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# Impact of Backwards Compatibility on Standard Dominance

## The Case of Game Consoles


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Chair on Standardization  
**Research on Standards Battles**

- Geerten van de Kaa:  
**Factors for standards dominance**

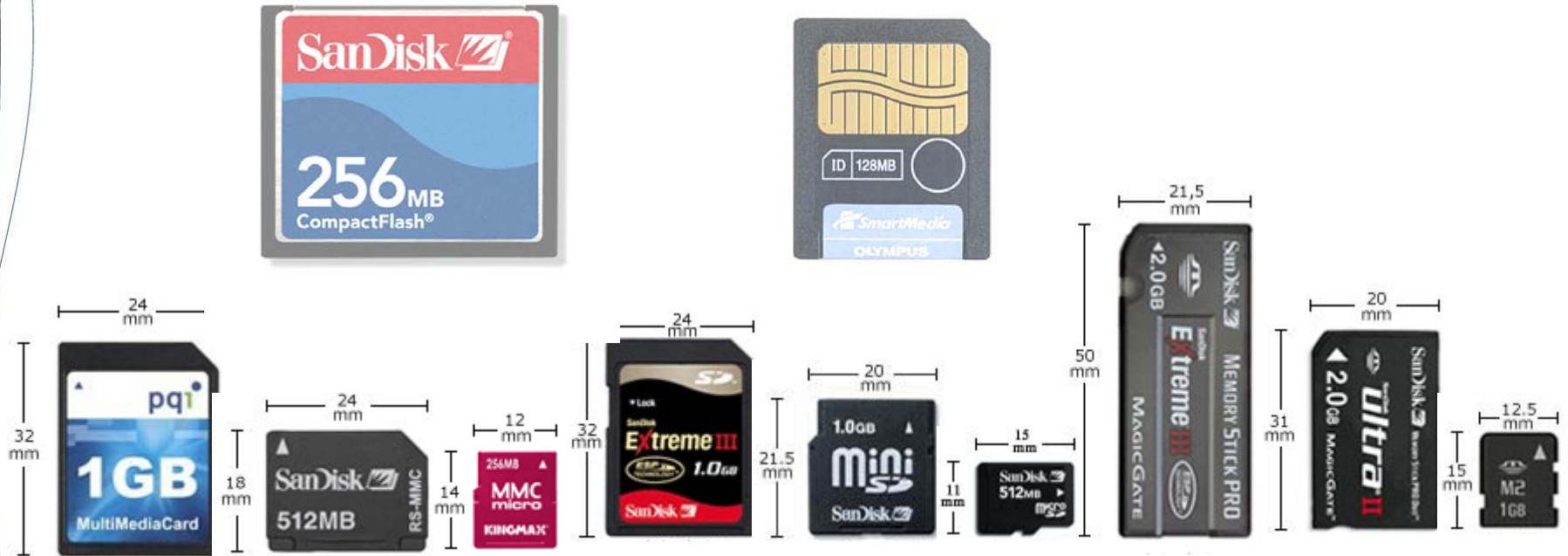


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**Research on Standards Battles (2)**

- Simon den Uijl:  
**Relating factors for standards dominance to  
phases in technology development;  
Interrelations between factors**

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**Research on Standards Battles (3)**

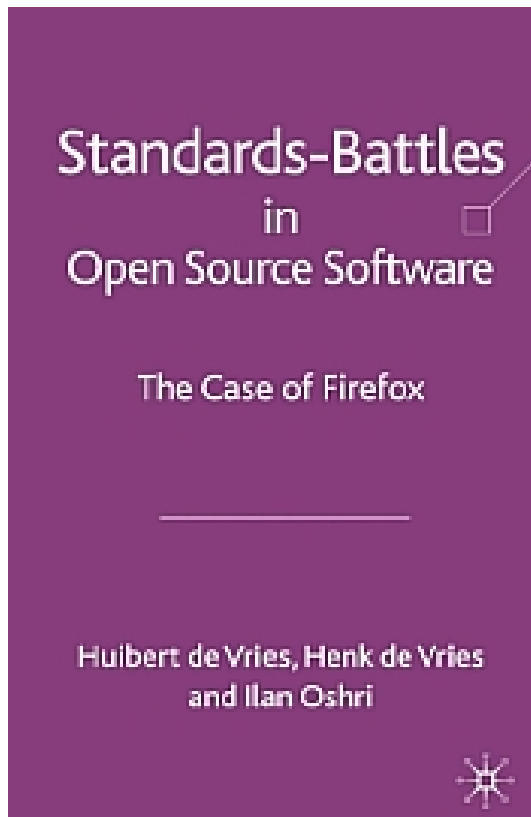
- Henk de Vries, Joost de Ruijter & Najim Argam:  
**Factors for multiple designs**



