acquisition rate has also been on a steady decrease
- 4 Concentration of donators in large cities and coastal areas

#### **EVOLUTION: # OF DONATIONS (in K)**

# 122 111 110 109 102

### **EVOLUTION: DONATORS ACQUIRED (in K)**

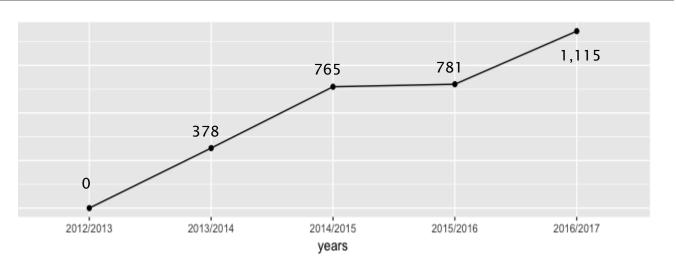






# **CHANNEL ANALYSIS:** DO-WEB

#### **EVOLUTION: AMOUNT DONATED (in EUR K)**



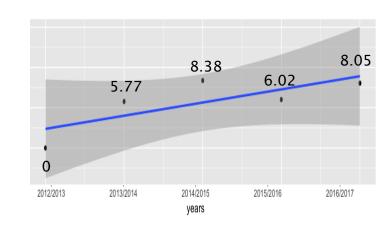
#### **HIGHLIGHTS**

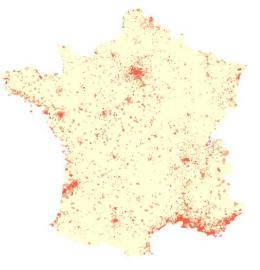
- The channel shows an increasing tendency for amount donated
- Number of donations made show a significant increase over the last year
- Acquired donators however couldn't restore 2014/2015 levels
- Donors are concentrated around main cities and the southern coastal area

#### **EVOLUTION: # OF DONATIONS (in K)**

# 2012/2013 2013/2014 2014/2015 2015/2016 2016/2017 years

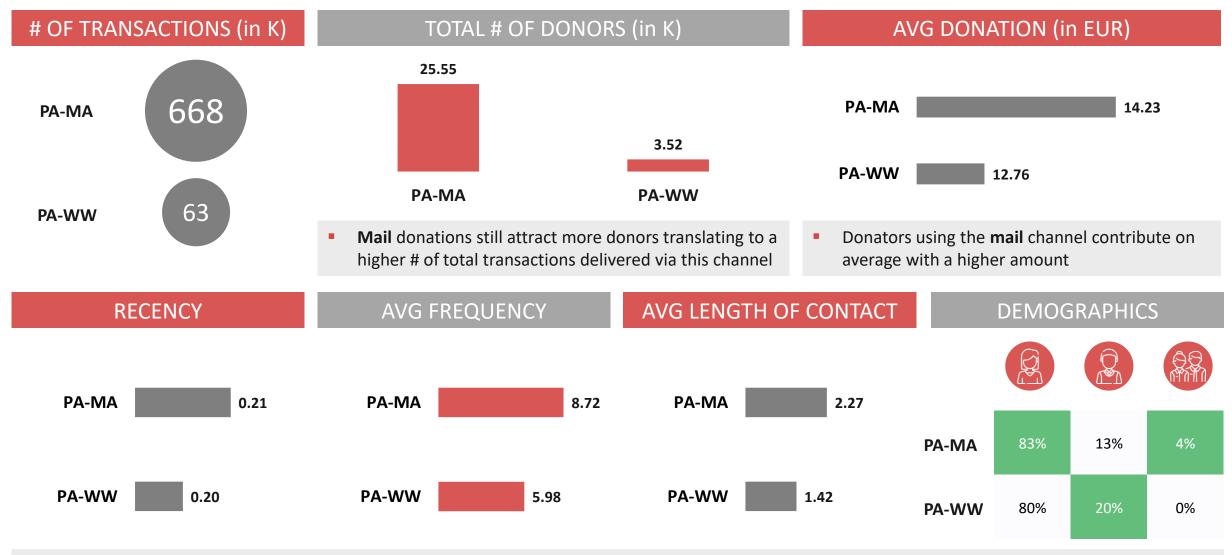
## **EVOLUTION: DONATORS ACQUIRED (in K)**







