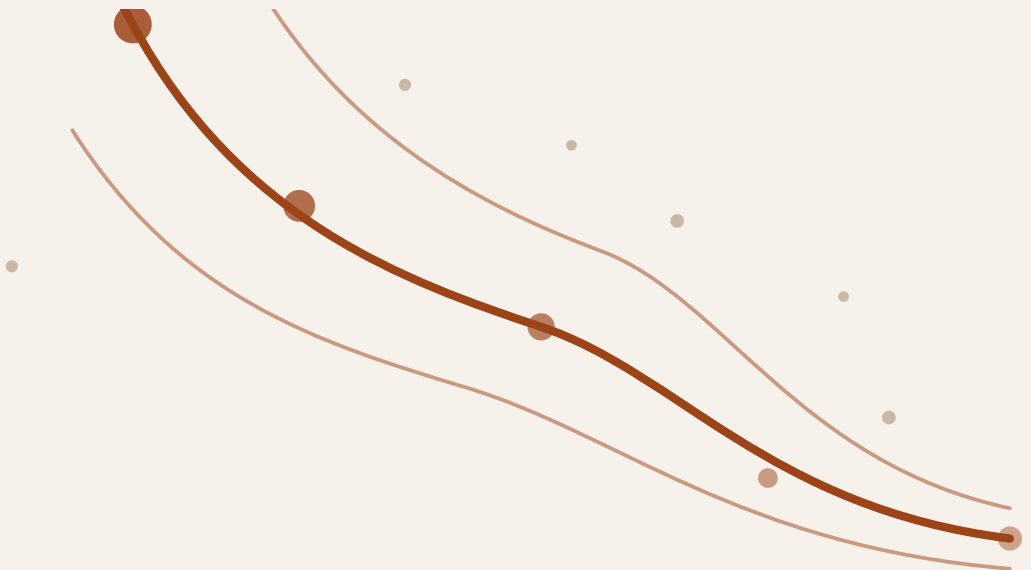


Innovation Management

From scattered initiatives
to a sustained organizational capability

Dr. Omar A. Alsamani



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Chapter 9

9 Innovation teams and organization-wide participation

In this chapter we move from the individual to the group: how innovation teams are formed and organized, and what distinguishes a team that carries its idea through to implementation. We then widen the lens to broader organizational participation: how an organization can open the door to innovation for all its employees without drowning in ideas it cannot respond to.

Introduction

Opening case: A technical team (composite case)

An organization tasked a team of five outstanding engineers in its IT department with developing a solution to reduce data-entry errors in a service run by the operations unit. The team worked enthusiastically for four months, built a sophisticated automated validation system, and presented it at a closing meeting where it won the admiration of everyone in the room. Two weeks later, however, the operations staff refused to use it: it added three screens to a procedure they performed dozens of times a day, and no one had asked them during development how they actually

worked. The problem was not the engineers' competence. It was that the entire team had come from one place and had worked within its own boundaries.

The case shows that a good team requires more than good individuals. An innovative team is designed: whom it includes, what roles its members play, how it connects with people outside it, and where it sits in the structure. These questions are the focus of this chapter. We take them up one by one before moving on to the wider participation that opens innovation to every employee.

Learning Objectives

After studying this chapter, the reader should be able to:

- 1 Explain why innovation increasingly relies on teams, and identify what distinguishes innovative teams.
- 2 Form an innovation team that is balanced in knowledge and roles.
- 3 Describe a team's activities with external parties and link them to its success.
- ε Compare team structures and choose the one that fits the degree of innovation.
- 0 Design broad organizational participation that the organization is able to respond to.

9.1 Why teams?

Wuchty, Jones, and Uzzi analyzed some twenty million scientific papers and two million patents spanning several decades. They found that teams have come to dominate knowledge production in nearly every field, and that work produced by teams is more likely to be highly influential than work produced by individuals (Wuchty et al., 2007). The explanation is that the problems worth

innovating on have become too complex for any single discipline to encompass, and the knowledge needed to solve them is distributed among different people.

Yet a team is not the sum of its members. A team of average performers may achieve what a team of stars cannot, if it knows how to combine its members' knowledge and reach the people it needs. Innovators need an environment, and the team is the environment closest to them; it is there that they find, or fail to find, much of what they need.

