



Migration Discourse Structures: Escaping Microsoft's Desktop Path

Leonhard Dobusch





Theoretical Starting Point & Research Question

- > Software markets as network markets: increasing returns, path dependency, lock-in
- > Focus on large organizational adopters: organizational context matters & “beacon” role of large organizational first movers

> How and why does an organization take the lead of adopting a minority system in a market with strong network effects?

FLOSS desktop usage in organizations (taken from Wichmann 2002)

Size*	UK	Sweden	Germany
Small	7,6%	3,4%	13,7%
Large	2,0%	3,2%	8,5%

* < 500 employees = small; > 500 employees = large (data: Wichmann 2002; see also Gosh 2006)

- (2) Explain how the organization broke through barriers



Linux in Munich: Case Study Database

transcripts

interviews / persons	7 / 7
talks / persons	3 / 3
Σ transcripts / persons	10 / 9

per functional area (transcripts / persons):

political administration	2 / 2
central IT	5 / 3
decentral IT	2 / 2
external*	2 / 2

media coverage (2001-2007)**

articles (online / print)	68 / 34
---------------------------	---------

archival documents

sets of slides	11
agenda papers	31
miscellaneous	7

* „external“ includes service provider and consultants

** articles from the following sources from 2002-2007 : Heise.de, Computerwoche, FAZ, FR, SZ



Analysis of transcripts in three steps:

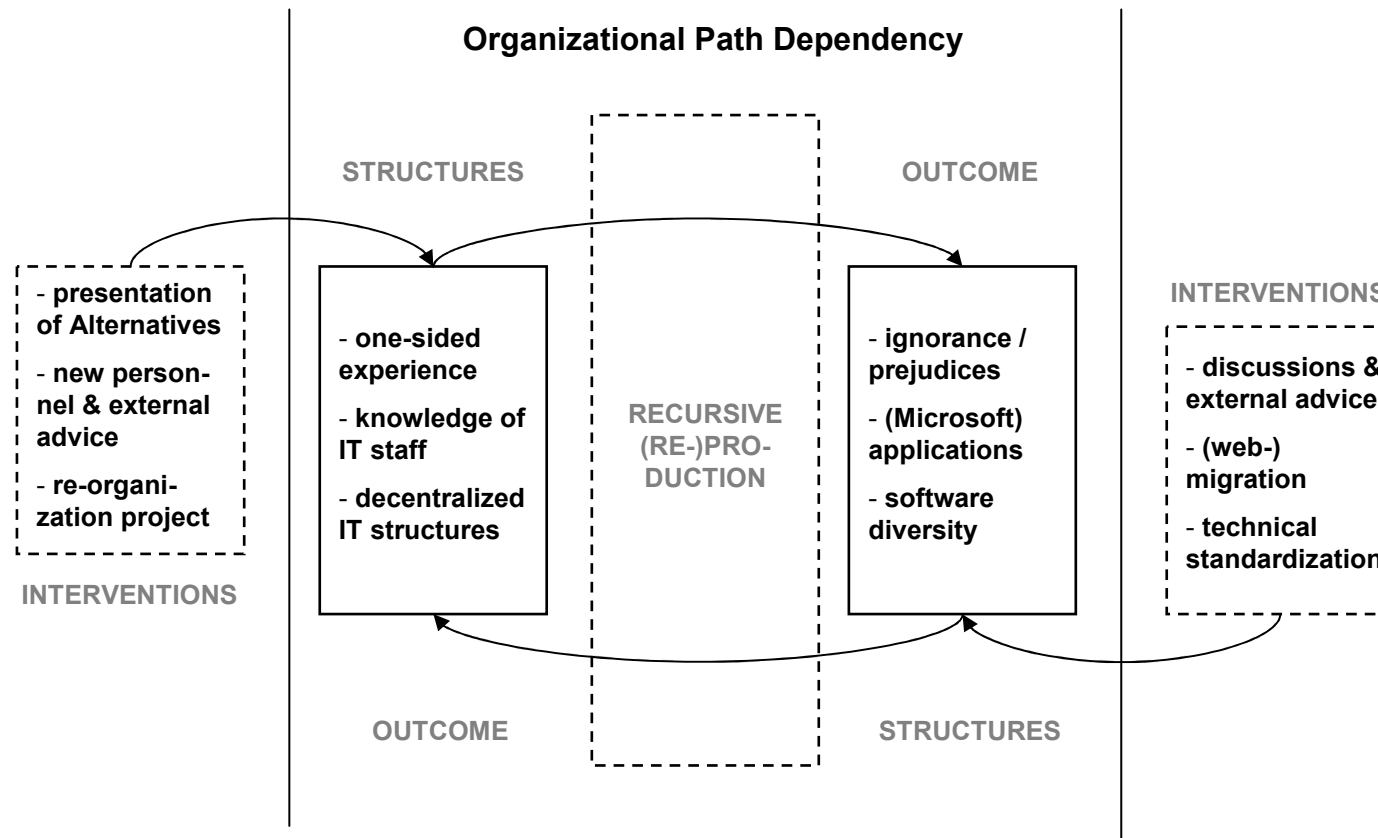
- (1) Paraphrasing (Meuser/Nagel 1991)
- (2) Coding of Paraphrases in atlas.ti (Miles/Huberman 1994)
 - Meta-categories: „barriers and drivers for the adoption of an alternative (i.e. non-Microsoft) desktop operating system“
 - Inductive sub-categories
- (3) Classify inductive sub-categories as **“Programs”** or **“Frames”**

