Innovation of Ebook

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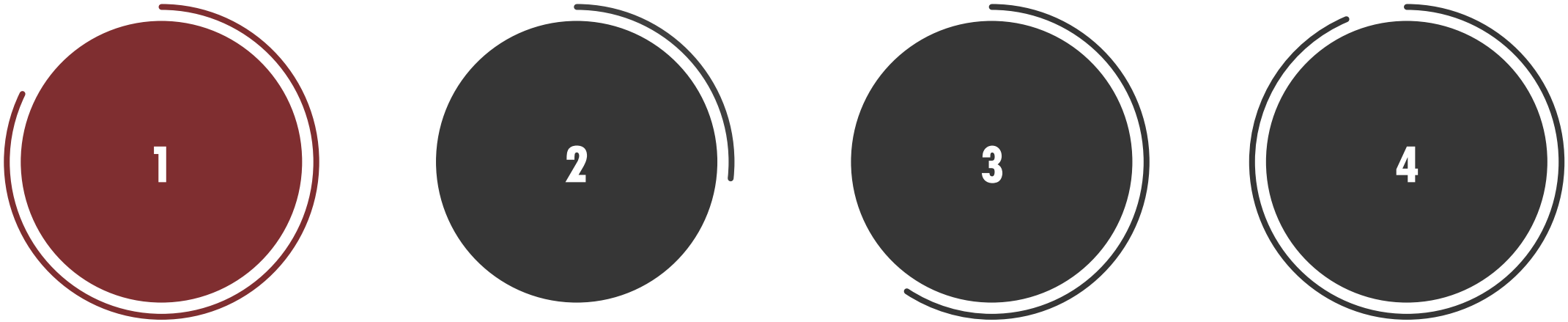
Outline



Identify Problem

Formulate Problem

Contradiction

Solution

Reading

01

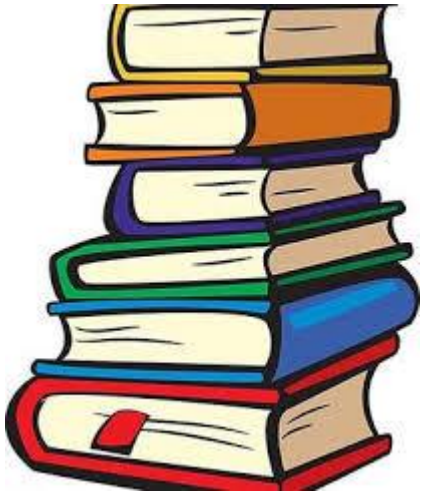
Reading is a good habit , almost everyone loves reading, but it is difficult to reading everywhere or at anytime

02

Books always occupy a lot of space
Books are weight to take
Books are expensive.

Formulate Problem

- Books have size and shapes
- Books have high cost
- Books are always heavy
- Books are easy to be broken
- Books may be lost
- We want to read different kinds of books



What blocks we reading?

What is ideal

- Reading everywhere
- Reading anytime
- Books store forever
- Many kinds of books
- Carry books with ourselves
- Low cost

What we want ?

39 Parameters

1. Weight of moving object
2. Weight of stationary object
3. Length of moving object
4. Length of stationary object
5. Area of moving object
6. Area of stationary object
7. Volume of moving object
8. Volume of stationary object
9. Speed
10. Force
11. Stress, pressure, or tension
12. Shape
13. Stability of the object's composition
14. Strength
15. Duration of action by a moving object
16. Duration of action by a stationary object
17. Temperature
18. Illumination intensity, brightness, light quality, etc.
19. Energy used by moving object
20. Energy used by stationary object
21. Power
22. Loss or waste of Energy
23. Loss of substance
24. Loss of Information
25. Loss of Time
26. Amount of substance/matter
27. Reliability
28. Measurement accuracy
29. Manufacturing precision
30. External harm affects the object
31. Object-generated harmful factors
32. Ease of manufacture
33. Ease of operation Simplicity
34. Ease of repair
35. Adaptability or versatility
36. Device complexity
37. Complexity of control
38. Extent of automation
39. Productivity

