



# Agile Development

**Topic 2:**

**Approach and Principles**

**Course code: CIS 333**

**Course Leader: Abdullah Bin Kasem Bhuiyan**



# Topic Coverage

## **This topic will cover:**

- The Agile Manifesto;
- What is meant by DSDM;
- The structure of DSDM Atern;
- The philosophy and principles of DSDM Atern;
- When to use DSDM Atern.



# The Agile Manifesto

- We are uncovering better ways of developing software by doing it and helping others do it.
- Through this work we have come to value:
  - **Individuals and interactions** over processes and tools
  - **Working software** over comprehensive documentation
  - **Customer collaboration** over contract negotiation
  - **Responding to change** over following a plan
- That is, while there is value in the items on the right, **we value the items on the left more**



# What is DSDM?

It is an Agile Project Delivery Framework that delivers the right solution at the right time. Features include:

- Any kind of project
- Focused on business benefit
- On-time and in budget
- Quality and rigour
- Incremental
- Collaborative

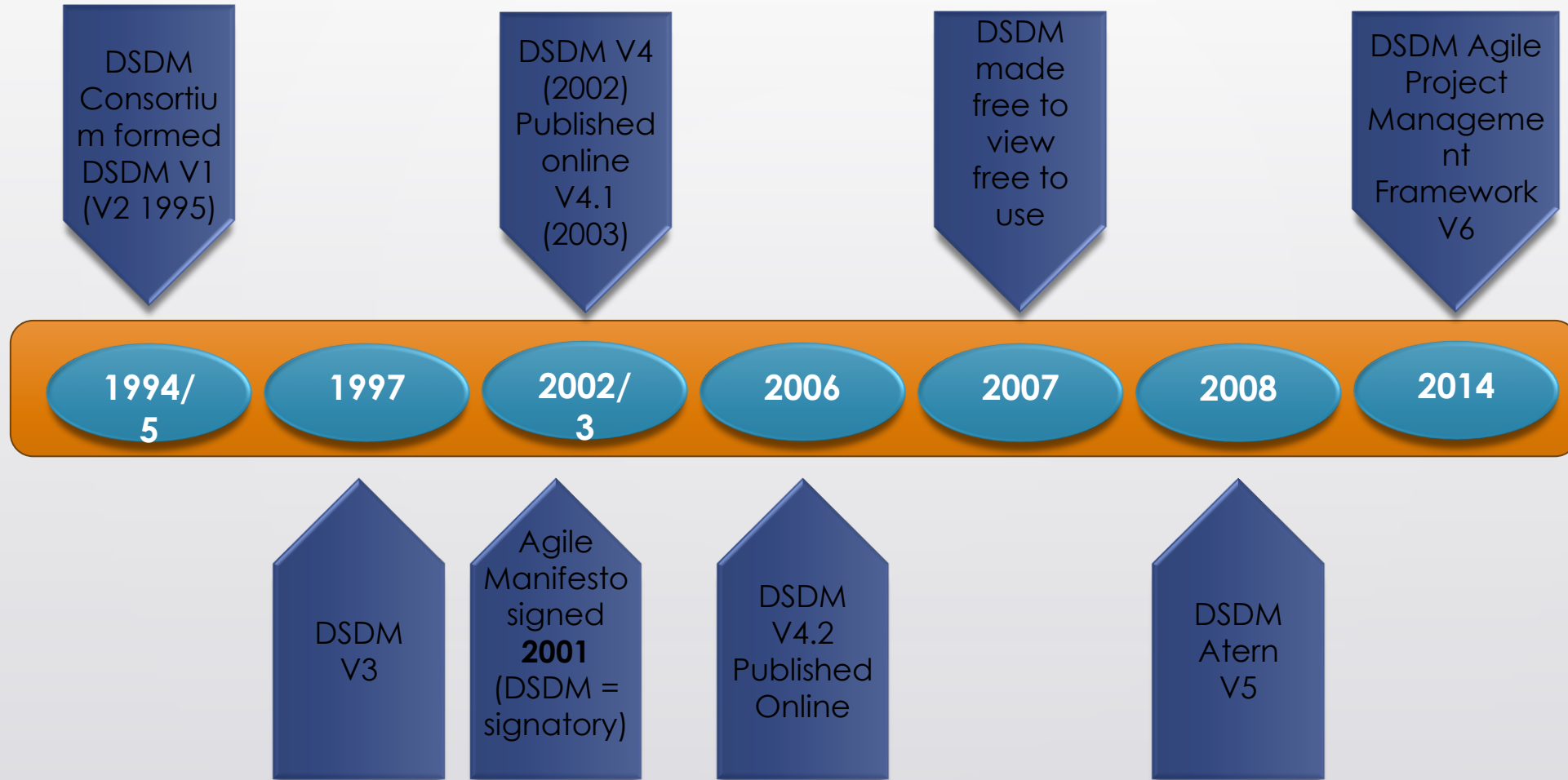


# DSDM – The History

The 1994/5 Dynamic Systems Development Method (DSDM) was written as a Framework for Business Centred Development. It focuses on delivering on time and in budget, as well as keeping quality.

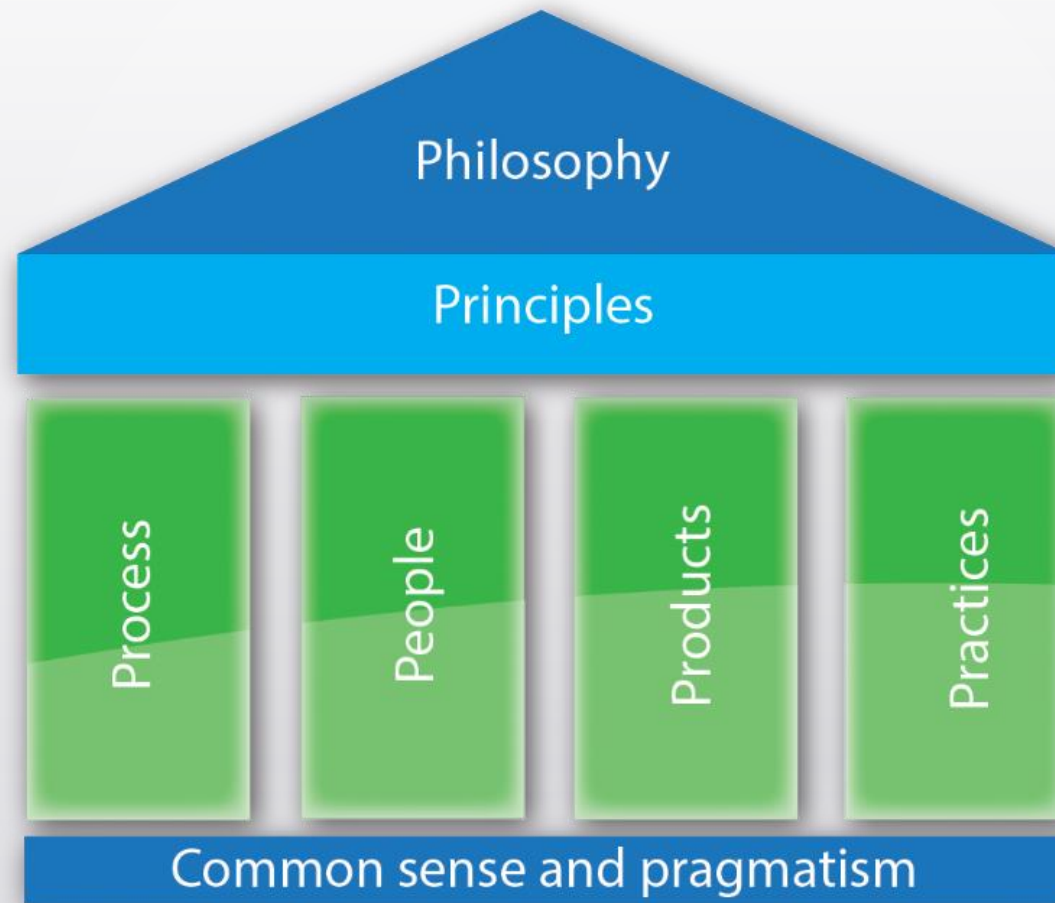
It brought together best practices from the combined experience of DSDM Consortium members, including many “blue-chip” companies. It was vendor-independent and became a standard, worldwide.

