# Proceedings of the Annual Global Sales Science Institute Conference

**Edited by:**

John F. (Jeff) Tanner Jr., Ph.D.
Professor of Marketing
Thurmond Negotiations Lab
Old Dominion University
Norfolk VA USA

Christophe Fournier, Ph.D.
Professor of Marketing
Montpellier University,
Montpellier Recherche
Management
Montpellier, France

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# ABSTRACTS

## B2B Buyers' Switching Back Intention and Behavior: Examining Antecedents and Moderators – R. Chugh, A. Liu, M. Leach, & A. Gould

Authors: Richa Chugh, Maynooth University, Ireland, richa.chugh@mu.ie
Annie H. Liu, USA, drahliu@gmail.com
Mark P. Leach, University of Wyoming, USA, mark.leach@uwyo.edu
Albert Noel Gould, University of Wyoming, USA, noel.gould@uwyo.edu

This research explores the influence of (1) the value of the win-back offer, (2) switching back costs, (3) rebuilding trust on purchasing agents' switch back intention. Data were collected from 301 purchasing agents through an online panel survey. Our findings highlight the positive effect of the perceived value of the win-back offer and the negative effect of switching back costs on purchasing agents' advocacy to switch back. Interestingly, rebuilding trust moderates the relationship between the value of the win-back offer, switching back costs and advocacy to switch back. The power of rebuilding trust is further discussed for future research.

**Keywords:** Customer reacquisition; Win-back offer; Switching costs; Rebuilding trust

## Hearing what isn't said: Measuring facial expressiveness and its impact on customer responses in real-time – S. Pauser & U. Wagner

Authors: Sandra Pauser, University of Vienna, Austria, sandra.pauser@univie.ac.at
Udo Wagner, University of Vienna, Austria, udo.wagner@univie.ac.at

Despite the effectiveness of nonverbal communication, sales research is confronted with the difficulty of measuring and coding nonverbal messages including facial expressions, gestures and tone of voice. This study uses an objective approach for capturing a salesperson's facial expressions using fully automated algorithms of a facial recognition software and relating it to customer responses. While being exposed to sales presentations, a continuous measurement device (program analyzer) captures customers' reactions in real-time. Initial findings of a large sample experimental study show that facial expressiveness positively impacts a salesperson's charisma, and customer responses, and thus provides noteworthy implications for sales executives.

**Keywords:** facial expressiveness, real-time-response measurement, program analyzer, personal selling

## Adapting Rational Sales Influence Tactics Across Expertise Levels – Y. Kim & R. McFarland

Authors:  Yenee Kim, ESSEC, France, yenee.kim@essec.edu
Richard McFarland, ESSEC, France, mcfarland@essec.edu

This research develops theory and provides specific guidelines to salespeople regarding which type of rational sales influence tactic to use based on customers' expertise levels.  Using *argument structure theory*, our theoretical model predicts that informational tactics (which focus just on product features) will be most effective with experts, while rational tactics with complete, fully developed arguments will be most effective with novices. Results from three experiments support this novel theoretical framework.

## Selling commodities through e-channels: is human touch obsolete in B2B? – A. Kulakli, R. Baltazarevic, & P. Kwiatek

Authors:  Atik Kulakli, American University of the Middle East
Radoslav Baltazarevic, Visoka škola za Komunikacije, Serbia
Piotr Kwiatek, American University of the Middle East, Kuwait, piotr.kwaitek@aum.edu.kw

In the wake of Industrial Revolution 4.0 all business processes are carried out with the increasing use of technological means. Prior studies showed that technology not only improves company performance but also improves customer relationships. The proponents of technological shift in sales contrast personal selling with customer self-service and argue that digital transformation reduces the need for human component in the sales process. However, the concurrent use of human-to-human and technology-mediated sales systems has not been investigated. To address the question on the relative influence of technology and personal selling the current study investigates the interplay of customer self-service with human-bounded concept of relationship quality. We set the research in a transactional, commodity B2B market. Such market offers ideal conditions for implementing customer self-service and achieving superior company performance due to scale efficiencies. Using a sample of 202 professional buyers and company data we empirically test hypotheses derived from transactional costs and social affect theories. The results of hypothesized model show that human touch improves company performance both in a short- and long-term perspective whereas customer self-service actually lowers the sales.

**Keywords:** B2B selling, automated channels; relationship quality

## An Examination of Effectuation in Dynamic Sales Environments – R. Epler

Author: Rhett Epler, University of Wyoming, USA, Repler@uwyo.edu

How do salespeople succeed in dynamic sales environments? This paper presents an initial foray of effectuation into the sales realm. Effectuation is rooted in entrepreneurship and management literature and describes how expert entrepreneurs make decisions in dynamic/uncertain environments. Effectuation was first conceptualized by Sarasvathy (2001) and is a set of decision-making heuristics consisting of five constituent elements: means, affordable loss, strategic alliances, exploitation of contingencies and seeking to control an unpredictable future. This paper hypothesizes that in dynamic sales environments, effectual decision-making will lead to improved performance, and that effectuation will reduce the impact of role ambiguity on sales performance.

## Are Women better Sellers? Gender Differences in Emotion Expression during Sales Conversations – I. Pezenka

Author: Ilona Pezenka, University of Applied Sciences of WKW, Austria, ilona.pezenka@fh-wien.ac.at

Based on the bio-psycho-social framework of gender difference, it is hypothesized that there are gender differences in the expression of emotions during sales conversations. As facial expressions are strong indicators for emotions, this paper employs computer-based facial expression analysis. The findings reveal that female sellers express a lower level of disgust and a higher level of joy during the sales conversation. Thus, women perform better in creating a positive conversational atmosphere than male sellers. Furthermore, the personality trait conscientiousness significantly predicts overall emotional expressiveness. Findings of this study help to consider gender-based differences in sales education and sales trainings.

**Keywords:** Gender, Emotions, Sales Conversation, Facial Expression Analysis

## The Transforming of the Seven Steps of Selling – J. Bullemore, W. Palomino-Tamayo, & J. Wakabayashi

Authors:  Jorge Bullemore, Universidad del Desarrollo, Chile, j.bullemore@udd.cl
Walter Martin Palomino-Tamayo, ESAN University, Perú, wpalomino@esan.edu.pe
José Luis Wakabayashi, ESAN University, Perú, jwakabayashi@esan.edu.pe

This paper examines how the changing environment is transforming each step of the traditional seven-step selling process. We developed an international Delphi panel with 24 experts (academics, consultants, and senior sales managers) from six countries. The use of new technologies is more in force than ever. It is key for companies to dedicate time to explore which of these new technologies can add higher value, and which are feasible for correct implementation. Therefore, we suggest sellers remain current in the use of technologies that help them increase their sales productivity.

