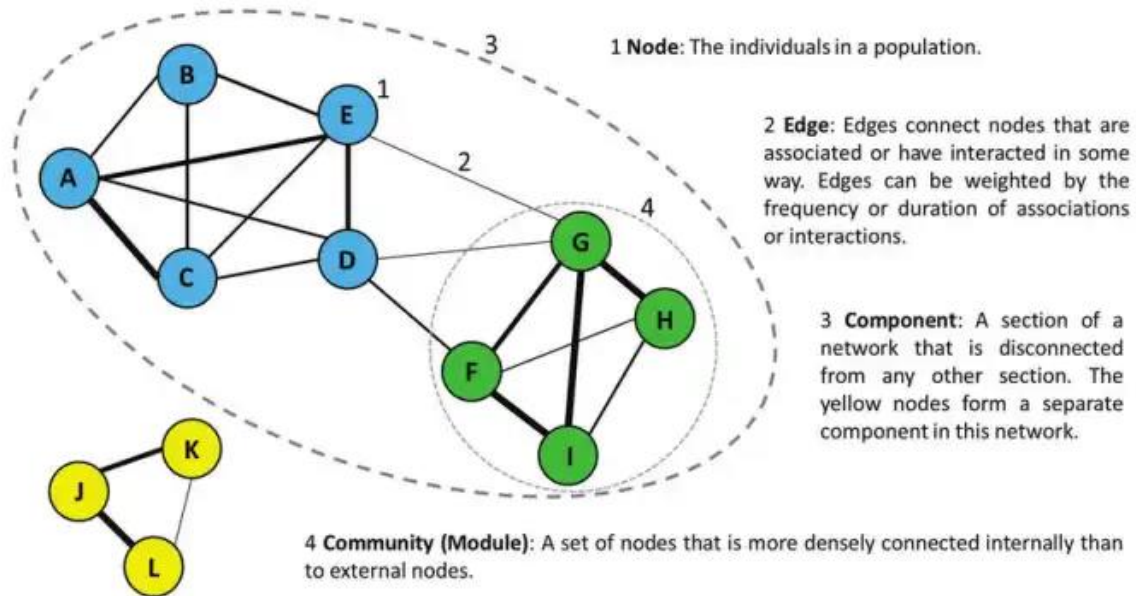


## Basics of network structure

Social Network analysis is the study of structure, and how it influences health, and it is based on theoretical constructs of sociology and mathematical foundations of graph theory. Structure refers to the regularities in the patterning of relationships among individuals, groups and/or organizations.



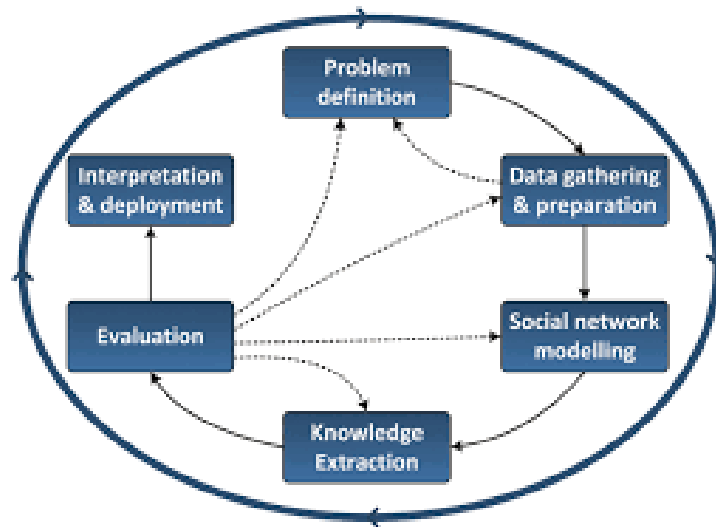
### 1 Process of Social Network Analysis (SNA)

The process of social network analysis (SNA) is a series of steps (stages) performed to achieve certain goals by means of analytical tools applied to social network data.

In general, six main generic stages of the SNA process can be distinguished:

1. Problem definition
2. Data gathering and preparation
3. Social network modeling
4. Knowledge extraction
5. Evaluation
6. Interpretation and deployment

Each of the above stages should provide some outcome for the next stage, but it is also possible to go back to some previous stages, for example, in order...



*Process of social network analysis*

## 2 Types of Network Structure:

The network structure of organizational designs brings about the development of three types of network structures found in today's dynamic organization. They include:

- Internal network structure
- Stable network structure
- Dynamic network structure

### 1. Internal Network Structure

The Internal Network Structure exists in organization which bases itself on the fundamental premise that if internal units are exposed to the harshness of market competitiveness, they will remain innovative and rise to capture entrepreneurial and market benefits without having the whole organization engages in much outsourcing. In this type of organizational structure, the internal units operate independently and function as a profit center that specializes in a particular aspect of the organization's product delivery system. The units of the internal network own most of the assets that are subjected to the discipline of the market by management.

Each unit has the capacity to negotiate with the central unit like any outside vendor. An example of company that has adopted the internal network structure is General Motors (GM). GM's component business maintains independent divisions that specialize in the production of some aspect of the automotive system. These divisions are encouraged to conduct business on the open market, yet they cooperate with the central unit of GM's component business whenever appropriate. The net result is greater effectiveness for the corporation as a whole.

### 2. Stable Network Structure

The Stable Network Structure deploys outsourcing as a means to increase flexibility in the value chain. An organization which maintains a stable network relies to some degree on outsourcing to add flexibility to their product delivery system.

In stable network structure, the central organization is dedicated to a particular business but contracts with outside vendors to provide certain products and services that are essential to its products delivery system. Although these vendors are independent of the central organization, they typically are highly committed to the core firm.

BMW is an example of a company which has adopted a stable network structure. Somewhere between 55 – 75% of BMW's production comes from outsourcing. Although BMW does not own its vendor firms outright, it does maintain stable relationships with them and may even make a financial investment in these organizations where appropriate. Dell has a longstanding alliance with Intel for processors.

### **3. Dynamic Network Structure**

A Dynamic Network Structure differs from internal and stable networks in that organizations with this structure make extensive use of outsourcing to support their operations. It exists where a lead firm identifies and assembles assets owned largely, if not entirely, by other firms.

In dynamic network structure, partnerships with vendors are less frequent, and less emphasis is placed on finding organizations to service the central organization only. Typically, the central organization focuses on some core skill and contracts for most other functions. For example, Ikea focuses on its retailing strength, and although it coordinates everything else, it also outsources many of the other operations. Reebok focuses on its design strengths and outsources the rest.