# The History of DSDM





# The Structure of DSDM





## The Philosophy

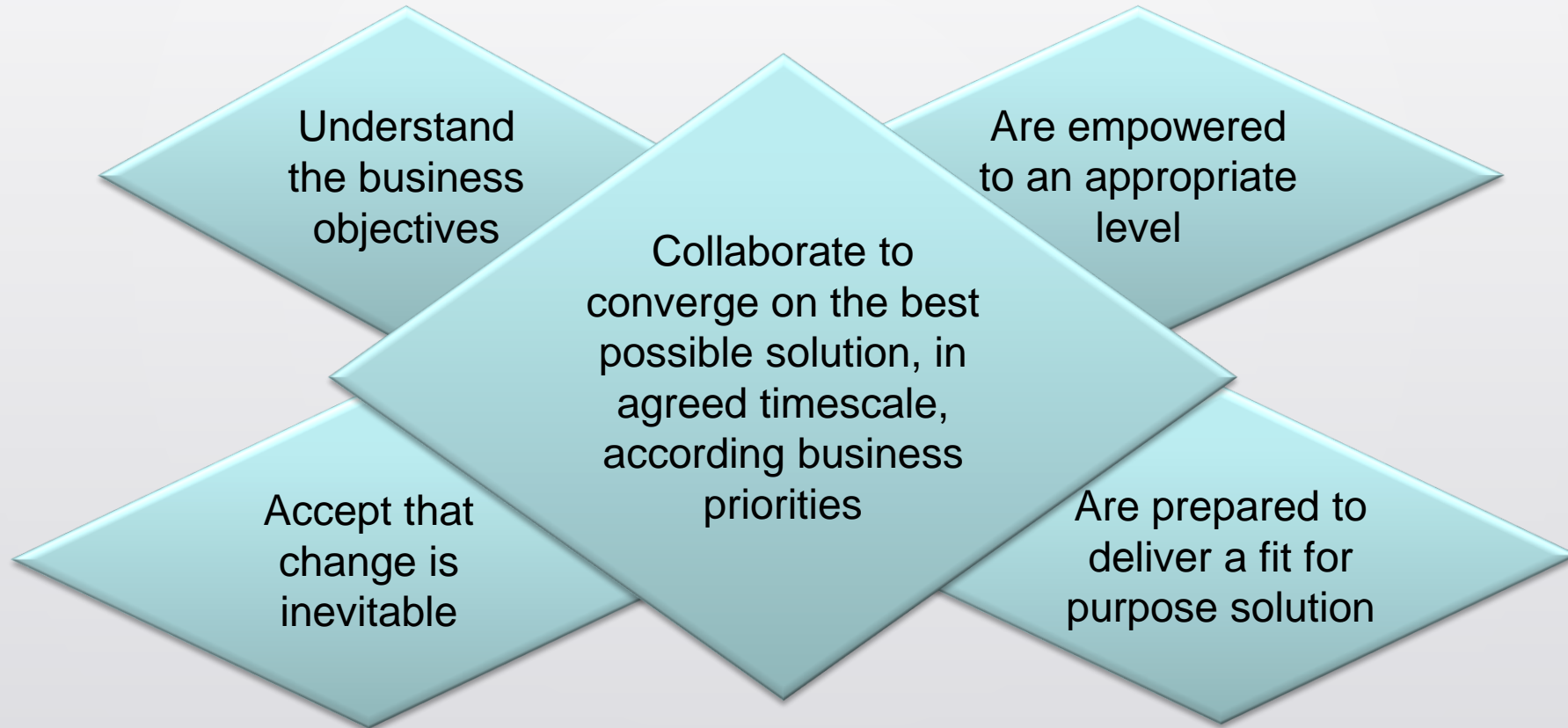
### **Two important points to consider are:**

- Any project must be aligned to clearly defined strategic goals;
- Any project must focus upon early delivery of real benefits to the business.



