

University of Groningen

## Linking the customer purchase process to website development and e-commerce performance

Krawczyk, Adriana Cecylia

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*

Publisher's PDF, also known as Version of record

*Publication date:*

2008

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Krawczyk, A. C. (2008). *Linking the customer purchase process to website development and e-commerce performance*. Enschede: PrintPartners Ipskamp B.V., Enschede, The Netherlands.

### Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

### Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

**Linking the Customer Purchase Process  
to Website Development and  
E-commerce Performance**

**Adriana C. Krawczyk**

Published by: SOM Research School  
University of Groningen  
PO Box 800  
9700 AV Groningen  
The Netherlands

Print: PrintPartners Ipskamp. B.V., Enschede

ISBN 978-90-367-3459-2  
978-90-367-3458-5

© 2008, Adriana C. Krawczyk

Alle rechten voorbehouden. Niets uit deze uitgave mag worden verveelvoudigd, opgeslagen in een geautomatiseerd gegevensbestand, of openbaar gemaakt, in enige vorm of op enige wijze, hetzij elektronisch, mechanisch, door fotokopieën, opnemen of enige andere manier, zonder voorafgaande schriftelijke toestemming van de auteur.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, including photocopying, recording or otherwise, without prior written permission of the author.

RIJKSUNIVERSITEIT GRONINGEN

Linking the Customer Purchase Process to Website  
Development and E-commerce Performance

Proefschrift

ter verkrijging van het doctoraat in de  
Economie en Bedrijfskunde  
aan de Rijksuniversiteit Groningen  
op gezag van de  
Rector Magnificus, dr. F. Zwarts,  
in het openbaar te verdedigen op  
donderdag 29 mei 2008  
om 13.15 uur

door

Adriana Cecylia Krawczyk

geboren op 20 november 1976

te Warszawa, Polen

Promotor : Prof. Dr. T. H. A. Bijmolt  
Copromotor: Dr. K.R.E. Huizingh

Beoordelingscommissie : Prof. Dr. J. C. Hoekstra  
Prof. Dr. D. Van den Poel  
Prof. Dr. P. C. Verhoef

*Moim Rodzicom – To My Parents*



# Acknowledgements

Groningen, summer 2000 – I came here to sail, and I grasped ‘Er gaat niets boven Groningen’<sup>1</sup>! So, I came back again for one year and again for much longer ☺

From being a sailor, via an exchange student, to becoming Ph.D. - how did I make such a path?

First, I was offered a job as a Ph.D. student, and I got an office with the view ☺ ...but a lot more was necessary to accomplish this path – the people that supported me along the way.

Primary, I am deeply grateful to my advisors.

Tammo Bijmolt, my promoter, he brought me to finish, and let me believe that I can make it. Tammo has this special quality to inject positive energy into people, which is crucial for a Ph.D. student. I appreciate to have a chance to work with such personality, with impressive knowledge and creativity. I learnt a lot about carrying research, statistical methods; I also learnt that good research project should have a ‘grapje’<sup>2</sup>.

I am grateful to Eelko Huizingh, my co-promoter, for investing his time and effort in my first research steps, especially, for being patient with my academic writing progress. It was rewarding when Eelko was fond of a piece I wrote. I recognize the value of what I learnt from him, and I know I got lessons from master.

When deciding to start my Ph.D. project, an important motive was that I will work with Janny Hoekstra. Indeed, it was a pleasure, and I learnt

---

<sup>1</sup> Er gaat niets boven Groningen: There is nothing (above) better than Groningen

<sup>2</sup> Grapje: surprise, joke ☺

a lot. In addition, I appreciate very much our great lunches and talks, and that when necessary I could share and discuss different problems.

Furthermore, I would like to thank the members of the reading committee, Janny Hoekstra, Dirk Van den Poel, and Peter Verhoef for their effort, and also prompt and constructive comments that improved this thesis.

Next, it was enjoyable to be a part of the Marketing Department - nice people, surprising department outings, inspiring seminars, gezellig Sinterklaas evenings and VVuitjes. Thanks to my officemates for keeping fingers crossed before important appointments, the tradition of officemates-dinners and to Sara Kremer for the longest period of pleasant officemate ship. I appreciate all support received over these years from Jeannette Wiersema and Hanneke Tamling. Besides, I had a great cooperation with Ernst Osinga in the first year of my Ph.D. project.

I am grateful to Thijs Broekhuizen and Richard Jong A Pin for their extra statistical aids. Also, thanks to Harry Panagopulos for professional support with English and enduring my time pressure.

I am happy that I had here Johanna Schönrok and Nonna Turusbekova, thanks for all these years of fantastic meetings, sharing joys and sorrows of phd-student-life and more. Also, I always could count on Aurora Batinas, Tra Pham, Nadia Gaydarska and Fang. The cross-European meetings and skype with Anna Woźniak, Agnieszka Bożyk and Agnieszka Morel (Fraczek) were energy-restoring. Two wonderful families took care of me: Els and Laurens de Lange made me feel in Groningen like at home, and I appreciate care of Nora and Simon Bell. And I thank the rest of my dear friends: believe me; to describe all support I received from them would require an extra chapter.

