



The Impact of Hybrid Team Structures on Performance and Adaptation

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Purpose

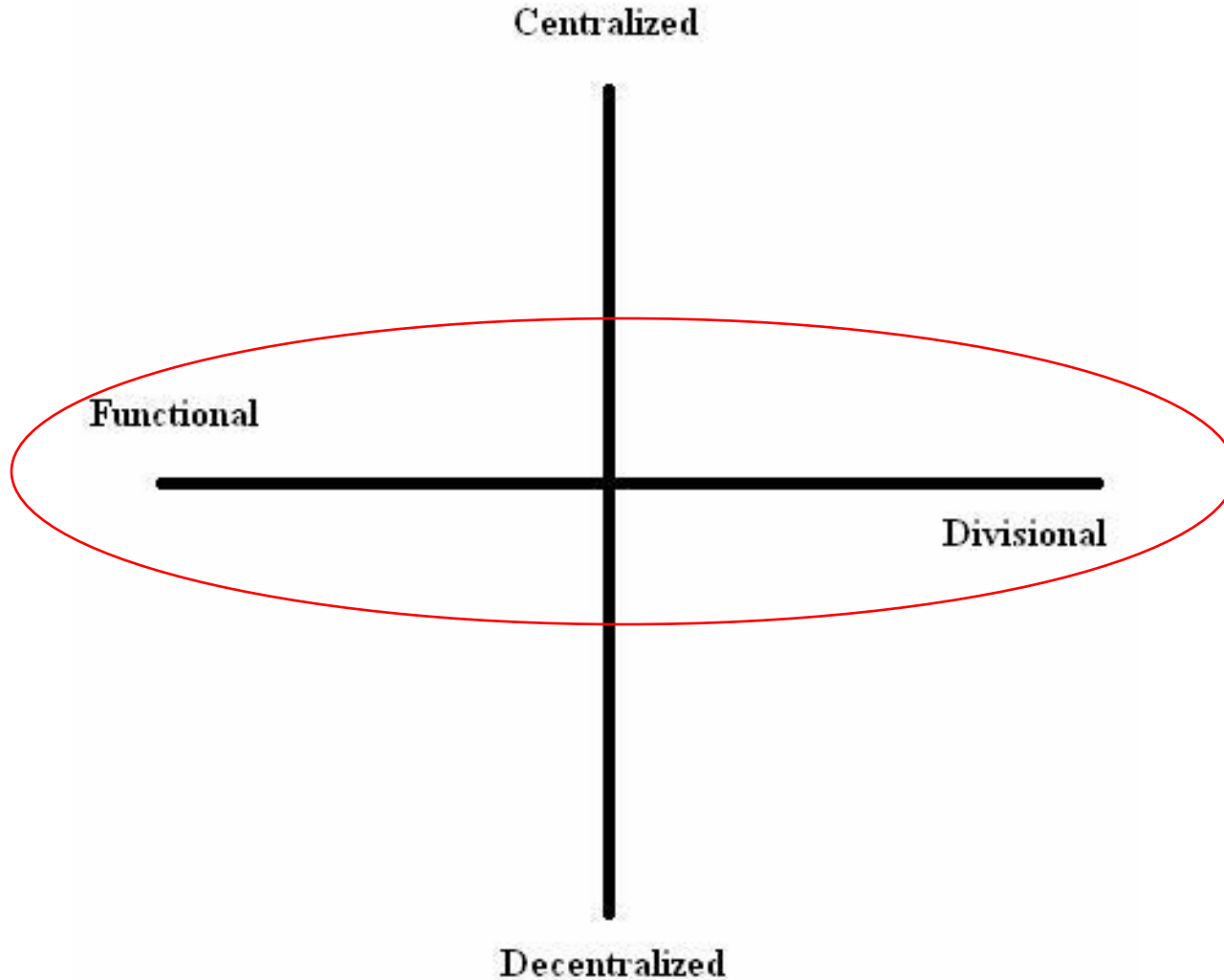
- ◆ Examine the impact of team structure on team performance and effectiveness by addressing:
 - the fit of structural conditions to task demands.
 - structural adaptability to changes in task demands.