## The Philosophy - 2

This is best achieved when key stakeholders ...





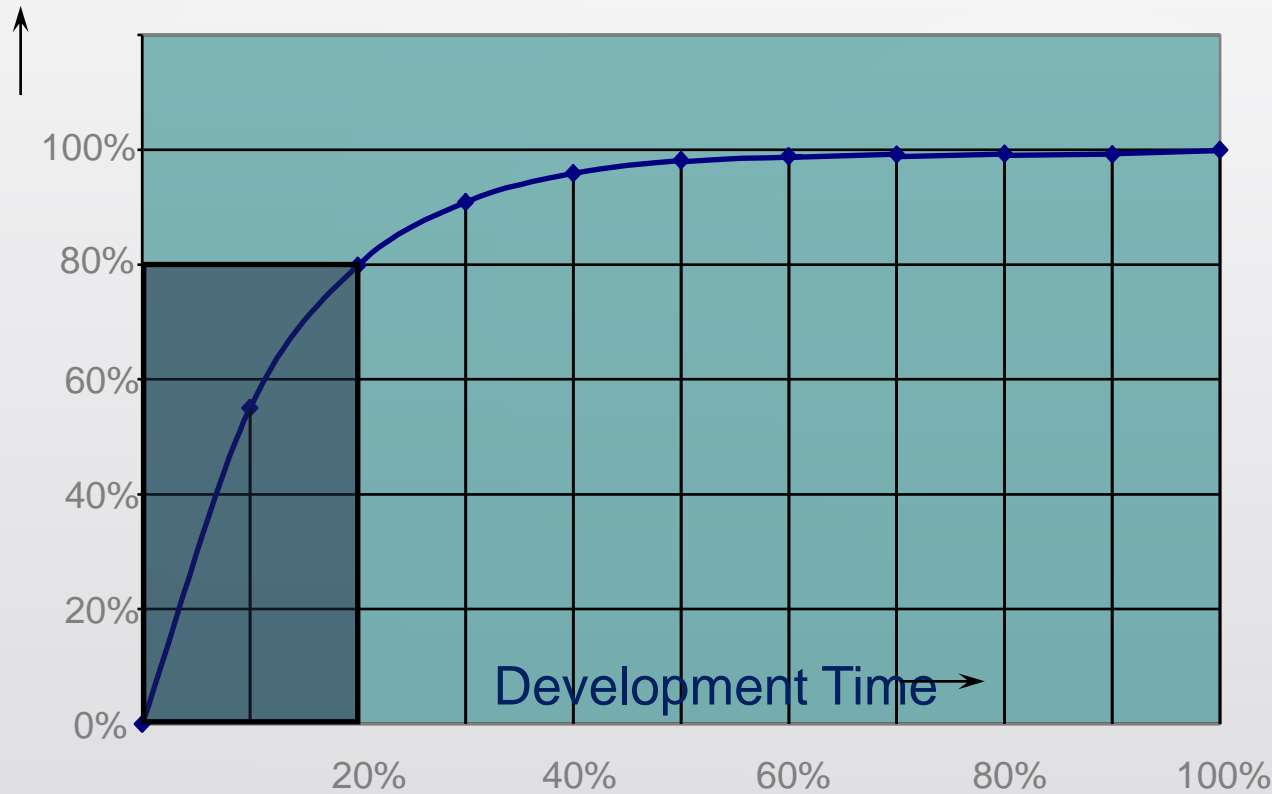
## The Benefits of DSDM

The advantages of DSDM are:

1. User ownership of the system is more likely
2. Reduced risk of building the wrong system
3. The final system is more likely to meet the users' real business requirements
4. Users will be better trained
5. Deployment is more likely to go smoothly