**Keywords:** Selling Techniques; Exploratory Research, Selling Scale; Professional Selling.

## Unintended Consequence of the New Ways of Selling: Value Co-Destruction – A. Alamäki, T. Kaski, & D. Rangarajan

Authors:  Ari Alamäki, University of Applied Sciences, Finland, ari.alamaki@haaga-helia.fi
Timo Kaski, University of Applied Sciences, Finland, timo.kaski@haaga-helia.fi
Deva Rangarajan, Ball State University, USA, drangarajan@bsu.edu

This paper aims to shed new light to the little studied topic of value co-destruction. We seek to explore triggers that may lead to value co-destruction instead. To do so, we analyzed a set of customers' and salespeople' interviews from business-to-business (B2B) sales cases and closed deals. The present study shows three categories of triggers potentially leading to value co-destruction: 1) interactional antecedents of value co-destruction are defective internal and inter-organizational interaction causing insufficient building of a shared understanding, 2) the unproved implementation capability leading to incomplete integration of customer and service provider processes, and 3) emotional aspects leading to discontinuity of constructive collaboration. We conclude that the termination of sales or buying process is related to the interactional, capability and affective triggers. The findings point out potential factors that salespeople and customers should recognize and tackle more effectively already during the early phases of buyer-seller collaboration.

**Keywords:** Value co-destruction, value proposition, uncertainty, sales failure, B2B sales, purchase

## A New Conceptual Approach of Sales Activities – R. Conde & L. Davis

Authors:  Richard Conde, University of Houston-Downtown, USA, Condeg@uhd.edu
Lenita Davis, University of Arkansas-Little Rock, USA, lmdavis@ualr.edu

Sales researchers have consistently studied sales activities as part of a sales manager sales control mechanisms. The definition and classification of sales activities are based on standards and functions created over two decades ago, with limited consideration to current sales processes and the overarching influence of sales technology. Because most empirical sales activity studies based on such conceptual approach have limited findings, this article attempts to expand the application of sales activities to an industry technology summary of the sales process. The effects of sales technology on sales agent activities are considered. A number of research propositions are presented.

## Insight Over Intuition: Present and Future State of Analytical Skills In B2B Selling – R. Rocco & D. Whalen

Authors:  Richard A. Rocco, DePaul University, USA, rrocco1@depaul.edu
D. Joel Whalen, DePaul University, USA, jwhalen@depaul.edu

The importance of salesperson analytical skills has risen to the forefront of sales management priorities to enhance selling performance and customer success. Analysis is winning the debate over intuition and experience.  Unfortunately, initial industry research suggests deficiencies with analytical skills within today's sales organizations and there remains a dearth of academic sales research examining this topic. This exploratory study utilizes a key informant mixed methodology with B2B sales managers to explore both the present state and future needs for analytical skills in sales. Implications include recommendations that academics and managers develop methods to better communicate the analytic data's customer-centric meaning.

## A Conceptual moderated mediation model of language divergence in sales interactions – A. Bai

Author:  Ainsworth Anthony Bailey, University of Toledo, USA, ainsworth.bailey@utoledo.edu

This paper proposes a testable conceptual model regarding the impact of language divergence in salesperson-customer interactions on subsequent customer relationship behavior.  The model posits that language divergence influences customers' perceptions of salespersons' characteristics—competence, customer orientation, and relationship orientation. These then impact perceived salesperson relationship investment, which in turn affects the nature of customer citizenship behavior. The model theorizes a mediating role for perceived salesperson relationship investment in the link between perceived salesperson characteristics and customer citizenship behavior, while relationship proneness moderates the perceived salesperson relationship investment-customer citizenship behavior link.  The model will be tested using both experimental and survey data.

## Intercultural competence and training in sales: Results of an exploratory study – N. Fischer, C. Fournier, & H. Oueslati

Authors:  Nadine Fischer, Université de Montpellier, France, nadine.fischer@umontpellier.fr
Christophe Fournier, Université de Montpellier, France, christophe.fournier@umontpellier.fr
Hanene Oueslati, Université de Haute-Alsace, France, hanene.oueslati@uha.fr

Because of the globalization of today's markets, the sales field gets more impacted by intercultural problems. Therefore, it is interesting for the research in this area to look at the impacts of intercultural concepts on the salesforce. The proposed communication is the result of an exploratory study of 5 interviews with managers that work or have worked in the sales field to collect the practitioners' points of view about the importance of intercultural training and competence for the salesforce. And even though the interviewees think that intercultural competence is key for success, not all companies train their salesforce as required.

## Impact of Managerial Indecisiveness on Salespeople – B. Caemmerer, J. Görne, & J. Mulki

Authors:  Barbara Caemmerer, ESSCA, France, barbara.caemmerer@essca.fr
Jobst Görne, Hochschule Aalen, Germany, jobst.goerne@hs-aalen.de
Jay Prakash Mulki, Northeastern University, USA, j.mulki@neu.edu

Retaining successful salespeople is a major concern for organizations. Uncertainty Management Theory (UMT) suggests that indecisive managers can create uncertainty, negatively impacting

employee commitment to the organization. Our quantitative study, based on a sample of 255 salespeople, reveals that perceptions of managerial indecisiveness leads to higher levels of role ambiguity, which in turn leads to a lack of trust in the supervisor and higher turnover intentions. We contribute to the extant literature and managerial practice by demonstrating that the retention of salespeople can be enhanced through decisive managers who instill trust in the organization and enhance job satisfaction.

## "It Will Not Happen Again." Repairing Trust after a Sales Manager Error – C. Nelson, M. Walsh, & A. Cui

Authors:  Christopher A. Nelson, Duquesne University, USA, nelsonc2@duq.edu
Michael F. Walsh, West Virginia University, USA, michael.walsh@mail.wvu.edu
Annie Peng Cui, West Virginia University, USA, annie.cui@mail.wvu.edu

Sales managers must maintain trust of their salespeople. What happens when this trust is broken? An important challenge for sales managers concerns dealing with the aftermath of an error that damages the trust of a salesperson, especially when the error results in financial harm to that salesperson (e.g., unfair bonus/incentive allocation). A common restorative approach consists of the sales manager acknowledging the error and providing a financial compensation to the victim. Our study finds that instead of acknowledging the error, the sales manager should promise to make things right before providing financial compensation.

## Transformational leadership boosting strategic account managers' competence development in service-centric transitions – S. Jokiniemi & P. Hautamäki

Authors:  Sini Jokiniemi, Tampere University, Finland, sini.jokiniemi@tuni.fi
Pia Hautamäki, Tampere University, Finland, pia.hautamaki@tuni.fi

The competitive and globalized marketplace is driving B2B sales organizations to move from product-oriented to service-centric sales and to serve strategic customers with value generating hybrid offerings. Highly competent sales professionals are needed for serving valuable strategic customers, which highlights the need lead strategic account managers' competence development. Instead of executing high-priced competence development programs, this conceptual paper suggests that applying transformational leadership behaviors may offer a cost-efficient way to improve sales competence development and further boost service-led growth.

## Exploring Cultural Intelligence and Virtual International Sales Team Coaching – D. Baker & V. McGeHee

Authors:  David S. Baker, University of Louisiana, USA, dbaker@louisiana.edu
Valerie McGeHee, University of Louisiana, USA, valerie.mcgehee@louisiana.edu

This discovery oriented qualitative study comprises one portion of a multi-method study in progress. It consists of lightly structured and open-ended telephone interviews of professional international Virtual Sales Team (VST) coaches within a large multi-national personal development and coaching organization. This paper develops propositions related to the sub-dimensions of cultural intelligence as separate antecedent factors related to VST coaching. Initial implications suggest a substantial link between the dimensions of Cultural Intelligence (Cognitive, Meta-Cognitive, Motivational, and Behavioral) at varying degrees of importance to VST coaching. Initial interviews also suggest that the cultural concept of face is important in VST coaching.