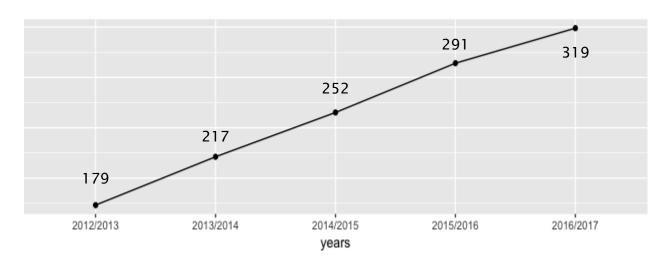
## CHANNEL COMPARISON DASHBOARD: PA



- Recency gap is abolished in channels for automatic deductions, while the more traditional mail channel leads with a considerable frequency difference, suggesting higher generosity for the channel.
- Demographic analysis on the # of transactions shows, that women donate more frequently, while there is a tendency towards **web** for men.

# **CHANNEL ANALYSIS: PA-MAIL**

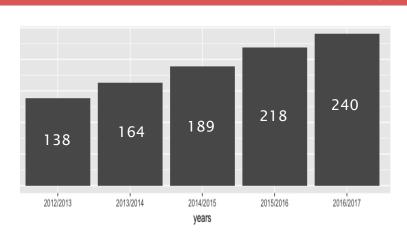
#### **EVOLUTION: AMOUNT DONATED (in EUR K)**



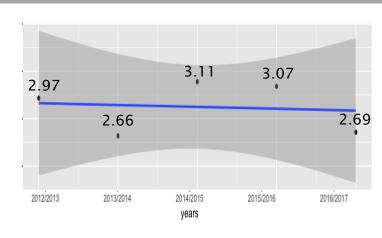
#### **HIGHLIGHTS**

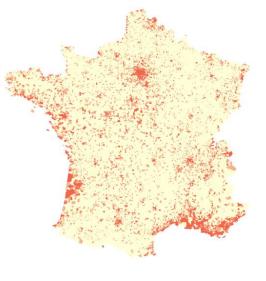
- 1 The channel shows a steady increase in amount donated
- The trend in the number of donations aligns with the increase in amounts suggesting no change in avg amount donated
- Donators acquired oscillate around 2.7-3K over the observed period
- Donors are concentrated around main cities and the southern coastal area

#### **EVOLUTION: # OF DONATIONS (in K)**



#### **EVOLUTION: DONATORS ACQUIRED (in K)**

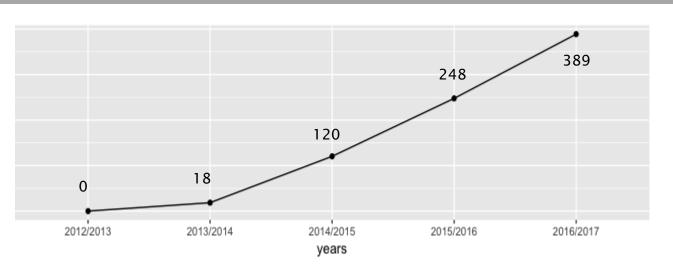






# **CHANNEL ANALYSIS: PA-WEB**





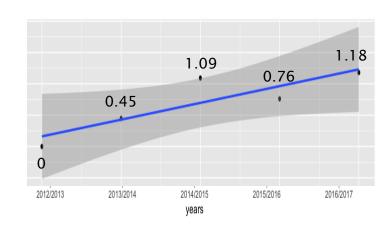
#### **HIGHLIGHTS**

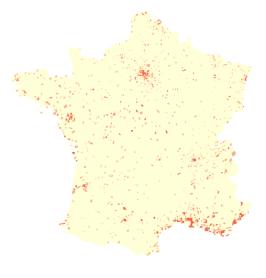
- 1 The channel shows a steady increase in amount donated
- The trend in the number of donations aligns with the increase in amounts suggesting no change in avg amount donated
- Donators acquired also show a steady increase to 1.18k in 2016=2017
- 4 Donors do not show apparent geographic concentration

#### **EVOLUTION: # OF DONATIONS (in K)**

# 2 10 20 2012/2013 2013/2014 2014/2015 2015/2016 2016/2017

# **EVOLUTION: DONATORS ACQUIRED (in K)**







# **DONOR SEGMENTATION**



The following variables were considered to establish donor segmentation: recency, first donation and generosity for each channel.

