

Successful Teams

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1 Overview

In homogeneous teams, members have similar personalities and strengths. There are few conflicts, but the results are often suboptimal. The more diverse the roles within a team, the more powerful the team becomes. If team members are aware of this distribution, it further improves outcomes. There are many different approaches to putting together successful working groups.

A selection:

- Meredith Belbin's model uses nine recurring roles.
- Harlan Mills proposed a *surgical team* of 10 people in 9 roles for software development.
- Glenn Parker takes a practical approach with four team roles.
- Mike Woods presents eight roles from Belbin's original model in his training program for managers.

2 Meredith Belbin

Belbin's model includes nine team roles. All roles should be represented in a project. In smaller teams, individuals must take on multiple roles. An employee can take on different roles in different teams.

Orientation	Team Role	Team Task	Characteristics	Weaknesses
Action	Implementer	Transforms concepts and plans into concrete actions and executes them	Disciplined, reliable, efficient, traditional, turns ideas into action	Inflexible, rigid, slow to respond to new options

Orientation	Team Role	Team Task	Characteristics	Weaknesses
Action	Completer Finisher	Handles work with care and attention to detail	Meticulous, conscientious, punctual	Overly worried, wants to do everything themselves
Action	Shaper	Strong personality focusing self and others on tasks	Dynamic, works well under pressure, courageous, overcomes problems	Can provoke, may lack consideration for others
Communication	Coordinator	Organizes and controls the team, uses resources well	Confident, goal-setting, decisive, delegates	Can manipulate, may delegate personal tasks
Communication	Team Worker	Supports members in working effectively, encourages communication/teamwork	Cooperative, diplomatic, listens actively, relaxed	Indecisive in critical situations
Communication	Resource Investigator	Finds or provides the needed contacts and handles networking	Extroverted, enthusiastic, communicative, creates new contacts and options	Overly optimistic, loses interest quickly, dislikes routine
Knowledge	Plant	Introduces new ideas and methods, seeks solutions	Creative, imaginative, unorthodox, strong problem-solving and thinking skills	May ignore practical aspects, resistant to criticism, makes careless errors
Knowledge	Monitor Evaluator	Analyzes feasibility and practical benefit of approaches	Sober, critical, strategic, evaluates all options, makes sound judgments	Low drive, uninspiring to the team
Knowledge	Specialist	Has specific necessary expertise	Highly knowledgeable, intense, driven	Can be pedantic, distracted, focused only on own task

3 Harlan Mills

Harlan Mills proposed a *surgical team* model for software development teams.

3.1 The Surgeon

Also known as the chief programmer. Programs in a structured language and personally defines functional and performance specifications.

3.2 The Copilot

The surgeon's second self. Capable of everything the surgeon can do, but less experienced.

3.3 The Manager

While the surgeon is the boss, the manager handles key administrative tasks such as budgets, staffing, workspaces, materials, and machinery. For smaller projects, the manager might manage more than one project.

3.4 The Editor

Reviews the surgeon's programming, critiques it, rewrites where necessary, adds references and documentation, checks versioning and configurations, and oversees the mechanical production process.

3.5 Two Secretaries

One each to support the manager and the editor.

3.6 The Program Librarian

Archives all program versions and configurations in a product database. Responsible for both source and machine code. Turns "private art" into public practice by making all computer runs visible to all team members, and identifying all programs and data as team, not individual, property.

3.7 The Toolsmith

Creates, maintains, and extends all specialized tools – usually interactive computer services.

3.8 The Tester

Creates tests for all program components, up to complex regression tests.

3.9 The Language Lawyer

Expert in finding tricky and efficient language elements to perform difficult or complex tasks. A language lawyer can support up to three surgeons.

3.10 Literature

Frederick P. Brooks, *The Mythical Man Month*, Addison-Wesley Publishing Company, ISBN 0-201-00650-2

4 Glenn Parker

The four team roles used by Glenn Parker:

Team Role	Team Task	Characteristics
Contributor	Provides technical information and data	Self-driven, task-focused, expects good planning and results from the team
Collaborator	Understands goals and steers the team toward them	Willing to support the team beyond assigned roles
Communicator	Ensures information flow within the team and externally	Actively listens, relaxed, helps unify the team
Challenger	Questions goals and methods	Willing to openly challenge management, often pushes team to take calculated risks

Smith and Rigobello, A Plan for Modifying Workshop Models Based Upon Glenn M. Parker's Team Roles, 2012 University of Rochester, CAS 352

5 Mike Woods

Mike Woods uses eight of Belbin's nine team roles – excluding the Specialist. He introduces a questionnaire that allows team members to identify their role profiles:

