

# *Customer Loyalty Programs and Privacy Concerns*

Oliver Hinz<sup>\*#</sup>, Eva Gerstmeier<sup>\*</sup>, Omid Tafreschi<sup>\*\*</sup>, Matthias Enzmann<sup>\*\*\*</sup>, Markus Schneider<sup>\*\*\*</sup>

\* School of Business and Economics, Goethe-University of Frankfurt

\*\* Research Group IT Security, Technische Universität Darmstadt,

\*\*\* Fraunhofer Institute SIT, Darmstadt

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# Customer Loyalty Programs (CLPs)



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# Objectives of CLPs

- Change consumers' behavior
  - Increase single-store loyalty
  - Decrease price sensitivity
  - Enlarge switching costs
  - Induce greater consumer resistance to solicitations of competitors
  - Dampen the desire to consider alternative brands
  - Encourage word-of-mouth support
  - Attract a larger pool of customers
  - Increase the amount of products bought
- Learn more about consumers' behavior
  - Intra-corporate, inter-branch, or even cross-company purchase patterns
  - knowledge allows for up- and cross-selling as well as for custom-tailored solicitations

# Categorization of CLPs

2 x 2 matrix: online/offline and privacy-friendly (PFCLP)/data-collecting (DCCLP)

Purpose	Offline	Online
<i>Increase in Switching Costs only (PFCLP)</i>	Point-based programs like Swops points (ESSO)	-
<i>+ Data Collection (DCCLP)</i>	Card-based programs like Payback, Miles & More	Online programs like Webmiles

# Privacy in the domain of CLP

- Information privacy one important issue of management practice (Mason 1986)
- Companies try to mitigate this concern by offering privacy policies regarding the collection, handling, and use of personal information and by offering benefits such as financial gains or convenience (Hann, Hui, Lee and Png 2006)
- For the offline world, vendors can target different segments using PFCLP and DCCLP whereas in Electronic Commerce reliable solutions for PFCLP are missing

# Aim of Project

- Does the concern for information privacy hinder the wide-spread use of CLP?
- Are there different consumer segments that need different CLP models?

# Methodology

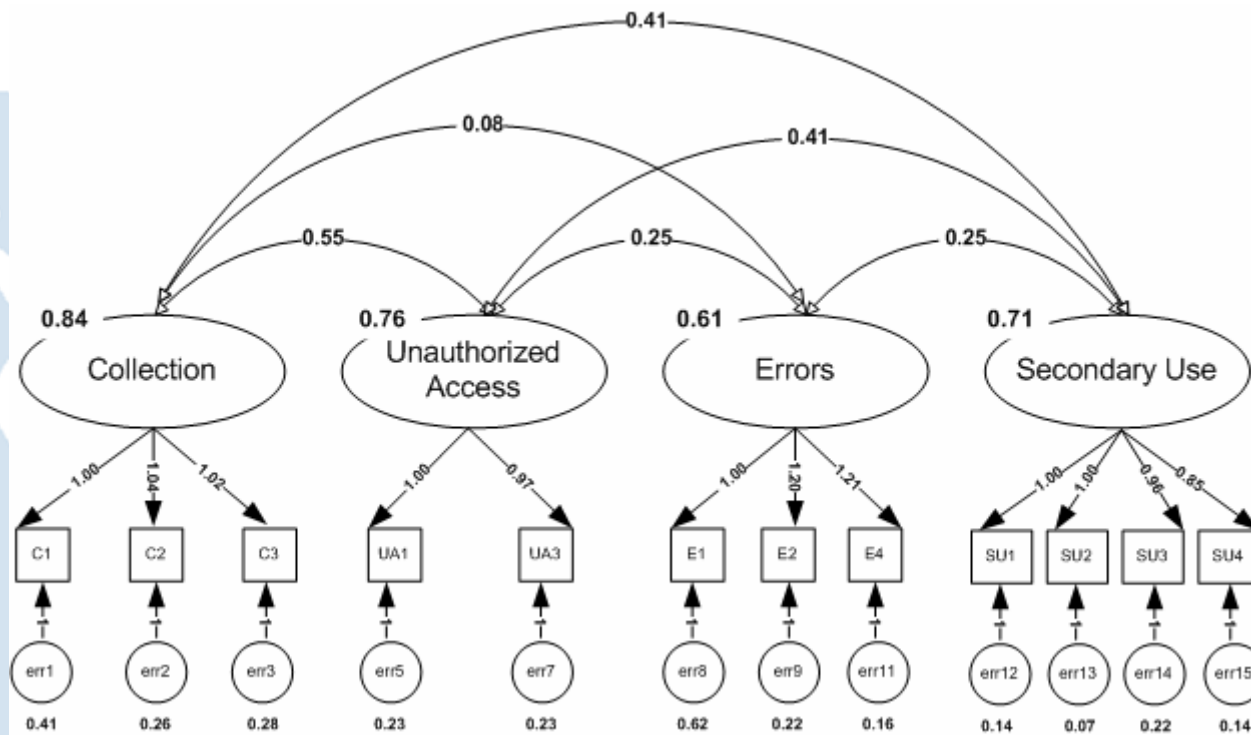
- Survey to segment prospective users by demographics and psychographics
- Identification of obstacles like Concern for Information Privacy (Stewart and Segars 2002), Computer Anxiety (Parasuraman and Igarria 1990), Behavioural Intention (Stone et al. 1983)
- Confirmatory Factor Analysis to confirm the constructs
- Regress demographics and psychographics on the propensity to participate in CLPs

