



# Collaboration Through Virtual Teams: towards an operational model for virtual project leadership in the automotive industry

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# Resume of the presenter

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2019 – now

**Product Manager for passenger and pedestrian protection**

EMEA and China Region

Joyson Safety Systems Aschaffenburg GmbH

Sept. 2016 – Dec. 2018

**Project Manager for buckle and seatbelt**

Audi and Lamborghini customer projects

Joyson Safety Systems Aschaffenburg GmbH (former TAKATA AG)

Jan. 2016 – Aug. 2016

**Product Development Leader**

Audi customer project

Faurecia Plastics Automotive Systems GmbH

Mar. 2015 – Dec. 2015

**Installation space analyst bus**

MAN

Jul. 2014 – Feb. 2015

**Project Manager Automotive**

Audi motorsport and Lamborghini customer projects

Brothers Binder GmbH



# Background

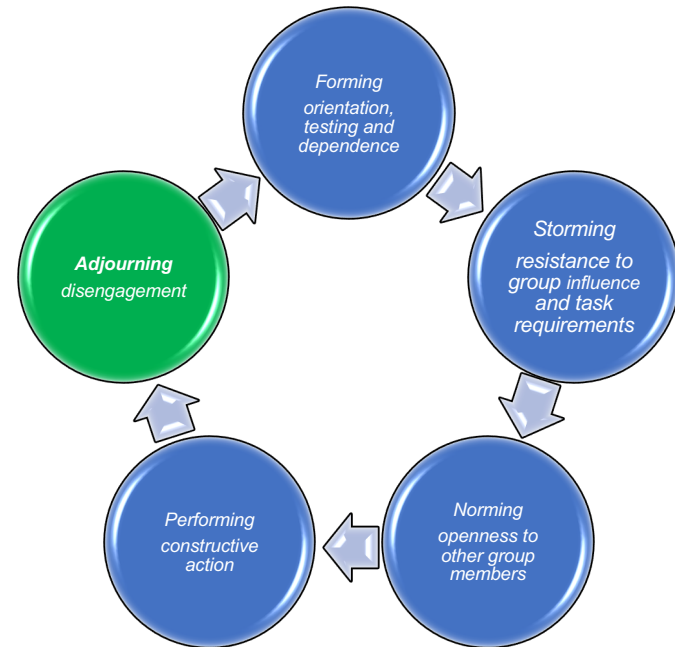
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- Both the diesel gate and the ever-stricter EU emission standards prompted the German automotive industry in particular to rethink vehicle production and promote e-mobility
- Linking the views of the working methods of the IT environment with the technical environment
- The introduction of agile working and the expansion of information and communication technology in the technical environment was seen by many companies as a done deal for working with virtual teams
- The COVID-19 situation has made us aware of the extent of insufficient digitization in Germany and the necessity of virtual work
- In addition, many leaders felt overwhelmed with the virtual leadership of a team

# Background

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- Transformation of the Tuckman and Jensen model into the Group Development lifecycle
- Extension of the individual lifecycle stages with five critical success factors
- Each individual stage of the final model is analysed to discover which influences team building or leading the most.