Overview

- ◆ Introduction to structural contingency theory as a model for team structure.
- ◆ Brief review of past research on structure.
- ◆ Presentation of hybrid structures combining complementary elements of task and role dimensions.

Dimensions of Structure





Structural Contingency Theory

- ◆ Two prototypical team task structures.
 - Functional
 - Divisional

- ◆ Neither prototype is superior to the other in all situations. Thus, structural *contingency* theory.



Team structure research

- ◆ Study 1: Fitting structure to environment.
- ◆ Study 2: Structural adaptability.

*Study 1: Fitting Structure to Environment**

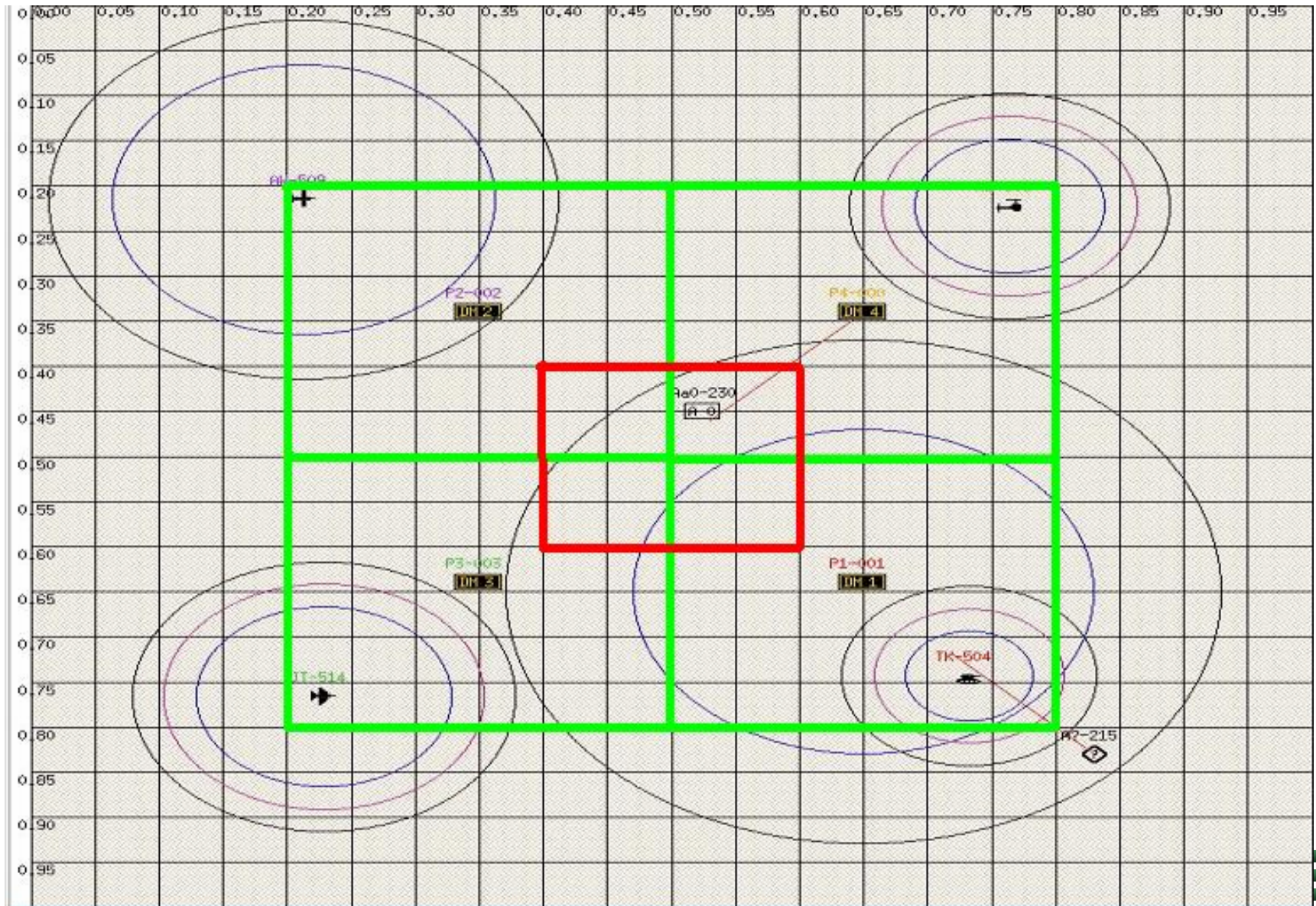
- ◆ Structure
 - Functional
 - Divisional