Mike Woods, Karrierestart, Wilhelm Heyne Verlag München, ISBN 3-453-04119-4

	A	B
1	Exercise: Team Profile	
2	From: Mike Woods, Karrierestart, Heyne-Kompaktwissen (German Translation)	Distribute exactly 10 points for each question.
3		
4		1. My contribution to the team could look like this:
5	I believe I can quickly recognize and take advantage of opportunities.	1
6	I can work well with people from all backgrounds.	2
7	I have good ideas.	1
8	My strength lies in encouraging colleagues.	1
9	I can effectively implement plans.	1
10	I am willing to become temporarily unpopular if it leads to rewarding results in the end.	2
11	I can work conceptually.	1
12	I can usually identify what is feasible.	1
13		10
14		
15		2. One of my weaknesses in teamwork could be:
16	I feel uncomfortable if meetings are not well-structured and well-managed.	2
17	I can be very generous when someone has a valid concern.	
18	I tend to talk too much when the group is discussing new ideas.	3
19	My objective attitude makes it difficult for me to join in the opinions of my colleagues.	2
20	Sometimes I am perceived as strong and authoritarian when a task needs to be completed.	1
21	I find it hard to be the leader of a group.	
22	I tend to get caught up in ideas and neglect the current task.	1
23	My colleagues think I worry unnecessarily about details and fear that something might go wrong.	1
24		10
25		
26		3. When I work with others on a shared project:
27	I tend to influence people without forcing them.	0
28	I avoid mistakes and omissions due to lack of care.	3
29	I often push for action to avoid wasting time in meetings or losing sight of main goals.	2
30	You can count on me to always contribute something original.	
31	I am always willing to support a good suggestion that benefits everyone.	1
32	I have a great interest in progressive ideas and developments.	
33	I believe my judgment can contribute to making the right decisions.	2
34	You can rely on me when it comes to organizing tasks.	2
35		10
36		
37		4. My attitude towards teamwork is as follows:
38	Overall, I am interested in getting to know my colleagues better.	0
39	I do not hesitate to criticize others' views or to represent my own opinion alone.	2
40	I usually find good arguments to refute unsupported claims.	2
41	I am capable of taking over the implementation of projects after the planning phase is complete.	1
42	I often make unconventional suggestions.	1
43	I strive to perform each task perfectly.	2
44	I am willing to leverage my contacts outside of work.	1
45	Although I am interested in all opinions, I make necessary decisions quickly.	1
46		10
47		

Figure 1: Team Roles Diagram 1

	A	B
48		5. My tasks satisfy me because:
49	I enjoy analyzing situations and weighing all possible alternatives.	2
50	I am interested in finding practical solutions to problems.	2
51	I foster a good working atmosphere.	1
52	I can exert strong influence on decisions.	1
53	I am open to people who offer new solutions.	1
54	I can get employees to agree on a necessary course of action.	2
55	I feel I am in My element when I can dedicate My full attention to a task.	
56	I enjoy seeking areas that expand my horizons.	1
57		10
58		
59		6. When suddenly faced with a difficult task, with limited time and unfamiliar colleagues:
60	I retreat to a corner to find a way out of the deadlock.	0
61	I work with the person who has the most positive attitude.	0
62	I look for a way to reduce the scope of the task by finding out which contribution each team member can best make.	3
63	My reliability ensures that we meet the deadline.	1
64	I believe I can keep a cool head.	1
65	I work in a goal-oriented manner, even under time pressure.	1
66	I step in as a leader if I feel the group is not making progress.	2
67	I stimulate discussions to find new possibilities.	2
68		10
69		
70		7. When I think about my problems with groups, I can recognize the following:
71	I tend to be impatient when someone is hindering progress.	2
72	Others criticize me for being too analytical and not intuitive enough.	0
73	My desire for correctness hinders progress.	1
74	I get bored quickly and rely on one or two team members to get excited about an idea.	2
75	I find it difficult to start something without clear goals.	2
76	sometimes struggle to clearly explain difficult and complex issues.	1
77	I am aware that I demand things from others that I am not capable of myself.	2
78	I hesitate to assert my viewpoint when I encounter resistance.	0
79		10
80		
81	The Worker	11
82	The Leader	9
83	The Shaper	12
84	The Creative	5
85	The Connector	10
86	The Analyst	10
87	The Teamworker	4
88	The Pedant	9
89		70

Figure 2: Team Roles Diagram 2

Worksheet Formulas		
Range	Formula	
B81:B88	B81	=SUM(B11,B16,B34,B41,B50,B65,B75)
B89	B89	=SUM(B81:B88)

Figure 3: Team Role Chart

	A	B
1	Exercise: A General Manager Profile	
2	From: Mike Woods, Karrierestart, Heyne-Kompaktwissen (German Translation each question.	Distribute exactly 10 points for
3		
4		1. My personal goal as a manager is:
5	To expand knowledge in my field.	1
6	To benefit the company.	5
7	To solve problems.	2
8	To create a good work environment.	2
9		10
10		
11		2. I am proud of:
12	My employees or colleagues.	2
13	What we have achieved.	1
14	Our ability to solve problems.	5
15	The company.	2
16		10
17		
18		3. In my opinion, we should be evaluated based on the following factors:
19	External contacts.	1
20	Contribution to a good work atmosphere.	2
21	Actual performance.	5
22	A good image due to our outstanding achievements.	2
23		10
24		
25		4. I derive satisfaction from my profession from:
26	Solving difficult problems.	5
27	Contact with interesting and stimulating people.	3
28	The respect of others who are dealing with similar problems.	1
29	Creative ideas.	1
30		10
31		
32		5. My task as a manager is to:
33	Ensure that good employees deliver good results.	5
34	Develop the professional skills of my employees.	3
35	Foster the personal development of my employees.	1
36	Maintain a "strict regime".	1
37		10
38		
39		6. I believe that the best reports I write:
40	Stimulate and interest my readers.	2
41	Expand knowledge.	2
42	Recommend clear approaches.	3
43	Offer reasonable detailed alternatives.	3
44		10
45		
46	Why-Points (Imagination)	12
47	What-Points (Logic)	11
48	How-Points (Practice)	17
49	When-Points (Enthusiasm)	20
50		60

Figure 4: Manager Role Diagram

Worksheet Formulas		
Range	Formula	
B46:B49	B46	=SUM(B8,B12,B20,B27,B35,B40)
B50	B50	=SUM(B46:B49)

Figure 5: Manager Role Chart