# **SEGMENT TRANSITION: DO-MAIL**

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	U. EU	10.16	-2017.	$\sigma \sigma$

	NEW DO MA	DO MA TOP	DO MA MIDDLE	DO MA BOTTOM	WARM DO MA	COLD DO MA	LOST DO MA
<b>NEW DO MA</b>	88%	1%	2%	3%	5%	0%	0%
DO MA TOP	0%	71%	23%	1%	3%	0%	0%
DO MA MIDDLE	0%	6%	68%	13%	10%	0%	0%
DO MA BOTTOM	0%	0%	8%	70%	19%	0%	0%
WARM DO MA	0%	1%	7%	12%	0%	77%	0%
COLD DO MA	0%	0%	4%	8%	0%	0%	86%
LOST DO MA	0%	0%	1%	1%	0%	0%	97%

#### PERIOD: 2016.06 – 2016.12

	<b>NEW DO MA</b>	DO MA TOP	DO MA MIDDLE	DO MA BOTTOM	WARM DO MA	<b>COLD DO MA</b>	<b>LOST DO MA</b>
<b>NEW DO MA</b>	15%	5%	15%	21%	39%	0%	0%
DO MA TOP	0%	69%	21%	1%	5%	0%	0%
DO MA MIDDLE	0%	10%	57%	13%	14%	0%	0%
DO MA BOTTOM	0%	1%	13%	58%	23%	0%	0%
WARM DO MA	0%	1%	9%	17%	0%	71%	0%
COLD DO MA	0%	1%	6%	13%	0%	0%	79%
LOST DO MA	0%	0%	1%	4%	0%	0%	94%

Over the second half of the calendar year there is a significantly higher transition from the new segment to the middle, bottom and warm segments suggesting a higher acquisition rate at this period the year before.

# **SEGMENT TRANSITION:** DO-WEB

DEDI	<b>OD</b> .	2016 12	-2017.06
FLN	DU.	<del>201</del> 0.12	. <del>– 20</del> 17.00

	<b>NEW DO WW</b>	DO WW TOP	DO WW MIDDLE	DO WW BOTTOM	WARM DO WW	COLD DO WW	LOST DO WW
<b>NEW DO WW</b>	65%	2%	4%	4%	18%	0%	0%
DO WW TOP	0%	73%	18%	2%	5%	0%	0%
DO WW MIDDLE	0%	7%	69%	7%	11%	0%	0%
DO WW BOTTOM	0%	1%	7%	70%	13%	0%	0%
<b>WARM DO WW</b>	0%	2%	7%	6%	0%	80%	0%
COLD DO WW	0%	1%	5%	4%	0%	0%	88%
LOST DO WW	0%	1%	2%	2%	0%	0%	94%

PERIOD: 2016.06 – 2016.12

	<b>NEW DO WW</b>	DO WW TOP	DO WW MIDDLE	DO WW BOTTOM	WARM DO WW	<b>COLD DO WW</b>	<b>LOST DO WW</b>
<b>NEW DO WW</b>	39%	2%	6%	6%	35%	0%	0%
DO WW TOP	0%	67%	18%	1%	9%	0%	0%
DO WW MIDDLE	0%	11%	54%	7%	18%	0%	0%
DO WW BOTTOM	0%	2%	12%	54%	23%	0%	0%
<b>WARM DO WW</b>	0%	1%	6%	6%	0%	81%	0%
COLD DO WW	0%	1%	4%	6%	0%	0%	83%
LOST DO WW	0%	0%	3%	3%	0%	0%	91%

The new-to-new transition rate between the two periods has a lesser gap than the one of the DO-MA segment, which suggests a more balanced acquisition over the year for Web in the regular donations.

