

Managing the Personalization-Privacy Paradox: a Systematic Literature Review

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Tensions arise when using data for personalisation

- Privacy
 - Control over access to personal information
- Privacy paradox
 - People say they are concerned about privacy
.....but in practice they share all of their data for free
- Personalisation
 - Better customer satisfaction
 - Enhanced purchase intention



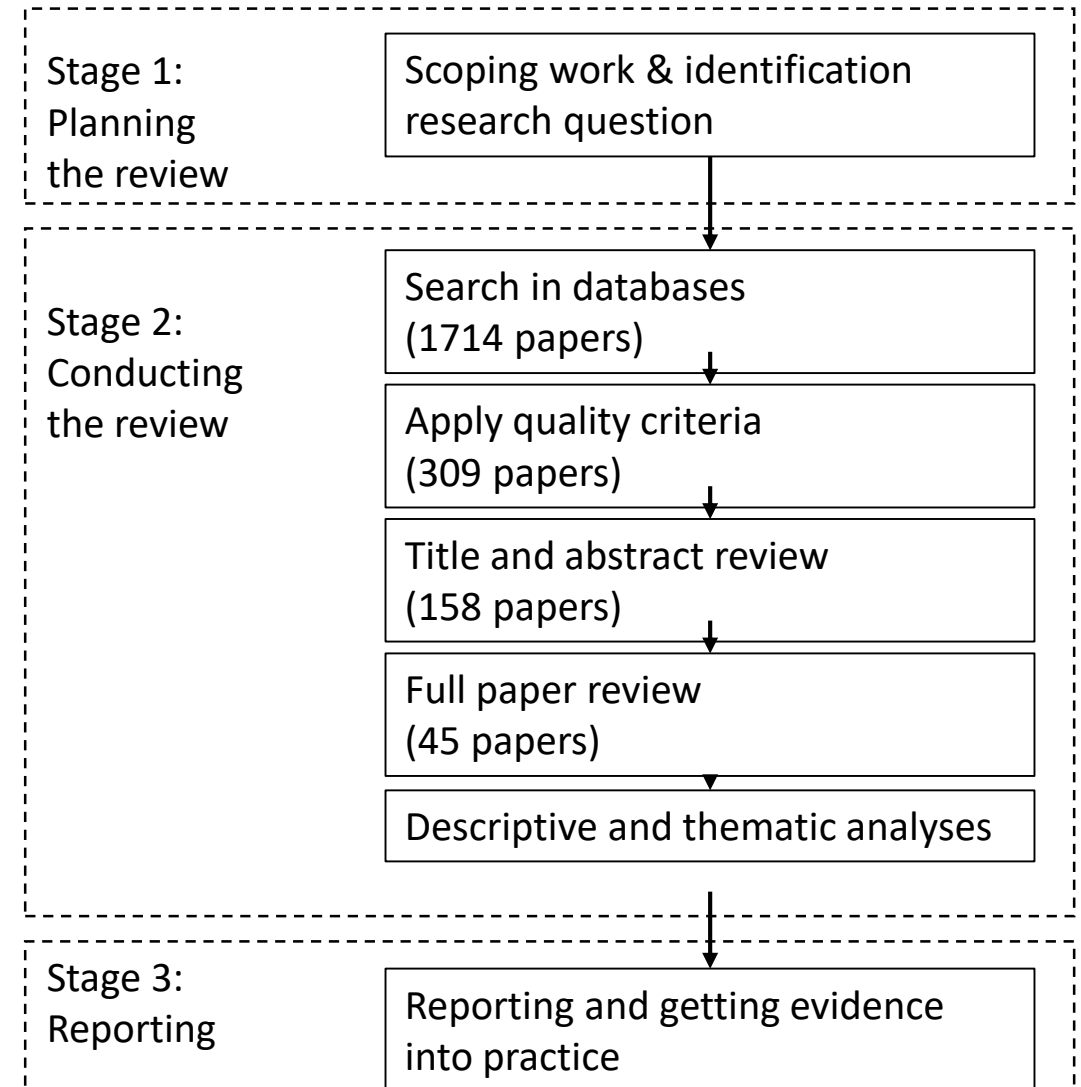
How do we find balance?