# Data and Descriptive Analysis

- Data was obtained by using an online survey
- Survey was accessible for one month in 2006
- N=279 participants
- Majority between 20 and 30
- 187 male, 90 female, 2 missing
- 53.4% beneficial for both, seller and consumer; 36.2% only beneficial for seller, 2.9% only beneficial for consumer, 7.9% not beneficial at all
  - 7.9% exclusively in PFCLP, 14.3% exclusively in DCCLP, 26.5% both, 51.3% none
- Obstacles for participation: 27.6% privacy concerns, 22.2% convenience issues in registration phase, 19% sparse benefits

# Confirmatory Factor Analysis for CFIP

## 1/2



# Confirmatory Factor Analysis for CFIP

## 2/2

Measures of Model Fit	Original Model by [StSe02]	Parsimonious Model
NFI	.907	.962
GFI	.874	.943
AGFI	.820	.907
CFI	.930	.979
RMR	.092	.025

- Parsimonious Model works slightly better and is thus used for further analyses
- Overall, very good fit
- CFIP: every item is equally important in computing each factor and each factor is equally important in computing an overall score for CFIP

# CFIP

- Overall, a high score of CFIP in our sample (mean: 4 on a 5-point likert scale)
- However, large part of participants use CLP
- Very surprising: customers participating in DCCLP have higher CFIP than customers using PFCLP (4.120 vs. 3.718, ANOVA-significant  $p < 0.027$ )
- Participating in DCCLP may create awareness of privacy issues
- Causal relationship is not clear and might be interesting for further research

# Determinants of CLP Participation

Logistic model: propensity to participate (0/1) as dependent variable

	Coef.	Std. error	Wald	Sig.	Ex(B)
Factor Coupon Proneness	.868	.169	26.292	.000	2.383
Factor CFIP	-.407	.244	2.773	.096	.666
Factor Computer Anxiety	-.511	.202	6.399	.011	.600
Factor Behavioural Intention	.331	.192	2.985	.084	1.392
Gender (0: male, 1: female)	-.736	.296	6.207	.013	2.088
Gross Income (1: <1000€, 2: 1000-2000€, 3: 2000-3000€, 4: 3000-4000€, 5: 4000-5000€, 6: >5000€)	-.842	.906	.863	.353	.431
Constant	2.007	1.568	1.639	.200	7.444
-2 Log-Likelihood			336.762		
Cox & Snell R-Square			.145		
Nagelkerke R-Square			.194		

# Identification of Segments - Literature

Hann, Hui, Lee and Png (2006):

- “Information Sellers”: Unconcerned in terms of privacy
  - Assumption: Information Sellers can successfully be targeted with DCCLP
- “Privacy Fundamentalists”: Not willing to sell any kind of private information
  - Assumption: Fundamentalists can not be targeted with DCCLP regardless of incentives offered
- “Pragmatists”: Concerned about privacy but willing to sell private information for a reasonable amount of money