- ◆ Situational Characteristic
 - Predictable
 - Unpredictable

- ◆ Task: MSU-DDD

**Hollenbeck, Moon, Ellis, West, Ilgen, Sheppard, Porter, & Wagner (2002)*

MSU-DDD





Findings

- ◆ The best team structure was contingent on the situational characteristics the team was facing.
 - Functional structures worked better in predictable environments.
 - Divisional structures worked better in unpredictable environments.

Study 2: Changing Structure*

- ◆ Stimulated by: Need to change; Tendency to apply static findings to dynamic situations.
- ◆ Asymmetric Adaptability: Structural changes may not be as easy to make in one direction as they are in the other.
 - Need to consider both the point of origin and the destination of the adaptation.
- ◆ Comparison of two changes:
 - Functional → Divisional
 - Divisional → Functional

*Moon, Hollenbeck, Humphrey, Ilgen, Ellis, West, & Porter (in press, *Academy of Management Journal*)



Findings

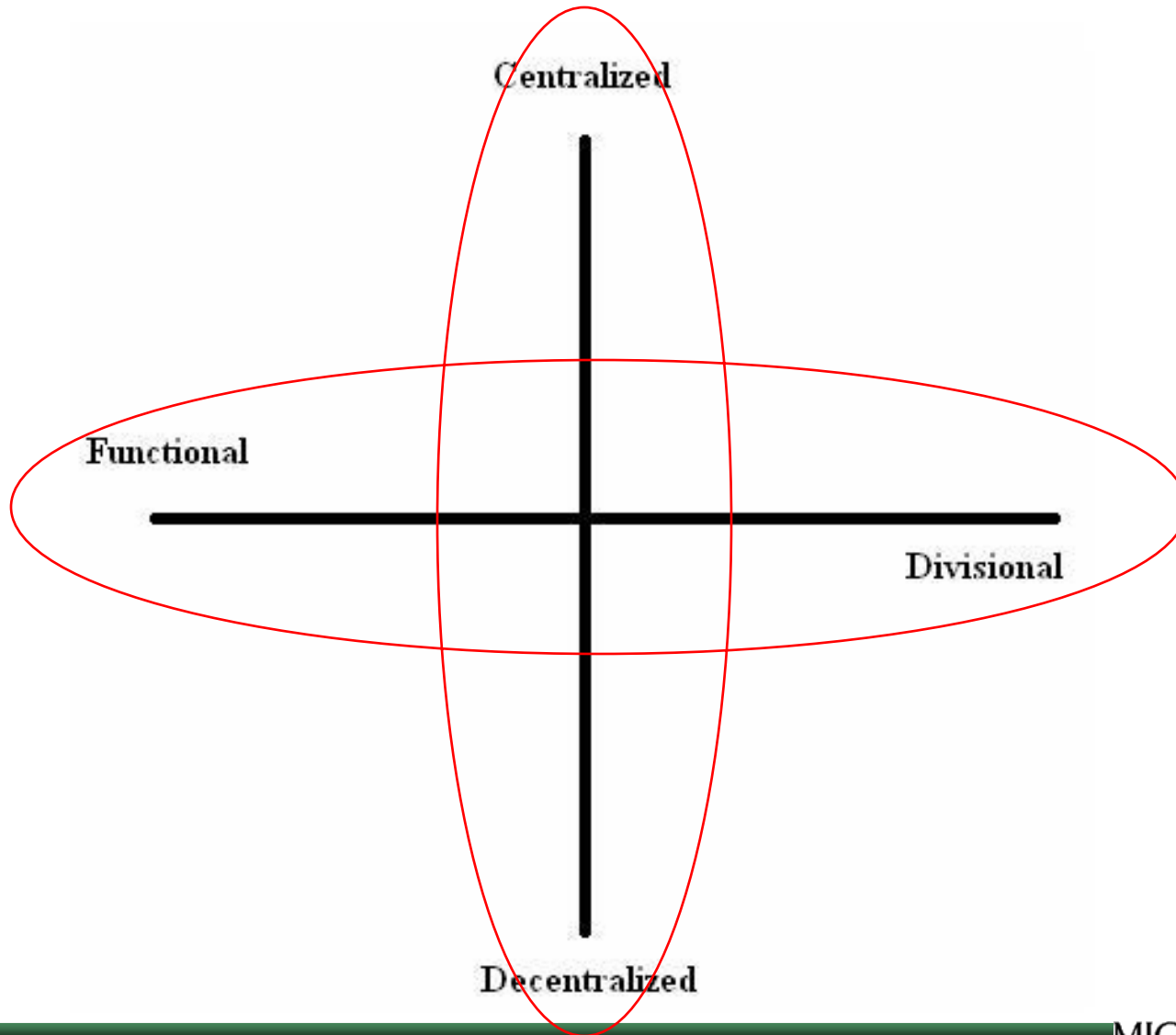
- ◆ Asymmetric adaptability.
 - Teams who were structured functionally at time 1 were able to adapt to switching to a divisional structure at time 2.
 - Teams who were structured divisionally at time 1 did not adapt well to switching to a functional structure at time 2.