- Personalisation-Privacy Paradox
 - Firms need personal information to provide personalised services
 - Consumers '*express*' that they have privacy concerns
 - In seeking to create a personalised service to gain customers, firms may lose customers
 - and a company having too much insight into us is seen as 'creepy'
- Firms need to deal with the paradox to gain benefits
- Research question:
 - How do organisations best manage the Personalisation-Privacy Paradox?



Systematic Literature Review (SLR)

- Originally developed in the medical field
- Traditional narrative literature review
 - based on heuristic search
- SLR aims to make the review process transparent and as reproducible as possible (Tranfield et al., 2003)



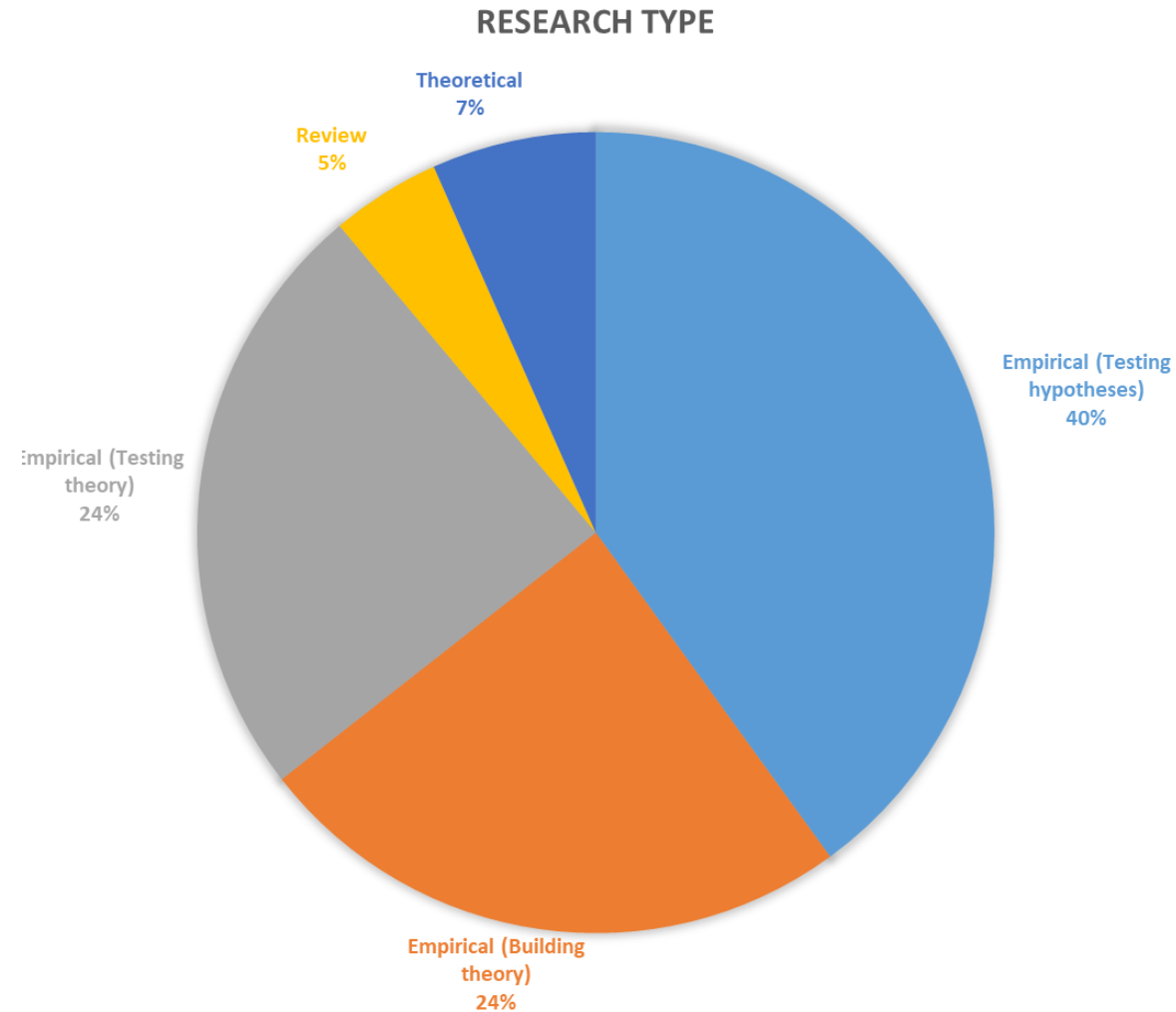
Search criteria

Construct	Keywords	Source
Personalization	personalization	Lee at al. (2011)
	personalized	Sutanto (2013)
	service personalization	Karwatzki et al. (2017)
	personalization features	Awad and Krishnan (2006)
Privacy	privacy concern	Lee at al. (2011)
	privacy calculus	Karwatzki et al. (2017)
	privacy paradox	Baek (2014)(2014)
	personal information	Karwatzki et al. (2017)
	information boundary	Sutanto (2013)
	privacy protection	Lee at al. (2011)
	privacy policy	Hann et al. (2007)
	willingness to share	Awad and Krishnan (2006)
Context	digital service	Karwatzki et al. (2017)
	mobile application	Sutanto (2013)
	information practices	Lee at al. (2011)
	trade-off	Hann et al. (2007)
	Online	Awad and Krishnan (2006)

Descriptive Analysis - Journals

Journal	Discipline	No. of studies
Information Systems Research	Information system	7
MIS Quarterly	Information system	7
Journal of Management Information Systems	Information system	5
Computers in Human Behavior	Information system	4
Decision Support Systems	Information system	3
Journal of Marketing	Marketing	2
Journal of the Association of Information Systems	Information system	2
Computers and Security	Information system	1
Expert Systems with Applications	Information system	1
Information and Management	Management	1
Information Technology and Management	Information system	1
Journal of Computer-Mediated Communication	Information system	1
Journal of Economic Behavior and Organization	Economic	1
Journal of Management	Management	1
Journal of Public Policy & Marketing	Marketing	1
Journal of Research in Interactive Marketing	Marketing	1
Journal of social issues	Social	1
Journal of Strategic Information Systems	Management	1
Journal of the Academy of Marketing Science	Marketing	1
Journal of the American Society for Information Science and Technology	Information system	1
Marketing Science	Marketing	1
Tourism Management	Management	1
Total		45