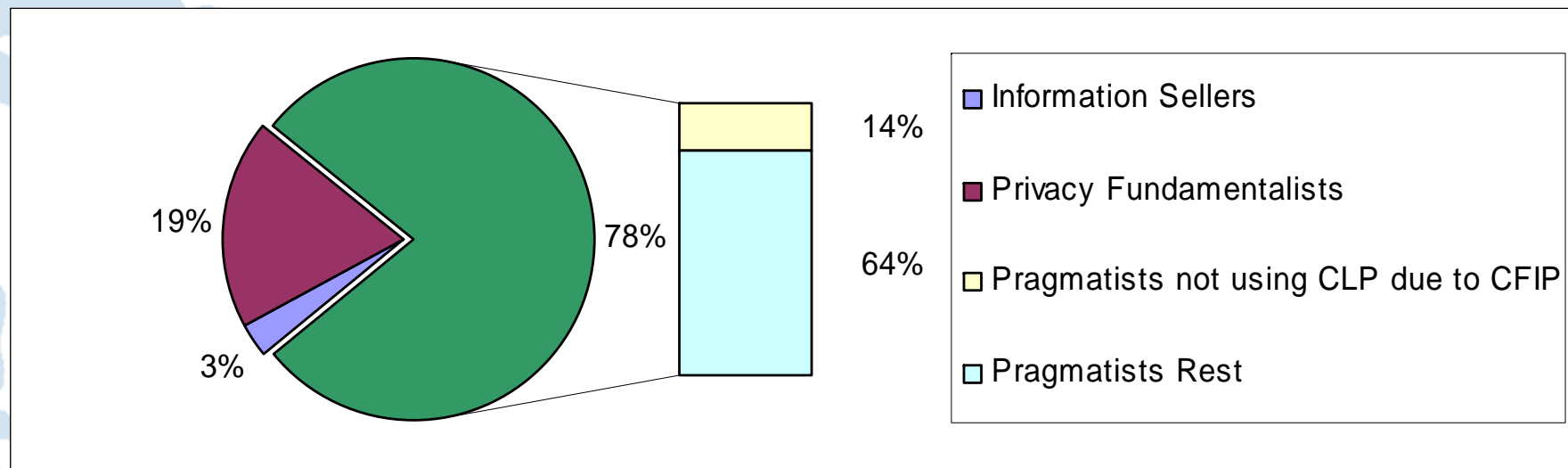
# Identification of Segments

## - Data Analysis

- Information Sellers:
  - 3.2% would sell private information for less than 5% discount
  - CFIP is significantly lower ( $p < 0.01$ ) for Information Sellers
  - Female ( $p < 0.057$ ) and high income ( $p < 0.01$ )
  - Low computer anxiety ( $p < 0.1$ )
- Fundamentalists:
  - 18.6% are not willing to sell private information for any amount
  - CFIP is very high ( $p < 0.01$ )
  - Above average male ( $p < 0.1$ )
  - Below average score on Trust (Costa and McCrae 1992) factor ( $p < 0.01$ )
  - Low score on computer anxiety ( $p < 0.01$ )
- Privacy Pragmatists:
  - Large Majority 78.2 %

# Identification of Segments

## - Overview



- 14.3% are not using CLP due to privacy concerns
- Implementation of an online PFCLP could address this segment

# Discussion

- Results confirms the general concern of online users regarding their privacy
- CFIP influences users' willingness to participate in online loyalty programs
- Untapped potential for Internet vendors: Segment consisting of customers who, in general, would like to participate in online loyalty programs, however, refrain from doing so because of privacy concerns
- One such system is proposed by co-authors
- Counter-intuitive finding: positive correlation between the participation in CLP and privacy concerns
- Limitation: homogenous sample
- Further research: Adoption of online PFCLP and drivers for the counter-intuitive finding with representative sample

# Thank you for your attention!

## Contact:

Oliver Hinz

Faculty of Economics and Business Administration  
Johann Wolfgang Goethe-University

Mertonstr. 17  
60054 Frankfurt am Main - Germany  
Tel.: +49 69-798-22379  
Fax: +49 69-798-28973  
E-Mail: [ohinz@wiwi.uni-frankfurt.de](mailto:ohinz@wiwi.uni-frankfurt.de)