# The 80/20 Approach

Level of Functionality

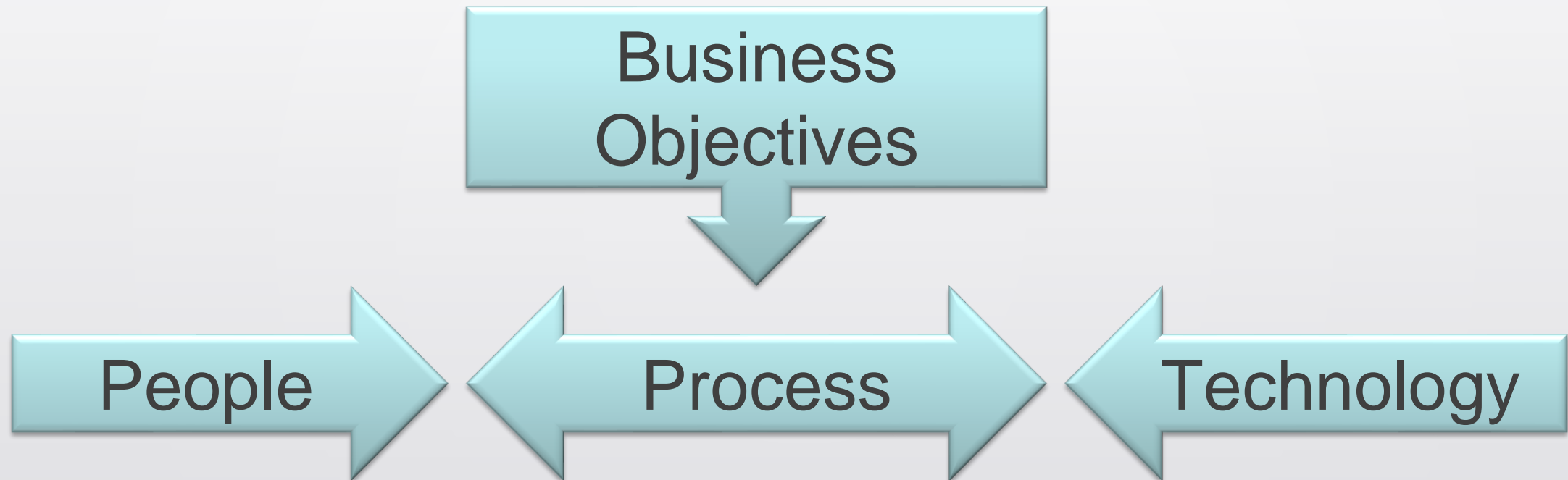


## Fundamental Assumption:

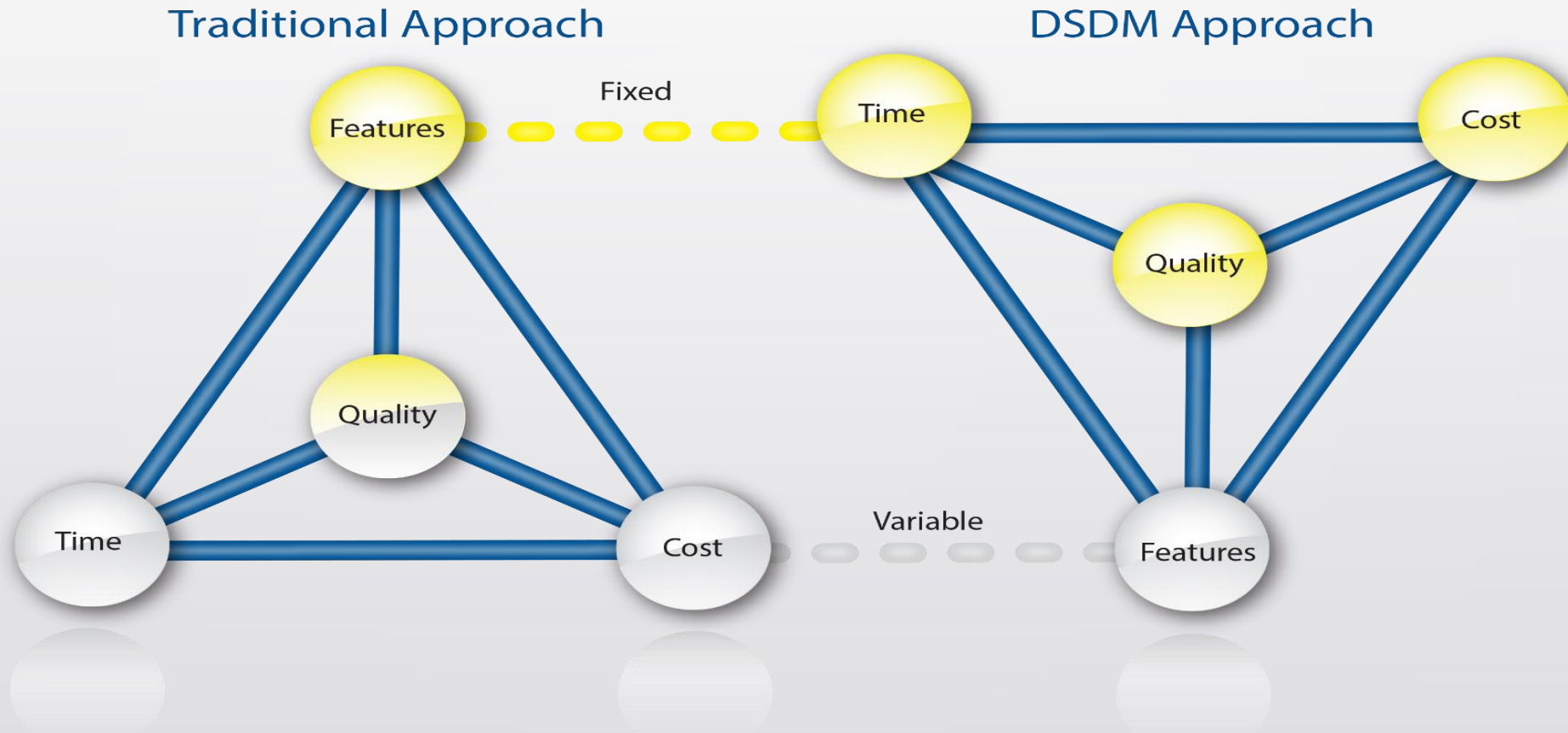
Nothing is built perfectly first time,  
but 80% of the solution can be produced  
in 20% of the time it would take to produce  
the total solution.