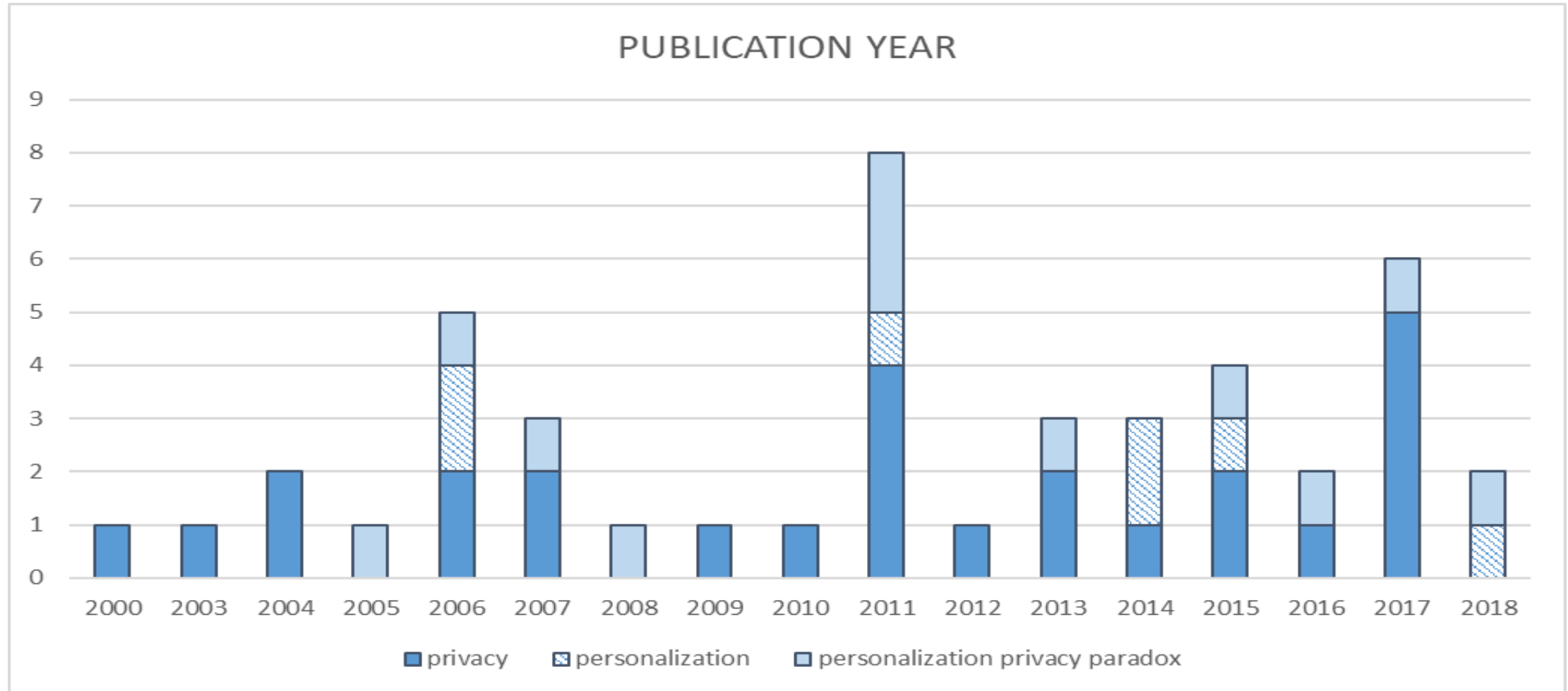
Descriptive Analysis - Research Type



Descriptive Analysis – Research Topic



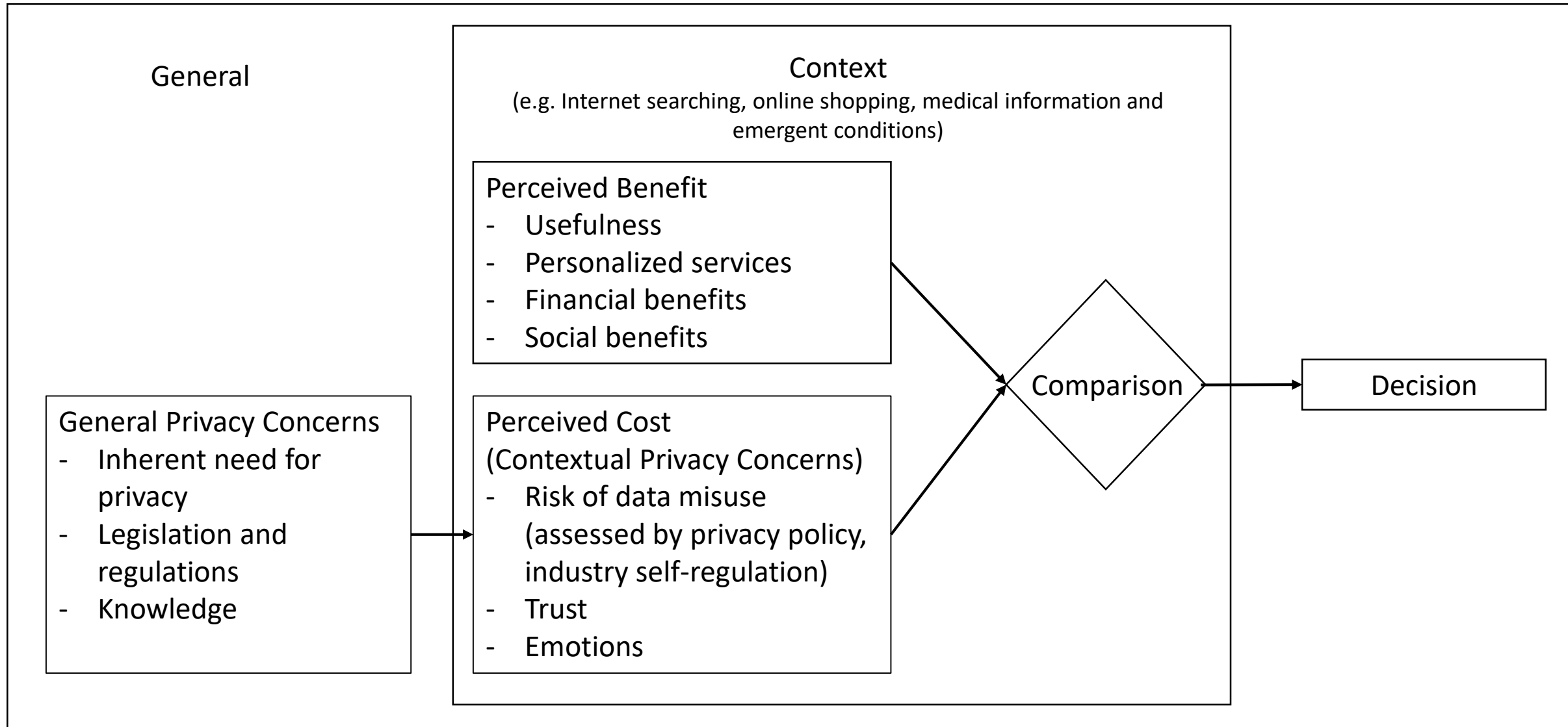
Descriptive analysis – Publication Year



Privacy Theories

Theory	Definitions
Privacy calculus	Individuals rationally calculate benefits and costs on the disclosure of personal information.
Communication privacy management	Individuals develop rules to form boundaries around them based on contextual factors. Concerns are raised if personal information is asked to pass a closed boundary.
Social exchange theory	Personal information is considered as intangible goods. Individuals are willing to disclose personal information when the benefits are good enough to compensate the potential risks.
Social contract theory	Due to the moral agreement between firms and the society, customers are willing to disclose personal information. Firms are responsible to provide privacy protection.
Control agency theory	Privacy concerns are affected by the perceived degree of control which can be performed by self and powerful ones, such as government and industry regulators.

Framework: How Individuals Make Privacy Decisions



Suggestions from Empirical Findings

- Privacy policy
 - Firms need to make privacy policy easy to access and understand
 - If customers cannot understand a privacy policy easily, their perceived control will decrease, which leads to higher privacy concerns