## Mind reading customers with interpersonal mentalizing - insights from Japanese B2B sales meetings – S. Jokiniemi & K. Hosoi

Authors:  Sini Jokiniemi, Tampere University, Finland, sini.jokiniemi@tuni.fi
Kenichi Hosoi, Hiroshima University, Japan, kn-hosoi@hue.ac.jp

Interpersonal interaction in B2B sales meetings drives sales performance. Besides acting adaptively, successful salespeople need to understand customer's underlying intentions by applying interpersonal mentalizing (IM) skills; a microlevel process complementing adaptive selling behaviors. Advancing this underresearched area, the goal of this paper is to offer Salesperson's Theory of Mind (SToM) scale – measuring a salesperson's IM skills – as a framework to be empirically applied in a new cultural context by using a dyadic approach and qualitative data focusing on B2B sales meetings between Japanese sellers and buyers. The empirical findings suggest two new dimensions to be added to the SToM scale.

## How Social Anxiety Reduces Sales Performance: Examining the Alleviating Influence of Mindful Acceptance and Supervisor Support – B. Lussier, M. Philp, N. Hartmann, & H. Wieland

Authors:  Bruno Lussier, HEC, Québec, bruno.lussier@hec.ca
Matthew Philp, HEC, Québec, matthew.philp@hec.ca
Nathaniel N. Hartmann, University of Hawaii, USA, nnhartma@hawaii.edu
Heiko Wieland, California State University, USA, hwieland@csumb.edu

Social anxiety is associated with a number of adverse job-related outcomes, yet little is known about the resources that can alleviate the negative relationship between social anxiety and salesperson performance. Drawing from comfort theory, this study investigates how mindful acceptance and perceived supervisor support can serve as safeguarding mechanisms that salespeople can leverage when experiencing high levels of social anxiety. Findings, derived from survey responses collected from 135 B2B salespeople matched with objective sales performance data, show that social anxiety is negatively associated with sales performance but that high levels of both mindful acceptance and perceived supervisor support alleviate this relationship.

**Keywords:** Social Anxiety; Sales performance; Mindful Acceptance; Perceived supervisor support; Comfort theory

## The Impact of Customer Mistreatment on Salespeople's Emotion Management and Selling Success: The Key Role of Emotional Authenticity – M. Klein, J. Poujol, & C. Bennejean

Authors:  Michel Klein, University of Montpellier, France, michelklein@neuf.fr
Juliet F. Poujol, University Paris-Nanterre, France, fpoujol@parisnanterre.fr
Christine Lai-Bennejean, EM Lyon Business School, France, lai@em-lyon.com

Faced with deviant customer behavior, how to lead your salespeople to succeed through emotion management has gained increasing attention. The objective of our study is to investigate the effect of customer mistreatment on salespeople's emotional labor strategies, which affect their success and satisfaction. We also consider the moderating role of self-esteem in this frontline mechanism. The results from our field survey with 269 salespeople show that customer mistreatment significantly affects emotional labor strategies, leading to their attitudinal and behavioral outcomes. Particularly, we find that these effects are stronger for young salespeople.

**Keywords:** emotional labor; emotional authenticity; customer mistreatment; sales performance; job satisfaction; self-esteem.

## How Can Salespeople Live With Their Bad Image? – M. Hering & O. Jensen

Authors:  Marcel Hering, WHU, Germany, marcel.hering@whu.edu
Ove Jensen, WHU, Germany, ove.jensen@whu.edu

Surveys indicate that sales carries an occupational stigma. How do salespeople uphold a positive self-identity despite the stigma? This qualitative, inductive study finds that salespeople, paradoxically, use the negative image to construct a positive self-identity: 1) By self-differentiation narratives, they use the stigma to distance themselves from "black sheep" in the industry. 2) By self-augmentation narratives, they use the stigma to dramatize the selling challenge and attribute success to themselves. It is the purchase act that opens these positive attribution options, making sales the only among the stigmatized professions which, paradoxically, can draw positive identity effects from a negative image.

## Is Grit a valid predictor of sales performance? – K. Wakefield, F. Poujol, & B. Hochstein

Authors:  Kirk L. Wakefield, Baylor University, USA, Kirk_Wakefield@baylor.edu
F. Juliet Poujol, Université Paris Nanterre, France, fpoujol@parisnanterre.fr
Bryan Hochstein, University of Alabama, USA, bryanh@cba.ua.edu

The subject of measuring grit (Duckworth et al. 2007) has spawned research across multiple fields of inquiry and becoming increasingly familiar in popular press and in managerial use. But, is it a valid measure? Across two studies we find grit to be strongly influenced by social desirability bias. We demonstrate the processes by which reported grit may influence management performance evaluation, while also discussing its limitations for managerial use.

## Perceptions of Ethics as a Prospecting Constraint: When is Making a Sales Call OK? – J. Tanner Jr., M. Quirk, & E. Tanner

Authors:  John F. Tanner Jr., Old Dominion University, USA, jtanner@odu.edu
Megan Quirk, Behavioral Sciences Research Press, USA, megan.quirk@bsrpinc.com
Emily C. Tanner, West Virginia University, USA, emily.tanner@mail.wvu.edu

Sales Call Reluctance occurs when salespeople develop where they are unable to prospect due to fear. One possible fear is a lack of knowledge that may inadvertently cause the salesperson to act unethically. A salesperson with this form of call reluctance may exonerate the lack of performance by claiming the high moral ground. A study of 1998 salespeople supports the proposed relationship for two types (role rejection and over-preparation) of call reluctance but not telephobia, as predicted. Over-preparation is mediated by a need for more product knowledge. These results provide insight into how fear turns into call reluctance.

## Communicating Throughout the Solution Selling Process – A Grounded Theory Approach – V. Kramer & M. Krafft

Authors: Victoria Kramer, University of Muenster, Germany, v.kramer@uni-muenster.de
Manfred Krafft, University of Muenster, Germany, marketing@uni-muenster.de

As a means of differentiation, Business-to-Business (B2B) suppliers increasingly employ value-creating offerings such as solutions, which generate and guarantee value-in-use for customers. A fundamental aspect of solution selling is communication. However, as the solution selling process is highly complex and customer relationships move through different stages, communication strategies vary over time. This paper investigates how communication strategies change throughout the solution selling process using a grounded theory approach. Using in-depth interviews with individuals from customer and supplier companies in Germany across various industries, this study develops a framework explaining how value is created and guaranteed through different communication strategies.

## Tensions in asymmetric supplier–customer relationships: an investigation – S. Lacoste & R. Johnsen

Authors:  Sylvie Lacoste, Kedge Business School, France, sylvie.lacoste@profecogest.com
Rhona E. Johnsen, Audencia Business School, France, rjohnsen@audencia.com

The purpose of this paper is to investigate tensions in relationships between small suppliers and large customers. Our research builds on previous research on relationship tensions, with a

focus on the concept of "coopetition," and contributes to the identification of tensions in asymmetric relationships. The empirical study uses grounded theory and is based on the analysis of semi-structured interviews with smaller suppliers involved in asymmetric relationships.

We classify the different forms of tensions as spatial, contractual versus relational, coopetitive and hybrid relationship tensions. We identify different ways to manage the identified tensions—through solving or internalizing them.