---

## Components of a Business Solution



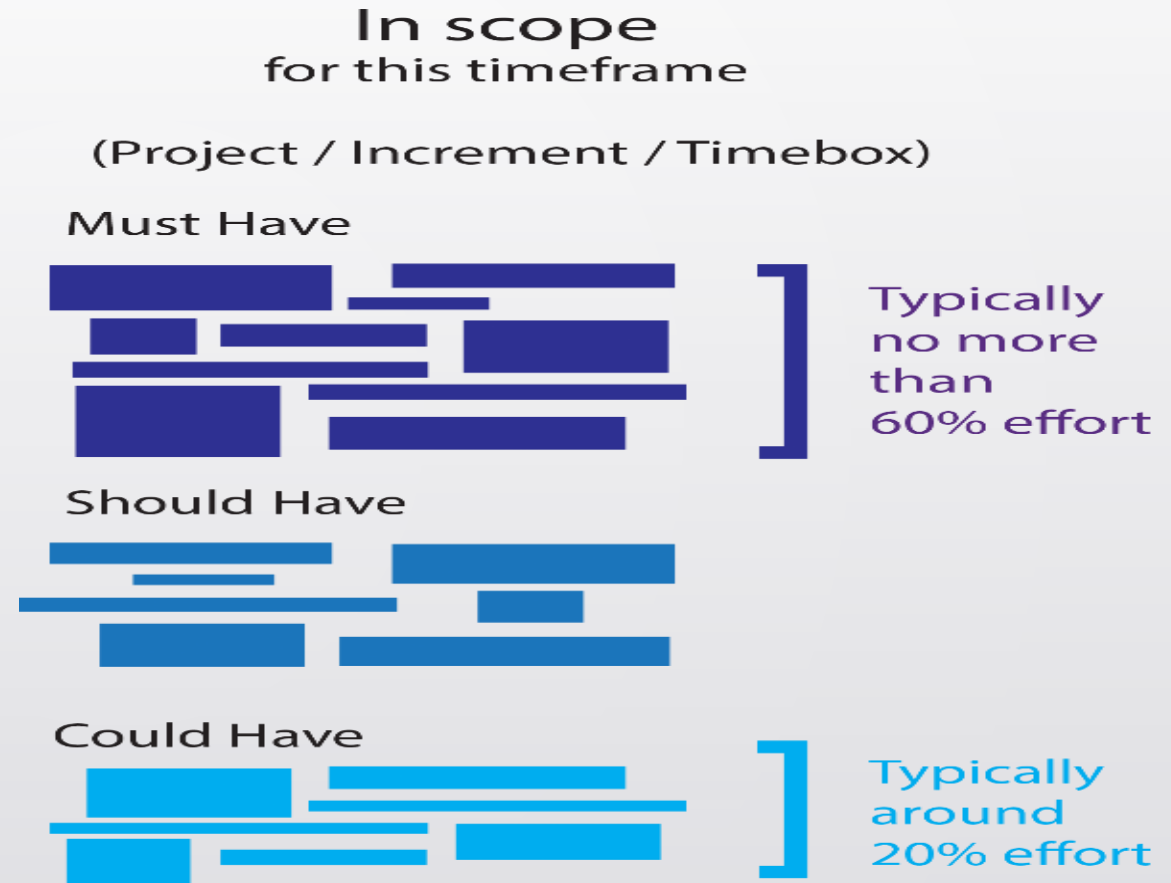
# Flexible Requirements





# Prioritisation

- DSDM uses the MoSCoW prioritisation model.
- Concentrating approximately 60% of the project on the 'Must Have' requirements, and around 20% on the 'Could Have' requirements.