# **SEGMENT TRANSITION: PA-MAIL**

DEDI	0.0	2046	4.0	004-	
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	OD.	$\angle U \perp U$		- 2017	.UU

	NEW PA MA	PA MA TOP	PA MA MIDDLE	PA MA BOTTOM	WARM PA MA	COLD PA MA	LOST PA MA
<b>NEW PA MA</b>	54%	19%	19%	2%	1%	0%	0%
PA MA TOP	0%	92%	3%	0%	0%	0%	0%
PA MA MIDDLE	0%	4%	86%	4%	2%	0%	0%
PA MA BOTTOM	0%	1%	21%	33%	42%	0%	0%
<b>WARM PA MA</b>	0%	0%	1%	1%	0%	94%	0%
COLD PA MA	0%	0%	0%	1%	0%	0%	97%
LOST PA MA	0%	0%	0%	0%	0%	0%	99%

#### PERIOD: 2016.06 – 2016.12

	<b>NEW PA MA</b>	PA MA TOP	PA MA MIDDLE	PA MA BOTTOM	<b>WARM PA MA</b>	<b>COLD PA MA</b>	<b>LOST PA MA</b>
<b>NEW PA MA</b>	34%	28%	23%	2%	1%	0%	0%
PA MA TOP	0%	86%	2%	0%	0%	0%	0%
PA MA MIDDLE	0%	4%	81%	4%	2%	0%	0%
PA MA BOTTOM	0%	1%	20%	33%	37%	0%	0%
WARM PA MA	0%	0%	0%	0%	0%	95%	0%
COLD PA MA	0%	0%	0%	0%	0%	0%	96%
LOST PA MA	0%	0%	0%	0%	0%	0%	98%

We notice a higher new-to-top transition for the second period, which implies that donor recruited towards the end of year tend to be more generous in their donation.

# **SEGMENT TRANSITION: PA-WEB**

DEDI	$OD_{i}$	2016	1 つ	2017	06
PEKI	OD:	2016.3	12 —	ZUII	.UD

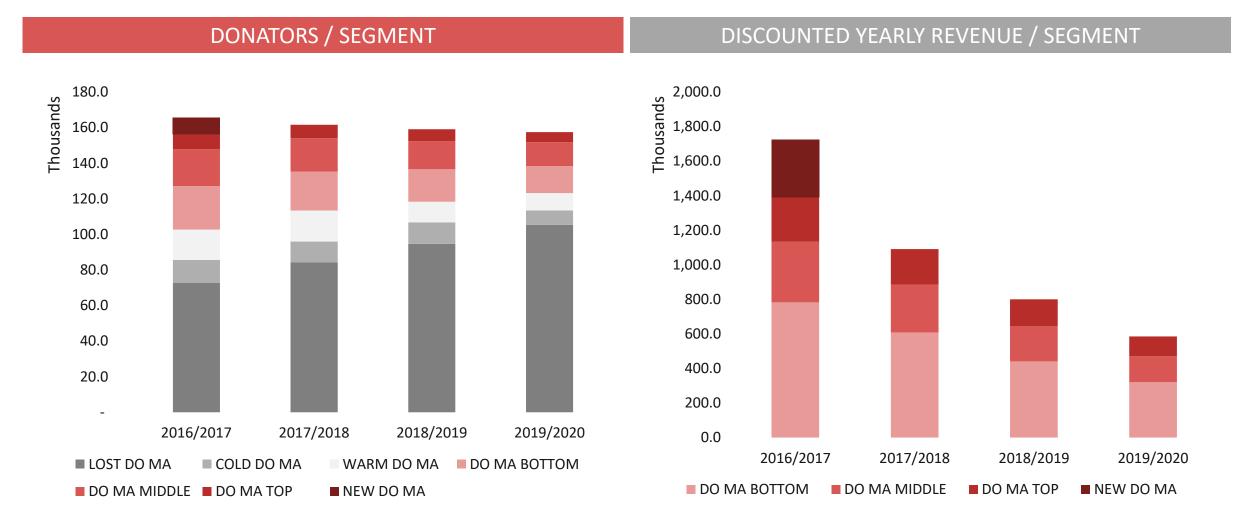
	<b>NEW PA WW</b>	PA WW TOP	PA WW MIDDLE	PA WW BOTTOM	WARM PA WW	COLD PA WW	LOST PA WW
<b>NEW PA WW</b>	66%	18%	11%	2%	1%	0%	0%
PA WW TOP	0%	93%	2%	1%	0%	0%	0%
<b>WARM PA WW</b>	0%	2%	2%	0%	0%	92%	0%
PA WW BOTTOM	0%	5%	34%	29%	26%	0%	0%
<b>PA WW MIDDLE</b>	0%	12%	76%	7%	3%	0%	0%
<b>COLD PA WW</b>	0%	0%	0%	0%	0%	0%	95%
<b>LOST PA WW</b>	0%	0%	0%	0%	0%	0%	97%