**Keywords:** tensions; symmetric relationships

## The Role of Value Co-Creation in Sales Team Performance – A. Inyang, O. Itani, & H. Alnakhli

Authors:  Aniefre Eddie Inyang, The College of New Jersey, USA, inyanga@tcnj.edu
Omar Itani, Lebanese American University, USA, omar.itani@lau.edu.lb
Hayam Alnakhli, Central Michigan University, USA, alnak1h@cmich.edu

Value co-creation has emerged as one of the leading ways organizations create and maintain competitive advantage in B2B markets. However, in the literature, the role of salespeople in co-creating value with customers has been largely unexplored. Salespeople in their role as boundary spanners are often at the forefront of interacting with customers, allowing them to play an important role in the value co-creation process. In this study, we look at the drivers of value co-creation by salespeople in sales teams, and the effects of value co-creation on sales team performance.

## B2B Salespeople's Social Media Content: The Role of Organizational and Individual Reputation in Enhancing Customer Digital Engagement – L. Schmitt

Author:  Laurianne Schmitt, EM, Strasbourg, Laurianne.schmitt67@gmail.com

In an increasing digitalized B2B environment, organizations emphasize social selling as a new interaction channel with customers. At the sales force level, it constrains salespeople to build a social media strategy. However, little is known on salespeople's social media content (SSMC). To add to this literature we build on impression management theory and develop a conceptual model to understand which SSMC increases customer digital engagement through the mediating effect of salespeople's and organization's reputation. We plan on conducting a LinkedIn field study and confirm the mediation through a survey with B2B customers.

## Social Selling, Fake News or Real Innovation? – P. Brassier

Author:  Pascal Brassier, University Clermont Auvergne, France, pascal.brassier@uca.fr

This research focuses on social selling, which is the use of social media for prospection and client relationship. After an extensive literature review, our study includes 153 managers and salespeople. The findings show a need for a better definition of the concept in order to be relevant, a wide range of practices, and a highly variable time investment on the part of sellers. Many don't even use social media for their business, and are wondering about the impact of these media on their reputation and on their actual results. They expect more research to provide more knowledge on this subject.

## A Conceptual Framework for Understanding the Antecedents and Consequences of Social Selling: A Theoretical Perspective and Research Agenda – B. Barney-McNamara, P. Chennamaneni, L. Davis, & J. Peltier

Authors:  Barbara Barney-McNamara, University of Wisconsin-Whitewater, USA, barneymcb28@uww.edu
Pavan Chennamaneni, University of Wisconsin-Whitewater, USA, chennamp@uww.edu
Lenita Davis, University of Arkansas Little Rock, USA, lmdavis@ualr.edu
James W. Peltier, University of Wisconsin-Whitewater, USA, peltierj@uww.edu

Social selling has gained the attention of sales researchers. Rather than merely a tool, social selling redefines the traditional sales process. The literature is spread across topics of social media and sales, social CRM, salesforce automation, and social selling, without providing an agreed-upon definition or tested construct for implementation. Using a comprehensive literature review, the authors propose a social selling framework that includes personal branding, information exchange, networking, and social listening to define the construct, while suggesting antecedents and outcomes to guide future research. We also provide findings from a literature review outlining key theories used in social selling research.

## Digital transformation in sales as an evolutionary process – . Wengler, G. Hildmann, & U. Vossebein

Authors:  Stefan Wengler, Hof University, Germany, stefan.wengler@hof-university.de

Gabriele Hildmann, Germany
Ulrich Vossebein, University of Applied Sciences, Germany

Most companies are working on their digital transformation and thus on their digital transformation of sales. Despite enormous transformation efforts, the positive productivity effects seem to be missing. As this research paper will show, the reasons are given in a limited knowledge about the main success factors of digital transformation as well as a missing understanding of the digital transformation as an evolutionary process. Based on the newly developed market-oriented transformation model, management implications as well as future research directions are derived for a more focused digital transformation process in sales.

## On the Experiences of a Tablet-Based Application in Direct Customer Conversations – the Case of FRONERI – A. Thoma

Author: Axel Thoma, University of St. Gallen, Switzerland, axel.thoma@unisg.ch

The role of the salesperson in business-to-business is changing; from an advocate and seller of products and services to an advisor and consultant who creates value in dialogue together with the customer. Digital, tablet-based applications support salespeople in such direct customer conversations. What such applications can accomplish, and which factors influence their adoption and usage are explored in this paper, based on a multiyear case study of FRONERI, a joint venture of Nestlé and R&R Ice Cream.

**Keywords:** Sales 3.0; Digital Sales Enablement; Sales Technology; Value Creation; Business-to-Business

## How Can Technology Adoption Change the Development of Value Propositions? - The Case of a Professional Service Firm – M. Mattila & M. Yrjölä

Authors:  Malla Mattila, Tampere University, Finland, malla.mattila@tuni.fi
Mika Yrjölä, Tampere University, Finland, mika.yrjola@tuni.fi

This single case study focuses on the adoption aspect of new advanced technologies by identifying and analysing how managers of a professional service firm, while participating in an AI-enhanced digital service platform development, frame the development of value propositions. The study draws analytical insights from value proposition literature and empirically scrutinizes a professional service firm acting as an intermediary for IT experts and companies engaging in related development projects. The study identifies three key themes

and several sub-themes influencing the development of value propositions. The study contributes to the existing literature by arguing that the adoption of new advanced technologies can impact all areas of value propositions' development, not only their contents or innovativeness. The study offers insights for managers on how they can implement value proposition elements to technology-enabled new service development.

# FULL PAPERS

Author:   Sirpa Hänti, Turku University, Finland, sirpa.hanti@turkuamk.fi

The turbulence in the business environment and changing customer behavior have influenced the business of selling organizations as well. The aim of this study is to increase understanding about the future business skills needed according to salespersons and the possible differences of their insights into HR people's insights. The findings suggest a wide variety of common insights of future business skills to both salespersons and HR people, except a striking difference in customer-oriented skills. In this early phase study, a futures wheel technique is piloted to get insights into the impact of three megatrends: digitalization, ecologic sustainability, and globalization.

**Keywords:** megatrends; sales transformation; business skills; dynamic capabilities

*Introduction*

The business environment is changing, and several authors (e.g. Cuevas 2018; Ulaga and

Loveland 2014) have already evidenced the transformation of sales, based on the changing

buying behavior, in both B2B and B2C markets. Thus, it is crucial to pay attention to the need

for the development of business skills, to gain a competitive advantage in the changing

markets. Personal sales are still one of the most important channels to acknowledge the

emerging needs and changes in B2B customers' businesses thus understanding of future

business skills also should be on their agenda.

This study is a part of a research project in process. In the first phase, the focus was in

finding synergies in knowledge creation and business development opportunities, between

PhDs, HEIs and SMEs (Hänti 2018).  In addition to the several ideas of cooperation models

between the participants, some themes of business skills to be developed occurred in the

study. Five themes of business skills needed were recognized: digitalization, future insights,

innovations, internationalization, and sales skills (Hänti 2018). However, a need for researching

future business skills in more detail was suggested in that study. This study focuses on the

following research questions: What kind of business skills are needed according to salespersons

and how do the insights of the future business skills differ from HR people's insights?