Early Conclusions

- ◆ Fit
- ◆ Asymmetry

Dimensions of Structure



Study 3: Changing Vertical Structure*

◆ Static

- Centralized teams will be more Accurate than Decentralized teams (time 1).
- Decentralized teams will be faster than centralized teams (time 1).

◆ Dynamic

- C→D shifts are more successful than D→C shifts.

**Ellis, Hollenbeck, Ilgen, & Humphrey (2003).*



Findings

- ◆ Centralized teams more Accurate than Decentralized teams (time 1).
- ◆ Decentralized teams faster than centralized teams (time 1).
- ◆ $C \rightarrow D$ shifts more successful than $D \rightarrow C$ shifts.
 - $C \rightarrow D$ retained accuracy but didn't lose speed.
 - $D \rightarrow C$ didn't gain accuracy but lost speed.

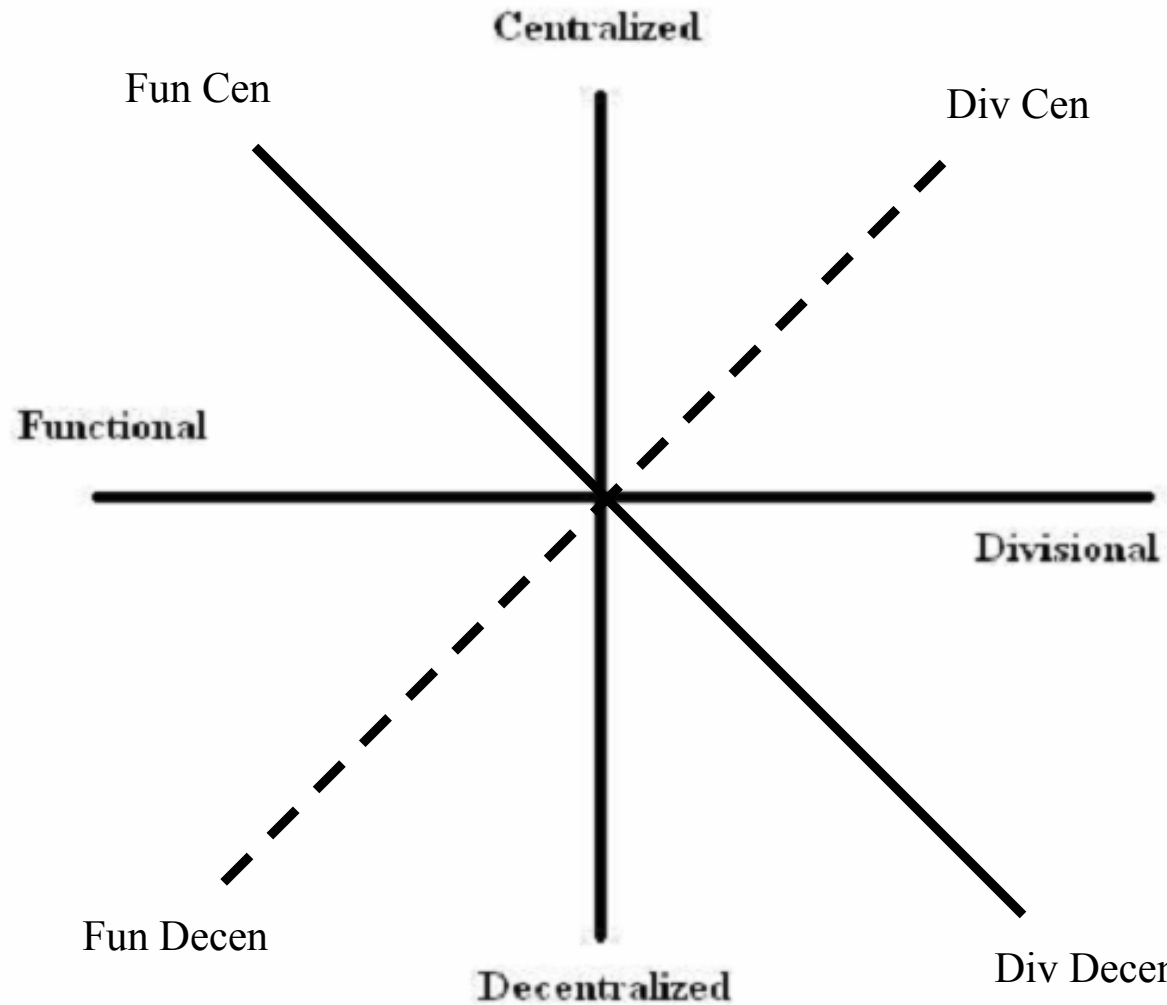


Hybrid Structures

- ◆ Horizontal and vertical structures complement each other.
 - Divisional/Centralized
 - Functional/Decentralized

- ◆ Can reap the benefits associated with both types of structures simultaneously.

Dimensions of Structure



Team Structure Hypotheses


- ◆ H1: Teams switching from FunCen to DivDecen structures will outperform teams switching from DivDecen to FunCen structures at time 2 (Structural Asymmetry).
- ◆ H2a: Hybrid teams will outperform FunCen teams at time 1.