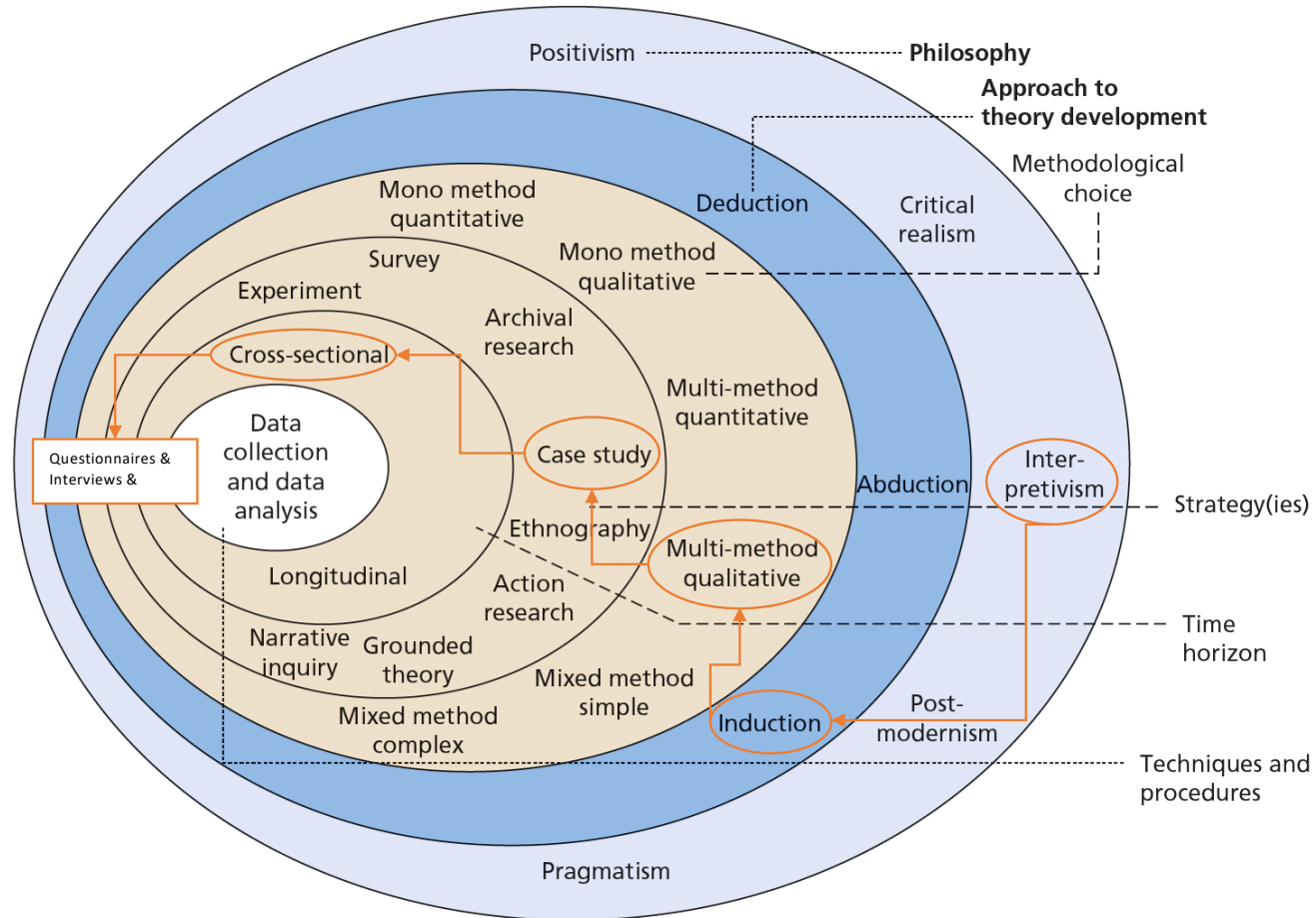
Tuckman's and Jensen's Group Development Lifecycle

# Research objectives

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1. To review existing literature on e-leadership and virtual teams and develop a provisional conceptual framework (PCF) for the analysis of e-leadership in the automotive industry.
2. To perform an analysis of the extant literature to identify critical success factors for the e-leadership of virtual teams in the automotive industry.
3. To develop, apply and evaluate a new operational model for the e-leadership of virtual teams that minimise personal contact and optimise project outcomes in the automotive industry.