De Vries, Henk J., Joost de Ruijter & Najim Argam (2009) Dominant design or multiple designs: The flash memory card case. *Technology Analysis & Strategic Management* (forthcoming)

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**Research on Standards Battles (4)**

- Huibert de Vries et al. **Case studies**





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**Research on Standards Battles (5)**

- **Robbert Flipsen: 46 historical cases**



## Backwards Compatibility

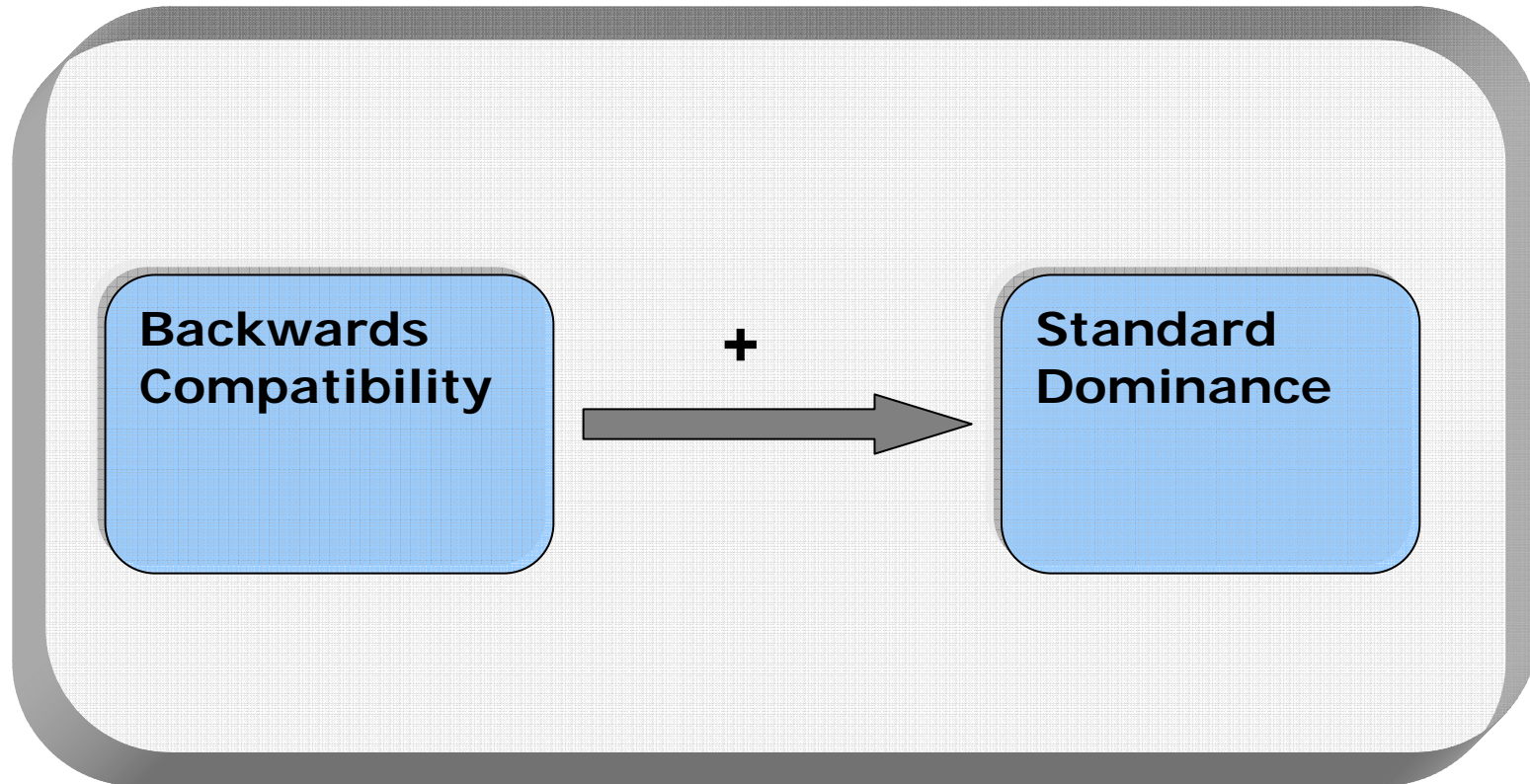
- A successor standard is compatible if compliant technologies are able to work together with products that were able to interoperate with its predecessors  
(Egyedi & Loeffen, 2008)