PERIOD: 2016.06 – 2016.12

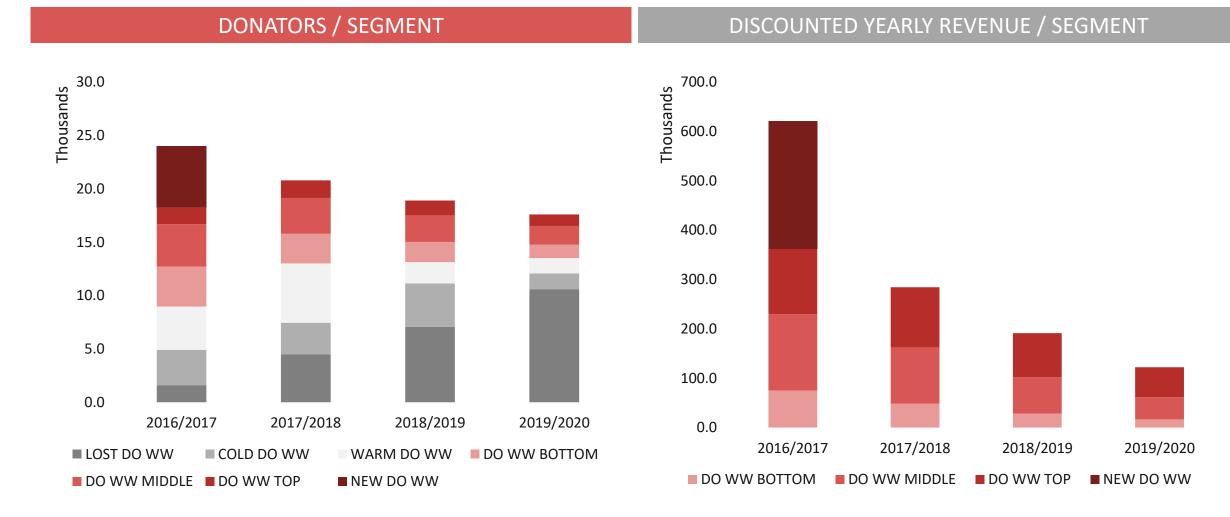
	<b>NEW PA WW</b>	PA WW TOP	PA WW MIDDLE	PA WW BOTTOM	<b>WARM PA WW</b>	<b>COLD PA WW</b>	<b>LOST PA WW</b>
<b>NEW PA WW</b>	46%	27%	15%	3%	1%	0%	0%
PA WW TOP	0%	88%	3%	0%	1%	0%	0%
<b>WARM PA WW</b>	0%	0%	0%	0%	0%	98%	0%
PA WW BOTTOM	0%	4%	22%	30%	37%	0%	0%
<b>PA WW MIDDLE</b>	0%	9%	76%	7%	2%	0%	0%
<b>COLD PA WW</b>	0%	0%	0%	0%	0%	0%	94%
<b>LOST PA WW</b>	0%	0%	2%	2%	0%	0%	95%

The PA payment type (MA-WEB) has a more homogeneous donator recruitment over the year than the DO, as its new-to-new transitions both have a 20% difference. However, the tendency of a higher recruitment rate in the first half of the year holds true for both payment types.