**Theoretical background**

In organizations, a wide variety of skills and accumulated knowledge are needed to enable the

activities to be carried out to gain a competitive advantage in the markets (Grant 1991; Barney

1991) and to create value for customers as well as capture value for the firm (Grönroos and

Helle 2010). Penrose (1959) is suggesting that skills, competences, and capabilities as flows, and

assets as stocks, form the resources of a firm (Mahoney 1995), which has been the cornerstone

of strategy (Ansoff 1965; Hofer and Schendel 1978). However, in today's turbulent markets, as

the competitiveness of a firm is challenged by a rapid change of customer behavior, the skills

and capabilities of the selling company, need to be agile. Thus, a need for evolution in time has

been suggested to the resource-based view (RBV) in the form of dynamic capabilities (Helfat

and Peteraf 2003). Dynamic capabilities are the firm's ability to integrate, build, and

reconfigure, both internal and external competences and resources, to address and shape the

changing business environment (Teece 2010). Hence, one of the crucial issues is the need to

anticipate and adapt to markets of the *future.*

B-to-B markets are transforming, due to digitization and increased global competition as

well as servitization and market fragmentation (Ostrom et al., 2010; Spina et al., 2013).

Digitization is powering the transformation of business in several forms, e.g. information

technology, communications, artificial intelligence as well as machine learning (Gupta et al.,

2017). There is no doubt that these transformations have already changed the customer behavior and as these trends are transforming the purchasing (Sheth, et al. 2009), it is aligning the transformation of sales work. Syam and Sharma (2018) argue that selling is facing disruption and a discontinuous change during the future decades and the fourth industrial revolution.

Futures studies are an emerging discipline that "seeks to help individuals and organizations better understand the processes of change so that wiser preferred futures can be created" (Inayatullah 2008, 5). The time horizon specifies how far it is intended to look into the future, as well as how much change one is going to allow in the forecast. Change may happen any day but the probability of significant change increases in the longer period (Hines and Bishop 2013).

The future is often expressed with trends or megatrends. Megatrends can be defined as "to describe the significant social, economic, political and/or technological movements that shape our lives" and "larger in magnitude, longer in duration and deeper in their effects than trends" (Naisbitt 1982 as cited in Mittelstaedt et al. 2011). As the world is changing at a rapid speed, the outreaches to anticipate the future are important to all of us. Dufva et al. (2019) have constituted a list of the next decade's megatrends: digitalization, ecological sustainability, and globalization that are implemented in this study.

**Methodology**

In this study, a mixed-methods approach, that combines both quantitative and qualitative research methods (see e.g. Molina-Azorin et al. 2018) is applied. The data was collected in two workshops (HR people 5/2019 and salespeople 12/2019) with a questionnaire that focused on

short-term skills (time 1-3 years). In the workshop of sales people was piloted the futures wheel technique (Glenn 2009) that focused on a longer time (10 years), to gain insights to business skills needed into 2020s.

Futures wheel is a method for "identifying and packaging primary, secondary, and tertiary consequences of trends, events, emerging issues and future possible decisions" (Glenn 2009, 1). It belongs to the category of exploratory methods in futures research (Pesonen et al. 2000). Futures wheel is a kind of structured brainstorming and a way of organizing thinking and questioning about the future. It is most commonly used to figure possible impacts of current trends and introduce futures thinking in a group context.

The group of sales informants that participated in the workshop was second-year MBA students in Professional Sales Management in Turku University of Applied Sciences. They represent different industries in B2B sales, five of them have sales work experience 3-13 years, one of them several years in R&D, and one in marketing (20 years) before starting in sales. The amount of personnel varies from 3-3000, as well as the turnover (latest fiscal year) from 1-400 MEUR. All of them evaluate the existing skills for gaining competitive advantage skills in their organization as good or middle-range levels. The group of HR informants represented also a wide variety of industries, both in B2B and B2C markets. The amount of personnel varies from 15-12000, as well as the turnover (latest fiscal year) from 1 MEUR to 3.3 BEURO.

The data are analyzed to reflect the differences between salespersons' and HR persons' views to the five themes of business skills and the importance of them (Likert scale 1-5) found

in the earlier study (Hänti 2018) as well as the possible other skills needed according to the

informants.

**Results**

All the five themes of skills were ranked either extremely important or important according to

salespeople. According to HR people, the importance of these five skill areas varied more and

e.g. internationalization skills divided the answers. Table 1 presents the importance of the five

themes of skills according to salespersons and in comparison to the HR people.

Table 1. The importance of the five themes of skills in the nearest future.

| Theme of skills | Salespersons Median (N) | HR people Median (N) |
|---|---|---|
| Innovation skills | 5.00 (7) | 4.27 (15) |
| Sales skills | 4.71 (7) | 4.27 (15) |
| Future insight skills | 4.57 (7) | 4.40 (15) |
| Internationalisation skills | 4.57 (7) | 2.87 (15) |
| Digitalization skills | 4.43 (7) | 4.73 (15) |

Salespersons mentioned 17 different skills (2-4 each) as HR people mentioned 31

different skills (1-5 each) needed in the nearest future (1-3 years). Salespeople rated change

management, communication, resilience and project management skills as well as digital

marketing, R&D, recycling economy, industrial processes, and cultural skills in an international

environment, as the most important skills. Only two of them – change management and

communication skills, were ranked extremely important according to HR people. HR people

suggested technology, leadership, understanding the big picture, renewal and different

management skills, as well as self-management skills as extremely important. A striking note

was that nearly half of the HR people (7) suggested that different customer skills, like customer

management and customer-centricity, are extremely important while no one of the salespersons mentioned any special customers' skills at all.

The results of the two group discussions of salespersons based on the megatrend "digitalization" are presented in Figure 1. At the upper half of the wheel, are the answers of the informants whose organization is oriented to stay in the existing position in the market (no-growth-oriented companies).
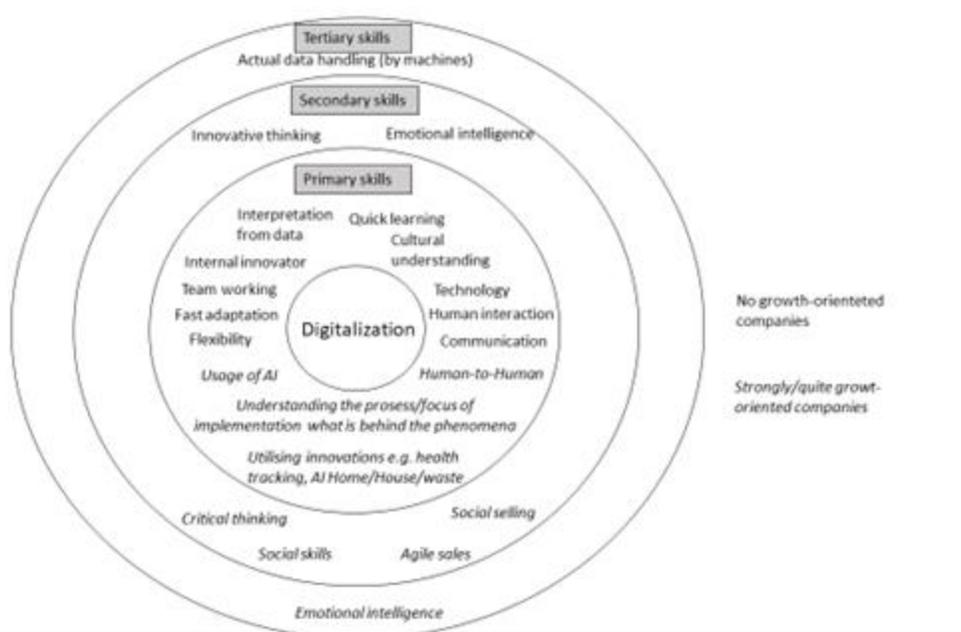


Figure 1. Future skills: megatrend Digitalization.