This is borne out in the experiences of innovators themselves. In a phenomenological study of the experiences of prominent Saudi innovators, nine of the eleven participants counted working with a supportive team among the reasons for their success, as when a partner took over operational tasks so that the innovator could concentrate on development (Alsamani, 2023).

9.2 What distinguishes innovative teams?

Hülsheger, Anderson, and Salgado brought together more than thirty years of research in a meta-analysis of team-level predictors of innovation. They found that factors related to processes within the team had a stronger effect than factors related to its composition (Hülsheger et al., 2009). Figure 9.1 summarizes the most prominent of these factors.



Figure 9.1 Team-level innovation factors, ranked approximately by strength of effect, adapted from Hülshager et al. (2009). The bars are illustrative and do not represent numerical values.

This finding has a direct practical implication. Organizations invest considerable effort in selecting team members, then leave the team to work without a shared vision, without contact with beneficiaries, or without real support for experimentation. The research suggests that what happens within and around the team matters more than the list of its members' names. Note, too, that diversity helps when it is diversity of knowledge relevant to the specific problem. Another review showed that diversity cuts both ways: it broadens the knowledge available to the team, but it can also open the door to division, and the outcome depends on the team's ability to exchange and integrate information (van Knippenberg & Schippers, 2007).

9.3 Team composition and roles

Team configurations vary as widely as their tasks, but innovation teams generally need five roles to be covered; in small teams, one person may hold more than one of them:

- **Team leader:** keeps the problem and purpose clear, coordinates the work, and protects the team's time.
- **Voice of the beneficiary:** someone who lives the problem or knows those who do, and who brings the team back to it whenever it drifts away. This role's absence is what caused the team in the opening case to fail.
- **Technical expertise:** the specialized knowledge needed to build and test the solution.
- **Voice of operations:** someone who knows how the solution will be used day to day, and what will hinder its adoption once the project ends.
- **Sponsor:** a leader from outside the team with the authority to remove obstacles and secure resources, as Chapter 3 explained.

Composition is also tied to stage. While exploring the problem, the team needs wider diversity and closer proximity to beneficiaries. While developing the solution, it needs technical depth. At scale-up, it needs people with operational experience. Team composition is therefore best treated as a decision to be revisited as the initiative moves from one stage to the next.

Equally important is the way members join the team. A team whose members join by choice, out of interest in the problem, starts with a different kind of motivation from one whose members were assigned without being asked. Many organizations combine the two: leadership defines the problem and the roles required, then opens the door to anyone who wishes to volunteer. This is another application of autonomy within boundaries.

9.4 The team and its boundaries: working beyond the team

External communication was among the strongest innovation factors in the meta-analysis above. Ancona and Caldwell studied this aspect in product development teams and found that the most successful teams were not necessarily those with the most external contact, but those that carried out specific kinds of external activity, above all communicating with leadership to secure support and resources, and coordinating with the other units on which the work depended. Teams that confined themselves to gathering general information, without these two activities, performed worse (Ancona & Caldwell, 1992). Figure 9.2 illustrates these activities.