Parameters of problem

- Weight of moving Objects
- Area of moving Objects
- Books is always heavy
- Books is easy to be broken
- Books may be lost
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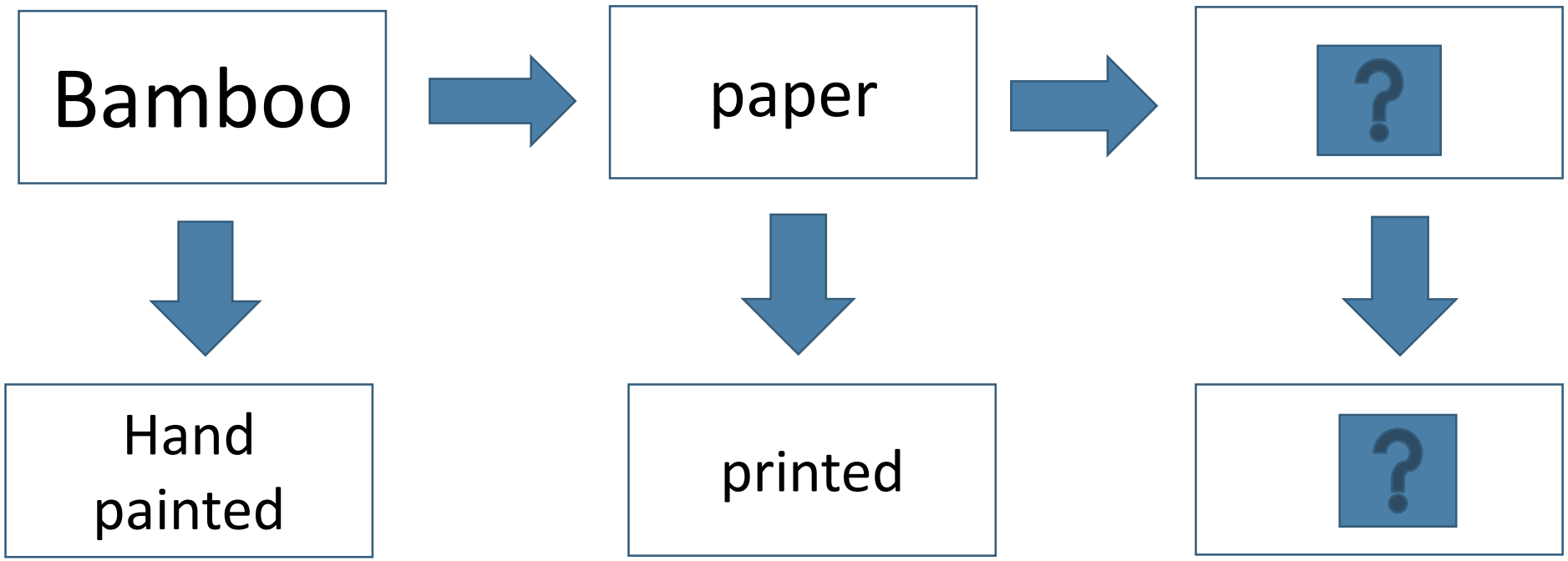
Traditional books

Contradiction matrix

Worsening Feature / Improving Feature	32.Ease of manufacture	35.Device complexity
1.Weight of moving object	27.28.1.36	29.5.15.8
5.Area of moving object	13.1.26.24	15.30

Separation Principles

1. Segmentation
5. Merging
8. Anti-weight
13. Other way round
15. Dynamics
24. Intermediary
26. Copying
27. Cheap Short living things
28. Mechanical Substitution
29. Pneumatics
30. Flexible shells/films
36. Phase Transition



Compare with existing system

New media: laptop television Pad phone kindle

iriver

Thank You