Next, my hearty thanks go to Anton Sugonyako for extra shifts after his work to make the layout of this thesis, for his patience and care, when I was under pressure of finishing Ph.D. and most of all, for being so close even though being so far.

Finally, my wholehearted gratitude is for my closest family.

My brothers, Karol and Bartek Krawczyk, are supporting me with everything, any time, any place and always. It is an honor to have them as paranymphs and that I will enter the defense aula in between two of them, and I know it will give me extra strength, as it gives extra strength in life having such wonderful brothers.

I had so many encouraging talks with my sister-in-law Aldona Krawczyk, and I am also grateful to her for revealing me the secrets of relaxation techniques.

Yet, the most soothing was the time with my nieces, Aleksandra and Gabriela – they bring so much beauty and joy to life.

Most of all, I would not make it without wonderful support of my Parents, Bogumiła and Adam Krawczyk. Every visit at home was regenerating, and their care and motivating support is priceless.

„Mama i Tata, dziękuję Wam za bezwarunkowe wsparcie i wiarę we mnie, za wysiłek i determinację żeby mnie wyedukować. Jestem z Was dumna. Mój doktorat to nasze wspólne osiągnięcie.”

All in all, doing Ph.D. was a very challenging mission, required high determination and hard work. But most of all it was a fantastic experience, knowledge expanding and self-development period, full of great moments, people, and travels. These years in Groningen are unforgettable, especially, the view on Trompbrug<sup>3</sup>.

Adriana Krawczyk

Groningen, April 2008

---

<sup>3</sup> Trompbrug – swing bridge from 1879, view from my windows ☺



# Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Importance of e-commerce .....	1
1.2	Customer purchase process.....	3
1.3	Goal of the thesis .....	4
1.3.1	Research problems .....	6
1.4	Outline of the thesis .....	8
<b>2</b>	<b>Stages of Website Advancement: Assessment based on Goals to Support the Customer Purchase Process</b> .....	<b>11</b>
2.1	Introduction.....	12
2.2	Conceptual framework.....	14
2.2.1	Customer value.....	14
2.2.2	Stages of website advancement.....	15
2.2.3	Website goals .....	18
2.2.4	Firm and industry characteristics .....	20
2.3	Study design.....	21
2.3.1	Sample.....	21
2.3.2	Measurements.....	22
2.3.3	Model .....	24
2.4	Results.....	26
2.4.1	Model selection .....	26
2.4.2	Dimensions of website advancement .....	27
2.4.3	Hierarchies of website goals.....	31
2.4.4	Effects of firm and industry characteristics.....	33
2.5	Conclusion and discussion.....	35
	<b>Appendix I</b> .....	<b>41</b>

<b>3</b>	<b>Transactional and Informational Functions of Websites: Which is More Important for Success?.....</b>	<b>45</b>
3.1	Introduction.....	46
3.2	Conceptual framework.....	47
3.2.1	Informational and transactional website functions.....	47
3.2.2	Website functions and success .....	48
3.2.3	Chain of performance measures .....	49
3.2.4	Constructs.....	50
3.2.4.1	Informational and transactional success.....	50
3.2.4.2	Overall website success and company performance.....	52
3.2.4.3	Website features.....	53
3.3	Methodology.....	54
3.3.1	Sample characteristics .....	54
3.3.2	Measurements.....	54
3.3.2.1	Performance measures.....	54
3.3.2.2	Measurement of website features.....	56
3.3.2.3	Formative and reflective constructs.....	57
3.3.3	Methodology .....	59
3.4	Results.....	60
3.4.1	The model fit .....	60
3.4.2	Measurement model results.....	60
3.4.3	Structural model results.....	61
3.4.4	Alternative models specifications .....	63
3.5	Conclusions.....	63
	<b>Appendix II.....</b>	<b>69</b>
<b>4</b>	<b>The Effect of Complaint Behavior and Service Recovery Satisfaction on Intentions to Repurchase on the Internet .....</b>	<b>73</b>
4.1	Introduction.....	74
4.2	Conceptual development.....	75
4.2.1	Satisfaction with online purchases .....	75
4.2.2	Complaint behavior about online purchases .....	76
4.2.3	Past purchase behavior and consumer characteristics .....	80

4.2.4	Country groups.....	80
4.2.5	Research framework.....	81
4.3	Study design.....	82
4.3.1	Survey description.....	82
4.3.2	Measurements.....	82
4.3.3	Sample description.....	84
4.3.4	Methodology.....	84
4.4	Results.....	85
4.5	Discussion.....	91
4.5.1	Conclusion.....	91
4.5.2	Managerial implications.....	93
4.5.3	Limitations and future research.....	95
	<b>Appendix III.....</b>	<b>99</b>
<b>5</b>	<b>Discussion and Implications.....</b>	<b>103</b>
5.1	Summary of the findings and theoretical implications.....	103
5.2	Managerial implications.....	108
5.3	Future research.....	109
	<b>Summary.....</b>	<b>113</b>
	<b>Samenvatting.....</b>	<b>121</b>
	<b>References.....</b>	<b>129</b>