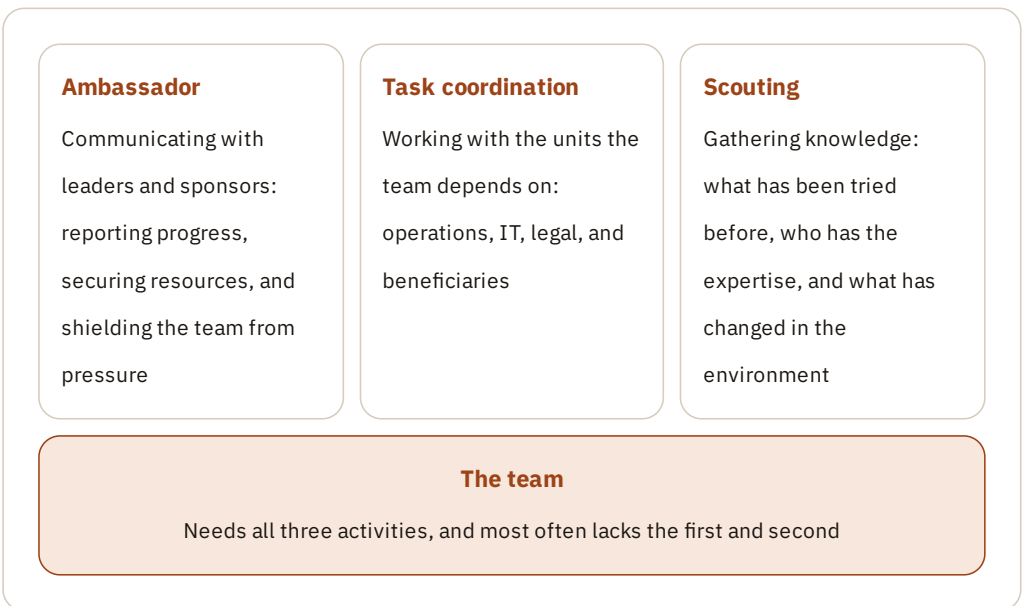


Figure 9.2 The team's activities with external parties, adapted from Ancona & Caldwell (1992).

This finding casts the opening case in a new light: the engineering team succeeded at technical scouting and presented its final result skillfully to leadership, but it never coordinated with the unit that would use the solution.

It also confirms what Chapter 7 said about the importance of a network of relationships in moving an idea into implementation (Baer, 2012). An innovative team works at its boundaries as much as within them.

In Practice

Write down the names of the people whose cooperation your team needs for its solution to be genuinely used. Then put a mark next to those you have spoken with in the past four weeks. The unmarked names are your project's biggest risks.

9.5 Team structures

Where a team sits in the structure depends on the degree of innovation required. Clark and Wheelwright distinguished four structures for development teams, graded by how fully members are dedicated to the team and how much authority its leader holds (Clark & Wheelwright, 1992). Table 9.1 presents them.

Table 9.1 Innovation team structures, adapted from Clark & Wheelwright (1992)

Structure	What it looks like	Suited to	Risk
Functional	Each member works in their own unit, and the work passes from one unit to the next in sequence	Small improvements within a single unit	Slowness, and no one who owns the whole outcome
Lightweight	A coordinator follows up the work, while members remain attached to their units	Improvements that touch more than one unit to a limited extent	A coordinator without authority, so unit priorities prevail

Structure	What it looks like	Suited to	Risk
Heavyweight	A leader with strong authority and members dedicated part- or full-time, who remain linked to their units	Significant innovation that requires integration across units	Tension between the leader and unit managers if authority is not settled
Autonomous	A dedicated team outside the usual structure, with its own rules and resources	Radical innovation, or innovation that conflicts with the existing model	Difficulty bringing the solution back into the organization once it succeeds

Organizations frequently assign lightweight teams to tasks that call for heavyweight ones: employees are asked to devise a solution that will change how three departments work, they work on it after finishing their regular duties, and they are led by a coordinator who cannot ask anything of anyone. The result is predictable. This connects with what Chapter 6 showed about time as the scarcest enabler of innovation.

9.6 Broad organizational participation

Alongside assigned teams, many organizations seek to involve all their employees in innovation through idea platforms, competitions, and internal challenges. This is the right direction: valuable ideas can come from anywhere, and the employee closest to a problem sees it before anyone else. Yet such participation often fails for a simple reason. The organization opens the door to more ideas than it can respond to, most of them end up in decision limbo, and participants learn that taking part is pointless.

A study of an open idea platform launched by a major technology company reveals another side of the problem. Bayus found that repeat contributors were better than others at offering ideas the company judged valuable, but they

seldom repeated their first success once their ideas had been implemented, tending instead to propose ideas resembling what had worked before (Bayus, 2013). A steady flow of good ideas therefore takes more than a platform; it takes a design that keeps renewing broad participation.

Successful participation tends to share four features:

- **The challenge before the platform:** time-bound campaigns that start from challenge questions set by the strategy, as Chapter 4 explained, rather than an open box for everything.
- **The response before the invitation:** before any campaign is launched, it is settled who will read the ideas, when, and how their authors will receive a reply.
- **From idea to team:** the best ideas become small teams that include their originators and receive time and resources to test them, rather than being handed to another unit to implement.
- **A network close to people:** individuals in different units who serve as innovation ambassadors. They know the system, help colleagues frame their ideas, and carry challenges from the field to the responsible unit.