The lower half presents the growth-oriented company representatives insights (*in italics)*. The three rounds in the wheel present the priority of the presented skills, i.e. the informants placed the skills in order based on the priority of them. For example, "skills of interpretation from data" and "quick learning skills", are high priority according to the salespersons in no growth-oriented companies. "Innovative thinking skills" as well as "emotional intelligence skills" are

not so prior according to them, and "actual data handling (by machines)" are even minor in priority. The same logic is in the lower part of the wheel where salespersons in growth-oriented companies suggest that "usage of AI skills" and "human-to-human skills" are in high priority in the forthcoming decade. "Critical thinking" and "social selling" are examples of more modest priority.

Concerning the megatrend of ecological sustainability, the no-growth oriented representatives mentioned prior skills needed "sensible growth" and "human approach" as the representatives of growth-oriented companies' proposed "sustainable and agile innovations", "agile sales" and "recycle of materials" in the 2020s. Globalization as a megatrend was linked to "redefinition of borders", "speed of everything", "digital money" and "scalability".

**Conclusions**

Although the insights of salespersons of the five themes of skills did not differ much from the HR people's insights, there were differences in the skill areas those two groups are suggesting. Salespersons did not mention any customer-linked skills at all in the short-term future, while HR people appreciated them extremely high. Technology skills were noted as extremely important according to HR people in the short-term future, while salespeople rated them as important. However, technology was mentioned as one of the primary skill areas in a longer period. In developing dynamic capabilities for the future, it is important for managers not to forget the human factor. Hence, in adopting the opportunities of digitalization, communication skills, as well as change management remain crucial. The pilot run of the futures wheel technique was promising but more data has to be collected. The skills found as most important should also be tested through a survey, in a larger population.

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# Disruption in B2B sales, Internet of Competition (IoC) model changes the way we sell – A. Leijala

Author:  Antti Leijala, *Aalto University, Finland,* antti.leijala@ultraleanbusiness.com

This article introduces a framework (stack of sensors, data infrastructure, analytics, application and digital service), namely "Internet of Competition (IoC)". IoC allows B2B companies to improve their Win Rate, via a deep understanding of customer buying criteria and analysis of own (and competitor) strengths and weaknesses. Using IoC methodology, we can combine the benefits of Artificial Intelligence (AI) and Lean Six Sigma (L6S) based sales processes improvement to create a closed loop for a continuously improving Win Rate. IOC disrupts B2B sales in a similar way that the internet did for consumer business and is also economically scalable from self-employed to large corporates. COVID-19 pandemic put buying processes on hold and this paper also presents a case study of buying criteria changes prior, during and after the crisis.

**Keywords:** win rate; artificial intelligence; internet of things; B2B sales; sales process;

buyer driven economy, COVID-19

### Introduction

Over the past decade, B2C sales has dramatically changed due to explosion of the internet,

changing buying behaviour and availability of purchasing related data which can be used to

predict purchasing behaviour. We can all recognize this from consumer services such as

Amazon. But, can the same type of phenomena happen in B2B sales, and what is needed to

make it happen not only theoretically, but also in practice? This is a large and multifaced

research question, especially when we consider that B2B salesforces are often "locked" in Sales

Management Control Systems (Stacey et al, 2018), sales is still a very instinctive based activity

and that any solution should be affordable to a small B2B business.

This article reviews some the major disruptions happening and, as a resolution to them,

introduces a generic framework, namely Internet of Competition (IoC) "stack" and its critical

success factors for wide range of applications and use-cases. Case study of COVID-19 impacts

on buying criteria is also presented and possible future impacts to B2B companies are discussed. We are witnessing a "reset" of global buying behaviour, and IoC sets a solid ground to measure, analyse and improve B2B companies' competitiveness in a dramatically changing environment.

**Three parallel disruptions affecting B2B sales**

There are three parallel disruptions effecting B2B sales. IoC framework interlocks them and enables a data-driven sales process optimization in B2B environment.

1. Buying behaviour of customers is changing rapidly, due to multiple reasons. Internet and easy access to data has already changed the way we behave as consumers and same transformation is also happening on the B2B side. Sales personnel is no longer needed to present products/services, but rather showing the customer value and helping customer to make a fast, yet right purchase decision. In general, the control of the buyer-seller process has moved from seller to buyer and aligning customer buying process with your own sales process becomes important (Webb, 2014 and Leijala A., 2019).

2. Analytical tools are developing fast and companies are introducing various kinds dashboards which claim to use mega-data and AI. However, there's a true concern that data literacy capability is lacking far behind the flood of facts and figures we get every day (Tableau, 2018). This is supported by my own empirical studies of 140 companies, where a clear majority of CEOs, CMOs, sales directors and sales personnel lack even the basics of data- and fact-based management skills. Dashboards are filled with nice-

to-know charts, and are especially lacking the "actionability" part, i.e. what corrective
or predictive actions should be triggered based on the visualized data.

3.  Lean Six Sigma (L6S) has been broadly applied in large corporates for several decades
    already (George M., 2002). Today's mainstream applications are ranging from
    production and support processes to finance, services and design, literally covering
    most process-areas. Most large corporates apply L6S in some form or shape (e.g. Lean,
    Six Sigma, Lean Six Sigma or Continuous Improvement), but very few are using it to
    improve the effectiveness of sales process or the entire "sales production system",
    which includes the marketing, sales and service functions and all activities needed to
    find, win and keep customers (Webb 2014).

**Internet of Competition (IoC) stack**

The main purpose of this article is to introduce IoC "stack", which can be used to create a
closed loop for learning from won/lost sales cases (tender or bid submitted to customer) and a
continuous improvement model for Win Rate. IoC stack has five (5) levels: Sensors,
Infrastructure, Analysis, Application and Digital service. All levels are needed for a fully
functioning system. Data quality is a critical success factor and thus its role is described
separately.
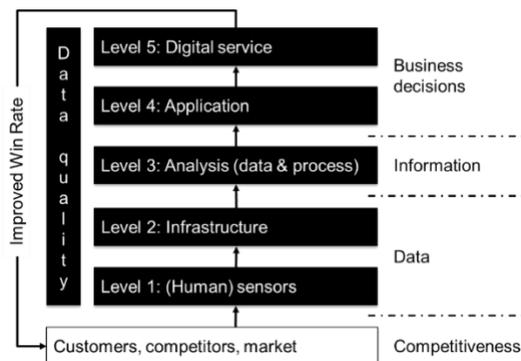
Figure 1. Internet of Competition (IoC) stack.