- ◆ H2b: Hybrid teams will adapt to structural change better than DivDecen → FunCen teams at time 2.



Method

- ◆ N = 64 4-person teams.
- ◆ Task: MSU-DDD with mixed task environment.
- ◆ Measures
 - DV: Team performance.
 - IVs: Horizontal and Vertical structure.

Condition	TIME 1	TIME 2
1	FUN-CEN	DIV-DECEN
2	FUN-DECEN	DIV-CEN
3	DIV-DECEN	FUN-CEN
4	DIV-CEN	FUN-DECEN





Team Structure Results

- ◆ H1: FunCen → DivDecen teams outperformed DivDecen → FunCen teams at time 2, controlling for time 1 performance ($b = 2.55, p < .01$).
- ◆ H2a: Hybrid teams outperformed FunCen teams at time 1, $t(47) = 3.01, p < .01$.
- ◆ H2b: Controlling for time 1 performance, hybrid structured teams outperformed DivDecen → FunCen teams at time 2 ($b = 1.93, p < .01$).



Conclusions

- ◆ Structural contingencies on both horizontal and vertical dimensions impact team performance.
- ◆ Asymmetry effects found on horizontal dimension also observed on vertical dimension.
- ◆ Optimal team structures involve both vertical and horizontal structural characteristics.
 - Hybrid structures may allow teams to perform well initially and still be able to switch structures successfully.
 - Hybrid team structures may actually give teams the “best of both worlds” in terms of the benefits of different types of horizontal and vertical structural schemes.