- Usefulness/value
 - Firms should make their services appear as useful as possible to customers
 - Privacy calculus: benefit vs. privacy concerns

Suggestions from Empirical Findings – Cont.

- Emotion
 - Negative emotions of privacy concerns mostly come from worry and anxiety about the potential risk in losing control over personal information
 - Firms need to convince customers that their data are managed in a transparent and well-designed manner
 - Customers are more willing to share information with those they are familiar or consider trustworthy

Suggestions from Empirical Findings – Cont.

- Context
 - Context-specific privacy concerns may override general privacy concerns
 - Users have higher privacy concerns when using social media and debit cards than when using email and searching information on the Internet
 - Experimental results show that users are more willing to share personal information in an emergency context than in non-urgent situations
 - Higher privacy concerns about personal health information
 - People with negative emotions toward health status, such as depression and anxiety, are more likely to share personal information

Conclusion

- Systematic literature review used to understand personalisation-privacy paradox
- Framework proposed based on theories and empirical findings
 - How Individuals Make Privacy Decisions
- Suggestions provided for firms to deal with personalisation-privacy paradox
 - Make privacy policy easy to access and understand
 - Improve usefulness and increase value
 - Avoid negative emotions and maintain trustworthy image
 - Understand the importance of context

Reference

Karwatzki, S., Dytynko, O., Trenz, M., Veit, D., 2017. Beyond the Personalization–Privacy Paradox: Privacy Valuation, Transparency Features, and Service Personalization. *Journal of Management Information Systems* 34, 369–400.

Lee, J.-M., Rha, J.-Y., 2016. Personalization-privacy paradox and consumer conflict with the use of location-based mobile commerce. *Computers in Human Behavior* 63, 453–462.
<https://doi.org/10.1016/j.chb.2016.05.056>

Martin, K.D., Murphy, P.E., 2017. The role of data privacy in marketing. *Journal of the Academy of Marketing Science* 45, 135–155. <https://doi.org/10.1007/s11747-016-0495-4>

Tranfield, D., Denyer, D., Smart, P., 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management* 14, 207–222.

White, T.B., 2004. Consumer disclosure and disclosure avoidance: A motivational framework. *Journal of Consumer Psychology* 14, 41–51.

Xu, H., Luo, X., Carroll, J.M., Rosson, M.B., 2011b. The personalization privacy paradox: An exploratory study of decision making process for location-aware marketing. *Decision Support Systems* 51, 42–52. <https://doi.org/10.1016/j.dss.2010.11.017>