**Level 1. (Human) sensors**

Internet of Things (IoT) commonly refers to "sensors" as technical devices collecting data. Recent IoT applications vary from security (Mathew A., 2019) and weather monitoring (Oo, Z., 2019) to digital marketing (Mohammadian A., 2020). In B2C e-commerce, web-shop type devices are used to collect massive amounts of data on customer behaviour. However, in B2B business and a non-integrated environment, the best understanding of customer requirements and competitive situations is often a *human customer interface*, i.e. either sales personnel or customer personnel.

**Level 2. Infrastructure and data storage**

Customer Relationship Management (CRM) systems are commonly used in larger B2B companies. These CRM systems form the core of needed infrastructure and data storage. In a small business environment, where CRM is often seen too complex, Excel is commonly used as the only storage of sales related customer data. Regardless of the system, it is important that relevant data is available and can be collected and maintained in preferably one data storage.

**Level 3. Analysis**

Analysis is divided in 2 phases, *data* analysis and *process* analysis.

Data analysis plays a critical role in IoC model. Win Rate (%) is the foundation of IoC data analysis, and it should be assured that the formula measures the efficiency of sales process. Win Rate is sometimes referred as Conversion rate or Hit Rate, but the basic logic of the formula is the same or similar.

$$Win\ Rate\ \% = \frac{\#\ of\ won\ cases}{\#\ of\ won + lost + withdrawn\ cases} * 100\%$$

Formula 1: Definition of Win Rate %.

In addition to Win Rate analysis, we analyse the reasons for sales outcome. I.e. we analyse "answers" (why did we win or lose?) and other sales case related data and as a result we get "rules", i.e. how to win and what are our advantages and disadvantages. Thus, IoC utilises effectively the AI principles and logic.

Process analysis is an equally important part of analytics. It is not enough that a salesperson improves the win probability of the next tender. Improvements need to be made in the underlying sales process to assure that competitiveness, measured by Win Rate, improves to the next level (Leijala A., 2019) and that the benefit becomes permanent.
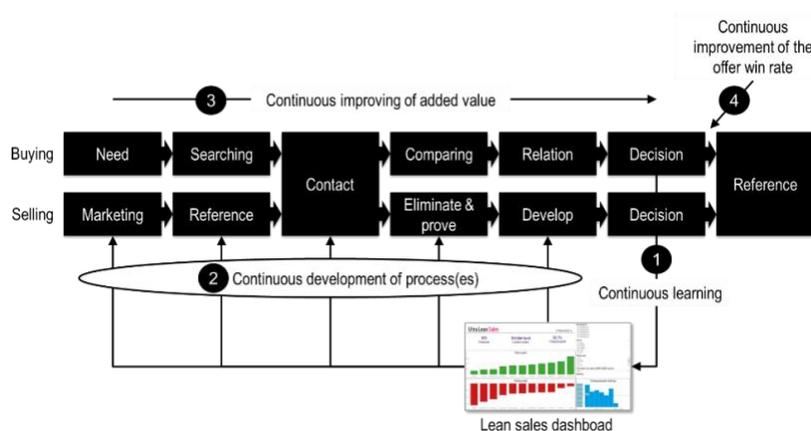


Figure 2: Buying process, sales process and continuous improvement (Leijala A., 2019).

Sales has traditionally been led by instinct and strong opinions. However, <u>modern sales require managing by data and process improvements</u>. In an on-line consumer business this is already happening, and via IoC this new sales leadership method and culture can be brought widely to the B2B business.

**Level 4. Application**

The main application of IoC is improving the win rate, and this can be done in numerous ways. In this chapter, two applications are presented as examples of many others.

(1) Ongoing sales case. Salesperson can easily gain knowledge on similar cases from history and what were the strengths and weaknesses against different competitors. This enables him/her to enforce the strengths in the offer material/presentations and to also to mitigate some of the weaknesses.

(1) Identify product competitiveness in different situations. What is our Win Rate if the product is sold separately vs. attached to other products or services? Or what is product competitiveness in specific markets and against different competition?

IoC enables hundreds of similar applications where Win Rate analysis is linked with not only sales process, but also any other core processes (such as strategy, pricing, delivery, innovation, product management or quality) of a company.

**Level 5. Digital service**

Digital dashboard enables companies to simulate competitiveness in different types of sales cases and environments. The salesperson can easily visualise and deep dive to their own

strengths and weaknesses in different type of sales cases. This information is collected in a

systemic manner and with high quality root cause analysis. Thus, it allows immediate usage in

open sales cases to elaborate the strengths, to mitigate weaknesses and to differentiate from

competition.



Figure 3: Example of digital service, Lean-sales dashboard (Leijala A., 2019)

When taking a more holistic company-wide approach, competitiveness data becomes

accessible to all needed parties. Eventually, the whole company can contribute to improving

the Win Rate, and in a measurable and actionable way. As an example, product manager can

gain e2e insight to product competitiveness in different environments and better understand

buying criteria beyond own product features, functionalities, and technical benefits. Another

example is that pricing manager can evaluate the role of price vs. other buying criteria and even

start optimizing the price to a level which does not yet impact Win Rate. Third example is that

company can measure the impact of sustainability or environmental image vs. Win Rate, thus

making company efforts to them easier to justify, both internally and to customers.

In summary, competitiveness becomes *measurable*, *transparent* to all and most

importantly *actionable*.

**Case study: Impact of COVID-19 in customer buying criteria prior, during and after the pandemic**

In total 44 B2B companies in Finland were studied during first week of April 2020 when the pandemic had a high peak in terms of governmentally set restrictions to move out from your own home and a strong recommendation to avoid any interactions with other people. Consequently, also B2B business had stopped for majority of companies. Using IoC framework, an online survey was conducted to qualify and quantify ongoing and expected changes.
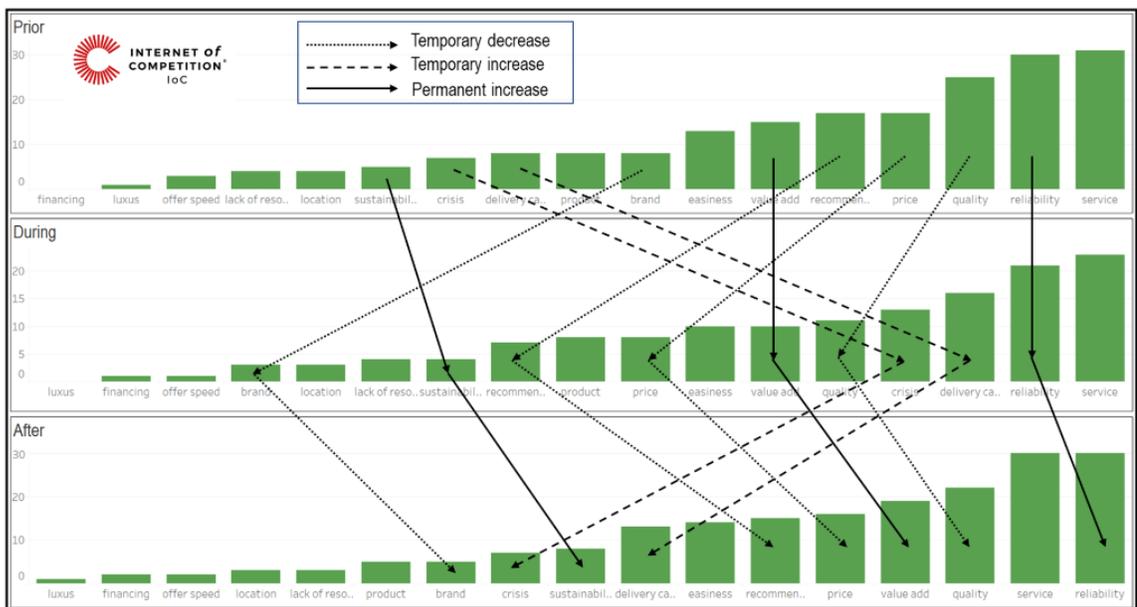


Figure 4: Case study of buying criteria prior, during and after the COVOD-19 pandemic reveals three types of changes.