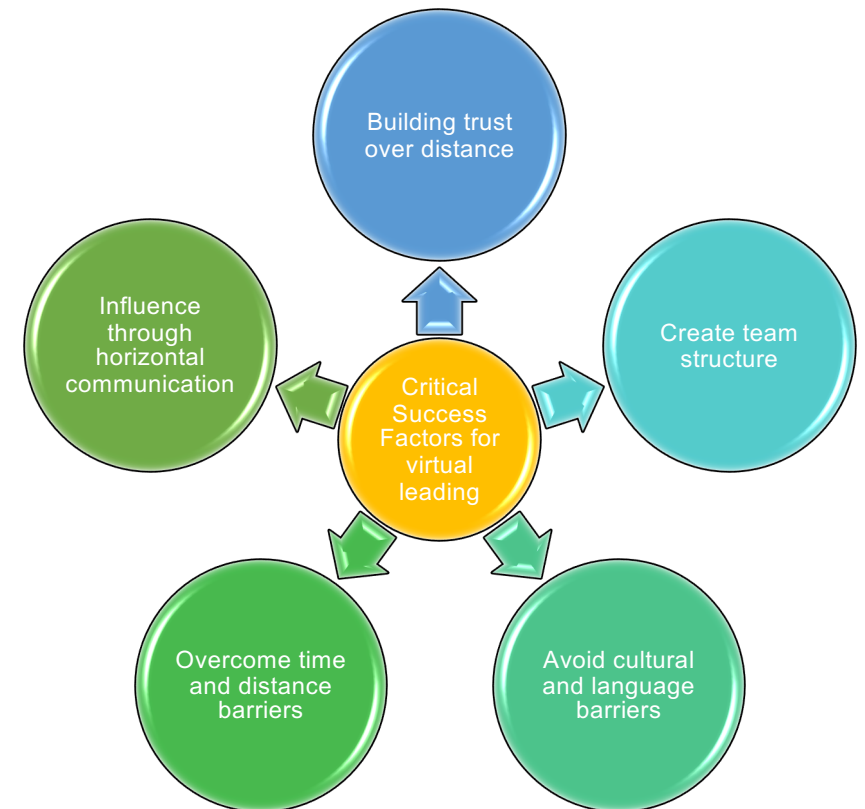
# Research methodology



# Critical Success Factors (CSFs)

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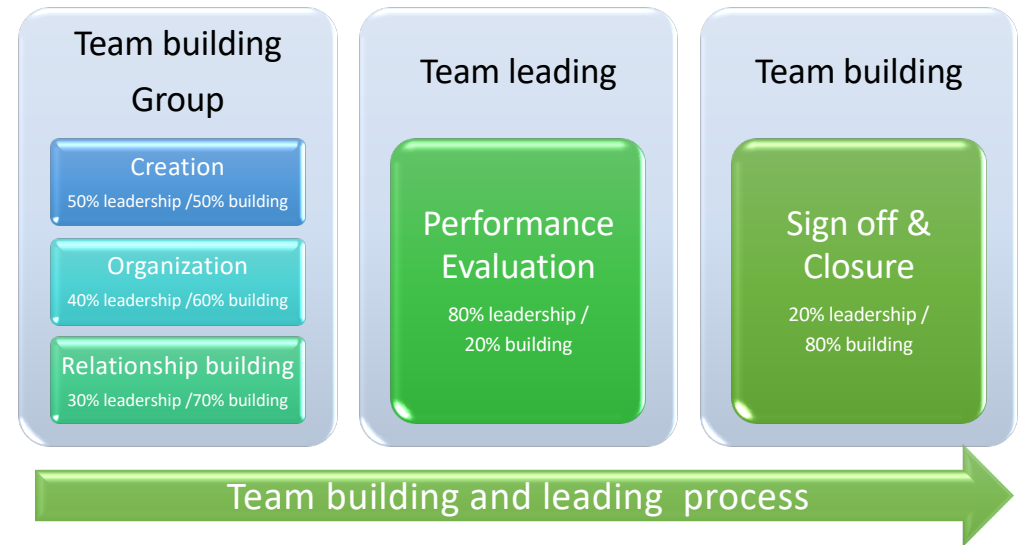
- CSFs emerged from the literature review
- The focus of the CSFs was increasingly placed on team building and leading
- The CSFs cover each stage of the V-CORPS model
- The use of CSFs is adapted to each phase of the V-CORPS model



# Critical Success Factors (CSFs)

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- CSFs impact each of the team building and leading stage
- Team building stage one and two are important
- Team leading is the most measurable stage
- Combination of CSFs with team building and leading stages results in the V-CORPS model





# Conceptual framework

CSF/ V-CORPS Stage	Creation	Organisation	Relationship Building	Performance Evaluation	Sign-off & Closure
<b>Building trust</b>	First impressions (Face-to-face meeting)	Assigning roles for individual members. Clearly define project tasks.	Conduct the “Big Five” analysis of each team member. Offer support in critical situations.	Outline the importance of reliability between team members and the dependency of performance	Acknowledgement of lessons learnt. Reflection on team leading.
<b>Create team structure</b>	Address corporate policies	Defining the terms of the project rules.	Team working contract and a team chat/forum to perpetuate the team communication	Highlight the importance and the effectiveness of the project structure.	Team dissolution. Creation of a long-lasting relationship.
<b>Avoid cultural and language barriers</b>	Establish whether any cultural or language barriers exist.	Definition of support actions in the steps to be taken should an issue arise.	Equal treatment and support during breakdowns of communication.	Stress the importance of work-culture. Ensure that performance comes before individuality.	Private contact data exchange (if desirable) Stay in touch with team members after project time
<b>Overcome time and distance barriers</b>	Investigate all possibilities.	Definition of the working tools used for the project	Show dependencies between tasks and team members	Train, show and explain methods for working without time waste	Avoid anxiety about separation and ending
<b>Horizontal communication</b>	Round of interviews; PM treats team members as equals.	Highlight the importance of teamwork. One team = One unit.	Intervene only when crucial. E.g. decision making, supportive roles, and escalating situations.	Create a relaxed environment while focusing the team on specific project milestones.	Project evaluation. Team members show support for the actions of the PM. TMs leave the project feeling appreciated.

## Progress to date

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- The literature review has been completed
- The provisional conceptual framework is built
- The methodology and design of the research has been defined
- The empirical study is 80% complete, and will be completed by the middle of November 2020
- PhD will be finished by November 2021

## Conclusion

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- V-CORPS model will be a guide for virtual team building and leading in the automotive industry
- V-CORPS model improves the understanding in the automotive sector about the importance of the team building stages
- V-CORPS model can be used across the full project life-cycle
- V-CORPS model will show that good team development results in good project performance