At a university, this might take the form of an **annual innovation day** at which students present their projects alongside their faculty supervisors, with senior leaders attending and taking part in the judging. The value of such a day lies in meeting several needs at once at modest cost: an opportunity to present, public recognition, connections between students and the bodies that could support their projects, and a signal from leadership about what it cares about. This is close to what one participant in the innovator study cited above recounted about a business incubator he had visited: he found that one secret of its success was that it brought emerging innovators together with innovators who had succeeded within the past three years, because they were closer to the obstacles the newcomers would face (Alsamani, 2023).

Principle

Broad participation is a promise to people that their ideas will be heard. The organization's capacity to keep that promise is what should determine how much participation it asks for.

Chapter tool: Team composition card

Use this card when forming a new innovation team, then revisit it as the initiative moves from one stage to the next. Answer each question with specific names and actual facts. A blank answer points to a gap in the team itself.

Chapter tool Team composition card

Dimension	Question	Answer
Problem and purpose	What is the problem? For whom? How will we know we have succeeded? Does every member state it in roughly the same words?	
Roles	Who is the leader? Who is the voice of the beneficiary? Who provides technical expertise? Who is the voice of operations? Who is the sponsor?	
Diversity	What knowledge does the problem require that the team lacks?	
Time	How many hours a week does each member actually devote? And which of their managers has agreed to this?	
Structure	Is the structure (functional, lightweight, heavyweight, autonomous) suited to the degree of innovation required?	
Boundaries	Which units do we depend on? And when do we communicate with the sponsor?	

Dimension	Question	Answer
Mode of joining	Did members join by choice, or were they assigned? Do they know why they were chosen?	

Chapter Summary

- Teams have become the predominant source of knowledge production and innovation, because problems require knowledge distributed among different people.
- What happens within and around the team, such as a shared vision, support for innovation, and external communication, affects innovation more than the team's composition does.
- Useful diversity is diversity of knowledge relevant to the problem, and its payoff depends on the team's ability to integrate that knowledge.
- Innovation teams need five roles: the leader, the voice of the beneficiary, technical expertise, the voice of operations, and the sponsor.
- The most successful teams work at their boundaries: they communicate with leadership and coordinate with the units they depend on.
- A team's structure is chosen according to the degree of innovation; assigning a lightweight team to a task that needs a heavyweight one is among the most common causes of failure.
- Broad participation is a promise of response, and so it should be designed to match the organization's capacity to keep that promise.

Key Terms

Boundary-spanning activities Boundary-spanning activities	A team's activities with external parties: communicating with leadership, coordinating with other units, and gathering knowledge.
Heavyweight team Heavyweight team	A team with a leader of strong authority and dedicated members, suited to innovation that requires integration across units.
Job-relevant diversity Job-relevant diversity	Differences in disciplines and experience relevant to the problem among team members.
Innovation campaign Innovation campaign	A time-bound call for ideas on a specific challenge question, with an announced mechanism for responding.
Innovation ambassador network Innovation ambassador network	People in different units who help their colleagues frame their ideas and connect the field with the innovation system.

Review and Discussion Questions

- 1

Why do process factors within a team have a stronger effect on innovation than composition factors? Understanding
- 2

Analyze the team in the opening case using the five roles and the three boundary-spanning activities, and identify what would have changed the outcome. Analysis
- 1

Choose an innovation initiative in your organization, identify its team's current structure, and judge whether it suits the degree of innovation

required. **Application**

- 2 Design an innovation campaign for a single challenge question in your organization, specifying the response mechanism before launch.

Application

- 3 “The more ideas submitted to an innovation platform, the stronger the evidence of its success.” Evaluate this statement. **Evaluation**

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How does an organization move from scattered initiatives that celebrate innovation to a sustained capability to produce it?

This book traces the path of innovation from the first signal to a solution adopted in practice that creates value, and analyzes the organizational foundations that make this path a settled practice: strategy, systems, culture, governance, teams and measurement, with people at the center.

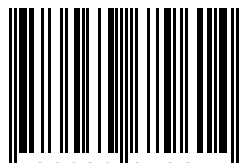
It rests on three pillars: a clear, high-priority problem; motivated people whose needs are met; and a system that connects them and turns effort into repeatable results. It combines international research evidence with the Saudi context, and pairs each chapter with a tool that can be used in a real organization.

Its twenty chapters are organized in five parts: foundations; institutional foundations and people; the initiative journey; value and the ecosystem; and an application to the university innovation ecosystem.

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