Results indicated that there are at least three type of changes in the buying criteria.

(1) Some buying criteria (such as quality, price, recommendations and brand) have a *temporary decrease* during the pandemic, but they are expected to climb up after the pandemic is over.

(2) Some buying criteria (such as delivery capability and resolution to crisis related challenges) have a *temporary increase* during the pandemic, but their role is expected to decline after the pandemic is over.

(3) Some buying criteria (such as sustainability, value add and reliability) have a *permanent increase*, and are expected to increase their role during and after the pandemic.

The survey was conducted with 44 B2B companies in Finland. They represented 40 different industries and were 1-9 employee micro-companies with turnover between 0€ and ~3m€ (median ~200k€). Most respondents estimated that the situation will "normalise" within 2-3 months, i.e. June/July 2020, but obviously only time will show when and how this happens.

**Discussion and conclusions**

Customer buying processes and buying criteria are changing at an increasing pace. Most companies have already seen clear changes during the past 5-10 years and B2B companies are equally affected. Recently, COVID-19 has impacted virtually all companies. In consumer business, AI platforms and predictive analysis are already established, and especially large corporates are effectively using them to predict and influence customer buying behaviour. Similar phenomena can happen in B2B side, using the Internet of Competition stack introduced in this paper.

**Increased customer value enables revolution of business growth**

Most implementations of sales process (and related CRM-systems) focus mainly on the

company's own internal activities and keeping sales forces in control (Stacey L. et al, 2018). IoC

changes this radically as the main purpose of sales process becomes 1) *meeting customer*

*buying process steps* and 2) *meeting buying criteria*. As an outcome of this process and data

driven philosophy, company can *provide more value to customer*.

Implementation of IoC does not require investment in CRM systems, nor massive

amounts of data. One can take the first steps using Excel and with as few as 30 samples (past

won and lost cases). Thus, it's not an exclusive right of large corporates, but can be even be

applied by self-employed B2B entrepreneurs. This is essential prerequisite for wide and fast

adoption in B2B environment, remembering that most small businesses do not use CRM and

typically only have some tens of sales cases per year.

Special attention should be placed on understanding and analysing customer buying

criteria and underlying root causes. This enables accurate predictions of own strengths and

weaknesses in upcoming sales cases and competitiveness in multiple different use-cases.

**Critical success factor #1: data integrity**
Data integrity needs to be high, in order to assure correct interpretation of data and corrective

actions for improving competitiveness. However, analysis of Win Rate provides massive new

insight to most companies, so one should not use poor data quality as an excuse for not starting

today.

Information quality has been recognized as a potential contributor in achieving strategic

advantage over competitors (Baskarada & Koronios, 2014) and this applies also to B2B sales.

Root cause analysis capability and skills are especially important in evaluating the reasons for winning or losing tenders. While L6S methods provide an extensive toolbox for high quality root cause analysis and continuous process improvement, starting with basic tools is already a huge improvement in an instinct based sales environment. Opinion based data, i.e. reasons for losing/winning/satisfaction, is often thought and entered in a rush (regardless of whether it comes from customer or sales personnel). Thus, the results also partially represent symptoms rather than real root causes. There are a couple of easy, yet powerful, root cause analysis methods which are recommended, such as standardizing the data structure, cause-effect diagram (ASQ 2020a) and the 5 why method (ASQ 2020b).

**Critical success factor #2: data confidence level and quantity**

Data confidence level and quantity is another critical success factor. The more data we have, the more we can deep dive to different types of cases and identify strengths and weaknesses. It is commonly assumed that AI requires massive amounts of data. This, however, is not necessarily the case in B2B sales when applying IoC. Pestorius captures the essential point in his book (2007): *"In a World where 20% margins and 10% growth is considered successful, making critical decisions with 50-60% certainty, rather than 0% is an enormous and profitable improvement".* This contradicts heavily with typically used 95% (P<0.05) confidence levels for correlation and regression testing as well as "Six Sigma" level of defect ratio where only 3.4 defects in a Million samples are allowed. To make this concrete, who would even dream to win 9,999,966 tenders out of a million attempts?

My analysis shows that a 95% confidence level for decision making is reached with ~80 cases. And moderate (50%) confidence already at ~30 cases. Even though one can start with

only ~30 won/lost tenders, the full power of IoC comes when the volumes are high. Not only large volume allows more focused and accurate corrective actions, but also totally new applications and use-cases for the competitiveness data.

**Reflections on COVID-19 impact to buying process and criteria**

The COVID-19 pandemic and the respective "reset" of global buying behaviour forces B2B companies to re-think customer buying process and criteria. Using IoC framework, they can not only analyse and quantify changes, but also adjust their own sales process to meet the new conditions.

Companies who can do this faster than their competitors are expected to be the winners in 21$^{st}$ century B2B sales. Likely the global economy will now face numerous changes and the outcome to B2B companies is hard to predict. To mention a few possible scenarios; many countries have already started to protect/favour home markets, remote work has become a new standard for many, online education has made a great leap and even the end of urbanisation has been discussed. If people, enabled by the possibility to work remotely, move from high density urban cities to rural countryside, what will be the implications to B2B companies in cities? How about B2B companies in smaller rural towns? In this turbulence, high quality analysis of customer buying behaviour becomes a critical success factor for companies and it also opens a huge number of new academic research opportunities utilising the Internet of Competition (IoC) framework.

## Conclusions and proposed research areas

In summary, Internet of Competition (IoC) framework and the described "stack" is a suitable foundation for 21st century B2B sales model, where sales and competitiveness related decisions are done using data analysis. Once the foundation is in place, it can be scaled in multiple directions to improve company Win Rates and other KPIs such as profitability. Short, medium, and long-term impacts of COVID-19 on buying behaviour will be the most important next research area. This research can be done for either single B2B company, or a group of many companies. Additionally, correlation between Win Rate and Price will be an interesting and highly valuable research area for B2B companies.

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ASQ 2020a. As of 15.1.2020, ASQ refers on its website https://asq.org/quality-resources/quality-glossary "Cause and effect diagram is a tool for analyzing process dispersion. It is also referred to as the Ishikawa diagram, because Kaoru Ishikawa developed it, and the "fishbone diagram", because the complete diagram resembles a fish skeleton. The diagram illustrates the main causes and sub-causes leading to an effect (symptom)."

ASQ 2020b. As of 15.1.2020, ASQ refers on its website https://asq.org/quality-resources/quality-glossary "Five whys is a technique for discovering the root causes of a problem and showing the relationship of causes by repeatedly asking the question, "Why?" A repetitive questioning technique to probe deeper to surface the root cause of a problem. The number of times "why" is asked depends on when the true root cause is reached."

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