# The 8 Principles of DSDM



1. Focus on the business need



2. Deliver on time



3. Collaborate



4. Never compromise quality



5. Build incrementally from firm foundations



6. Develop iteratively



7. Communicate continuously and clearly



8. Demonstrate control

---

# DSDM - 5 Key Techniques



MoSCoW Prioritisation



Modelling



Facilitated Workshops



Iterative Development

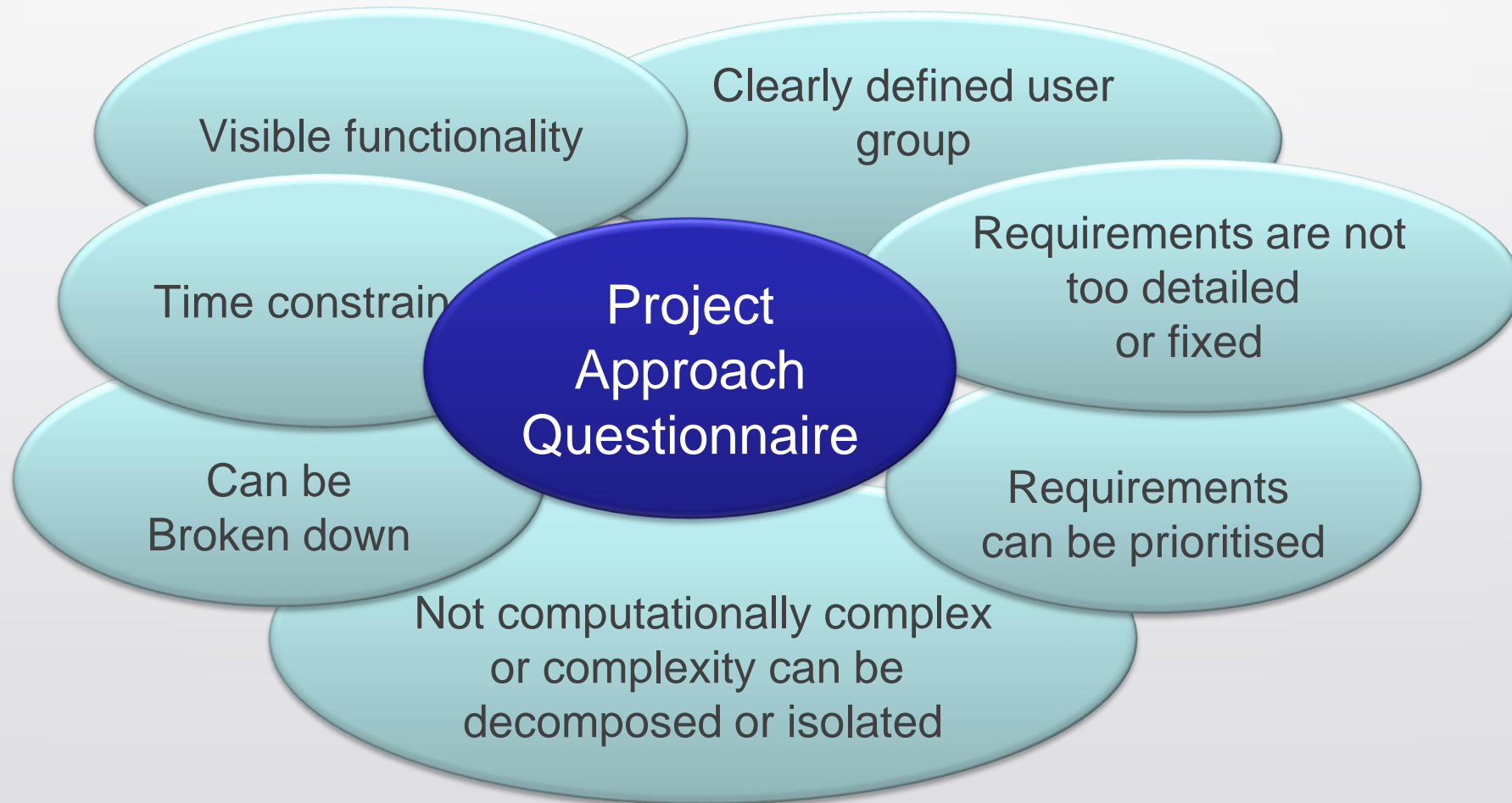


Timeboxing

# Instrumental Success Factors (ISFs) - Reducing the risk

1. Acceptance of the DSDM philosophy before starting work
2. Appropriate empowerment of the Solution Development team
3. Commitment of senior business management to provide the necessary business roles' involvement
4. Incremental delivery
5. Access by Solution Development Team to business roles
6. Solution Development Team stability
7. Solution Development Team skill
8. Solution Development Team size
9. A supportive commercial relationship

# What Kind of Projects?







## Summary of DSDM – 1

**DSDM is an Agile Project Delivery Framework that delivers the correct solution at the right time. The correct business solution is delivered because:**

- The Project team and other significant stakeholders remain focused on the business outcome;
- Delivery is on time, which permits an early return on investment and reduced risk;
- All people involved with the project work collaboratively to deliver the optimum solution;



## Summary of DSDM --2

- Work is prioritised according to business need and the ability of users to accommodate changes;
- DSDM does not compromise quality.



## More reading Resources

- The DSDM principles: A visual guide, Simon Buehring  
<https://www.knowledgetrain.co.uk/agile/the-dsdm-principles#:~:text=DSDM%20teams%20fulfil%20this%20principle,involve%20them%20in%20the%20project.> (Last accessed 19th September 2020)
- Chapter 4: Principles, Agile Business Consortium  
[https://www.agilebusiness.org/page/ProjectFramework\\_04\\_Principles#:~:text=DSDM%20practices%20are%20specifically%20designed,daily%20team%20stand%2Dup%20sessions](https://www.agilebusiness.org/page/ProjectFramework_04_Principles#:~:text=DSDM%20practices%20are%20specifically%20designed,daily%20team%20stand%2Dup%20sessions) (Last accessed 19th September 2020)



End of topic

**Any Questions?**