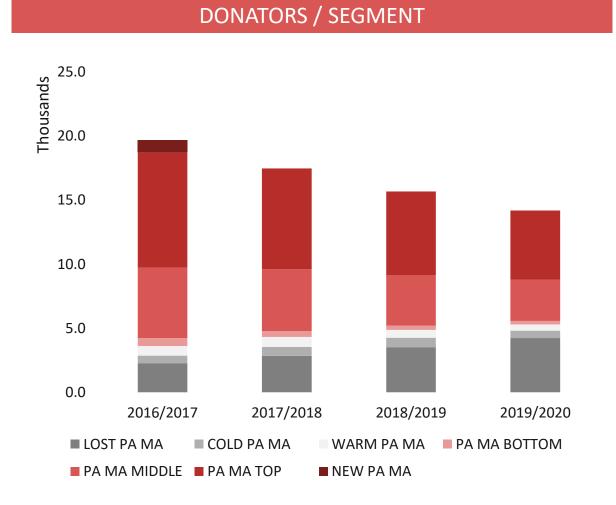
# **CUSTOMER LTV ANALYSIS: DO-MAIL**



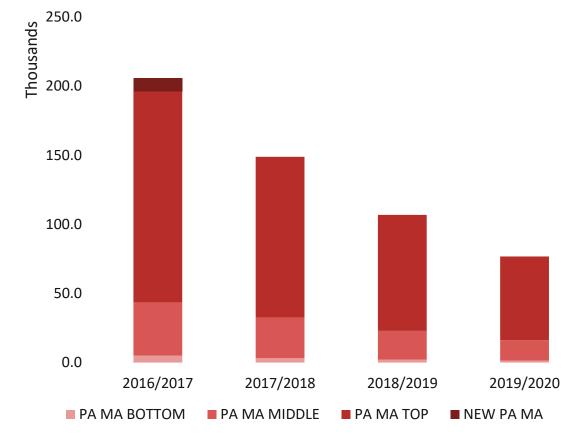
# **CUSTOMER LTV ANALYSIS: DO-WEB**



# **CUSTOMER LTV ANALYSIS: PA-MAIL**



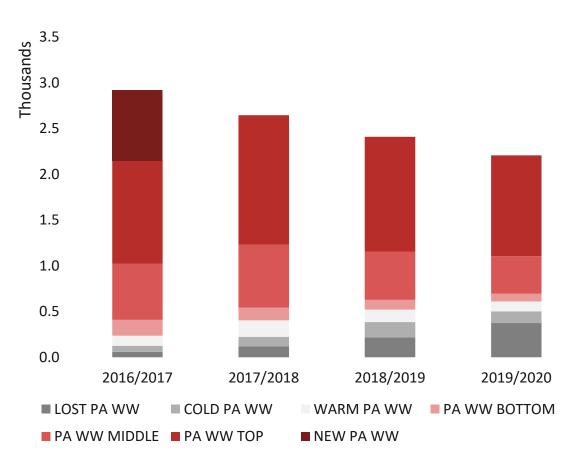
### DISCOUNTED YEARLY REVENUE / SEGMENT

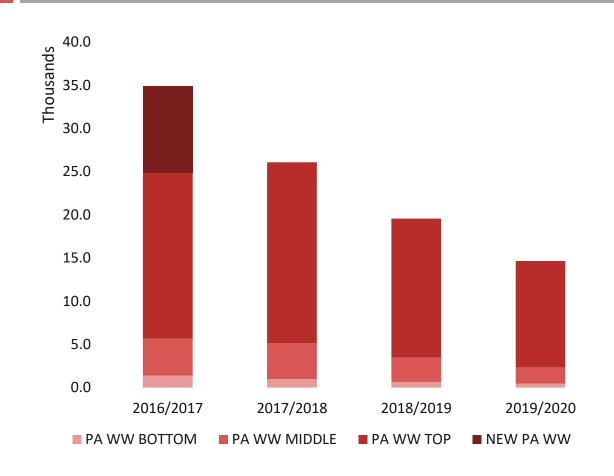


# **CUSTOMER LTV ANALYSIS: PA-WEB**



### DISCOUNTED YEARLY REVENUE / SEGMENT





# **CHANNEL TRANSITION & RECOMMENDATIONS**

PERIOD: 2016.12 – 2017.06

PERIOD: 2016.06 – 2016.12

	DO-MA	DO-WW	PA-MA	PA-WW		DO-MA	DO-WW	PA-MA	PA-WW
DO-MA	86%	1%	1%	0%	DO-MA	76%	2%	3%	0%
DO-WW	4%	78%	1%	1%	DO-WW	9%	60%	2%	1%
PA-MA	4%	1%	93%	0%	PA-MA	9%	1%	87%	0%
PA-WW	1%	1%	0%	94%	PA-WW	5%	3%	0%	89%

Donor tend to stay in the same channel, however DO-MA shows transitional tendencies towards DO-WW, and PA-MA

#### **ANOMALIES**

- The following anomalies were found during our analyses
- The database needs a clean structure to record payment methods for each channel considered

#### Mailing:

payment_method_id	count	total_amount
CB	11299	607800.09
PR	970433	12859668.56
VI	2516	144438.41

#### Web:

payment_method_id	count	total_amount
CH	2474	162166.27