Media coverage and archival data:

- Used to cross-check interview data and for temporal ordering



Barriers to migration & path-breaking interventions





Migration decision process: the road to GNU/Linux

Chronology of Events:

- 2001: Politician asks for office software alternatives >> IT compares products >>
- 2002: Politicians ask for more information >> external study >> IT and politicians change roles
- 2003: Ballmer visit >> competition of bidders >> preliminary decision second study
- 2004: New IT strategy und organization; resistance of decentralized IT staff >> definite decision >> tender >>
- 2005: Development of „Basisclient“ >> test run >>
- 2006: Start of actual migration >> new data, new trouble

Interim Conclusions:

- Emergent process: „In for a penny, in for a pound“
- Momentum is stabilized via “sunk costs”



Product comparison prepared by the central IT department in 2001

Advantages	Disadvantages
<ul style="list-style-type: none"> ▪ StarOffice is Open Source Software ▪ Lower purchase costs ▪ End of dependence on Microsoft ▪ Cross platform applicability (StarOffice) 	<ul style="list-style-type: none"> ▪ Re-working in existing documents necessary because of <ul style="list-style-type: none"> - partial lack of import/export - different macro languages - differen object models ▪ New product line needs requires more training and, therefore, leads to higher training costs ▪ There is no in-house training personnel ▪ Insufficient online-help (StarOffice) ▪ StarOffice/SmartSuite data formats are mostly not suitable for data exchange. Documents would have to be handed on in MS Office or RTF format. ▪ The already deployed – and payed for – MS Office products would have to be replaced all over although they are often not even amortized (to ensure readability in internal data exchange) ▪ No mail-client (SmartSuite)



The discourse: coalitions of actors & issues

	Frames (Top 3 out of 15 categories with a total of 439 codings)	Programs (Top 3 out of 12 categories with a total of 486 codings)
Political administration	18,68 % anti-monopoly(***) 17,58 % (overall) profitability 14,29 % public administration issues	27,14 % discussions 15,71 % external advice 12,86 % migration complexity(*)
Central IT department	25,98 % switching gains & efforts 18,63 % organisational structures(*) 15,20 % (overall) profitability	27,52 % migration strategy 24,03 % applications (incl. macros)(**) 9,30 % organisational know-how(*)
Decentral IT departments	26,39 % organisational structures(*) 22,92 % switching gains & efforts(*) 14,58 % expectations & uncertainty	17,09 % organisational know-how(*) 16,46 % migration strategy 15,19 % migration complexity(*)

(*) predominantly coded anti-migration

(**) unidimensional anti-migration code

(***) unidimensional pro-migration code



Interesting features and theoretical puzzles

- > **The dialectic of “Total Cost of Ownership”(TCO)-calculations:** financial valuation of all migration aspects transforms cost calculation into an all-embracing debate on “rationality” of a decision
- > **Public administration adopters as innovators:** political aspects of FOSS coincide with (partly) political character of administrations; market for FOSS as a “moral market”
- > **Focus on intra-organizational dynamics:** changing roles of actors during migration process and “discourse coalitions”



Thank you for your attention.