## Dominant standard

- A standard that has achieved a clear market share advantage over alternative designs (Anderson & Tushman, 1990)

## Conceptual Model



## Research approach

- Desk research data:
  - Websites of retailers
  - Forums on the internet
  - Annual reports of manufacturers
  - Articles/papers
- Qualitative research data:
  - 12 managers of Game console stores
    - 8 interviews within retail stores of E-Plaza chain
    - 4 interviews within regular game console stores
  - Interview Field experts:
    - Former executive of Sony
    - Melissa Schilling, Associate Professor of Management at Stern School of Business, New York University who investigated this case and published about dominance battles within the game console industry



NB: None of the manufacturers (Microsoft, Sony and Nintendo) was willing to cooperate in this research



**Controllers**

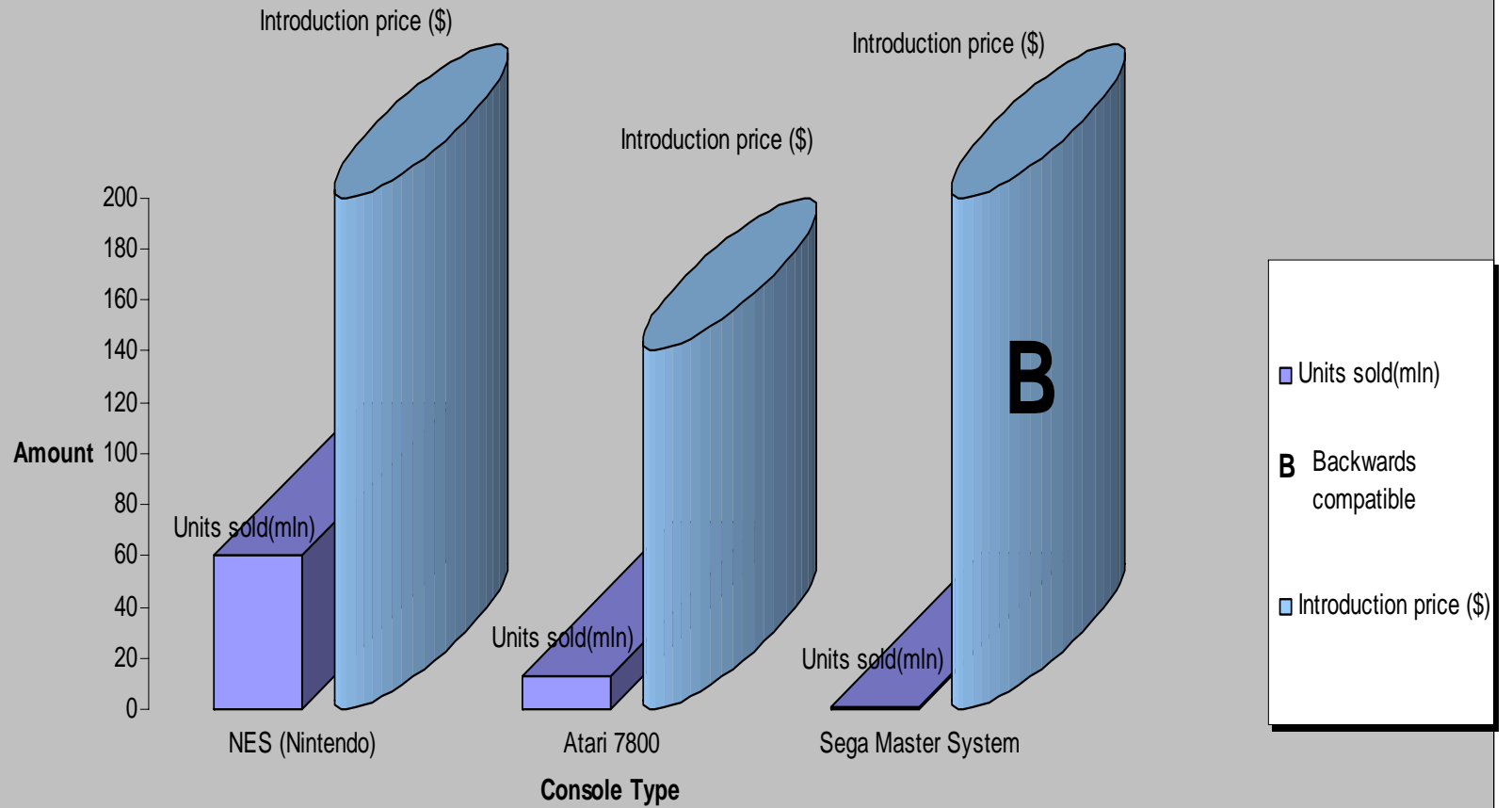


**Games**

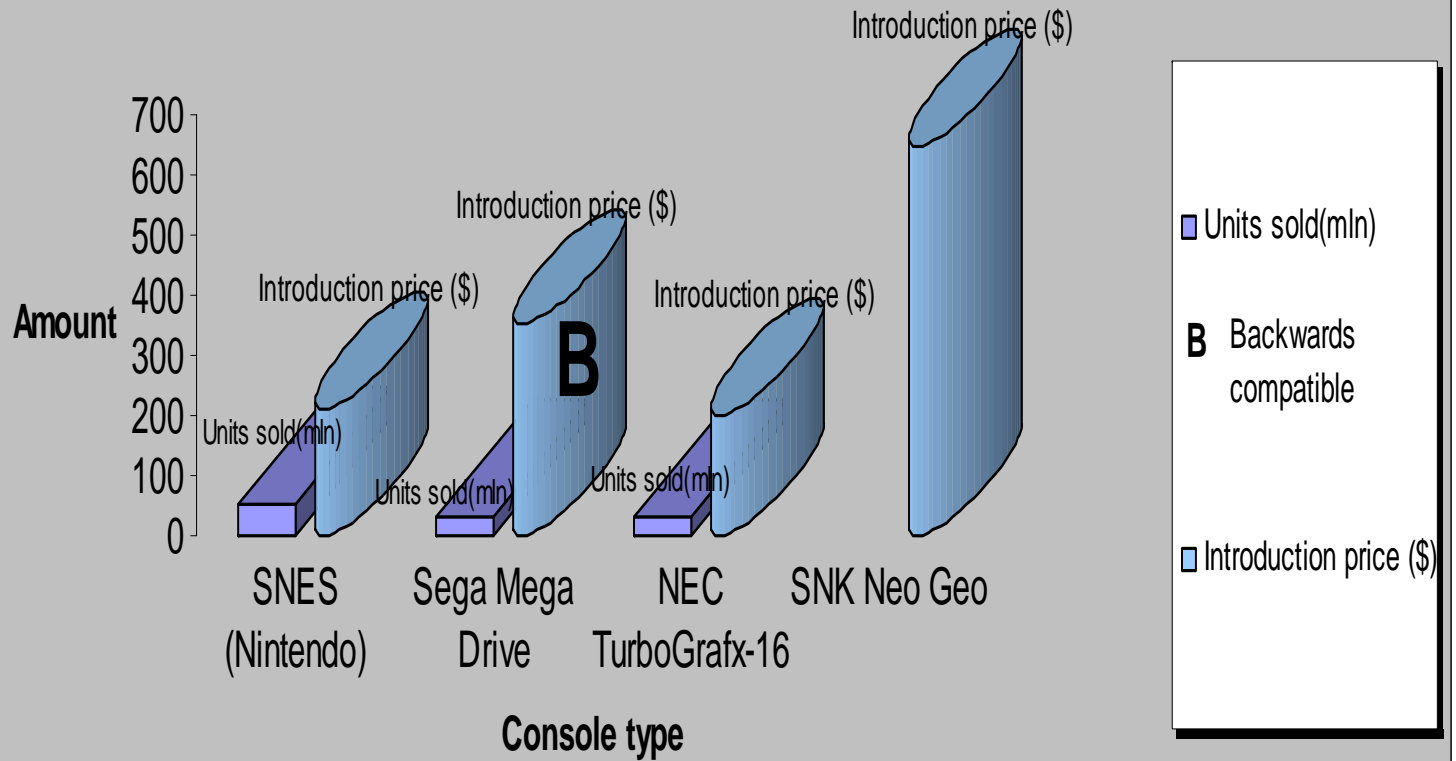


**Memory cards**

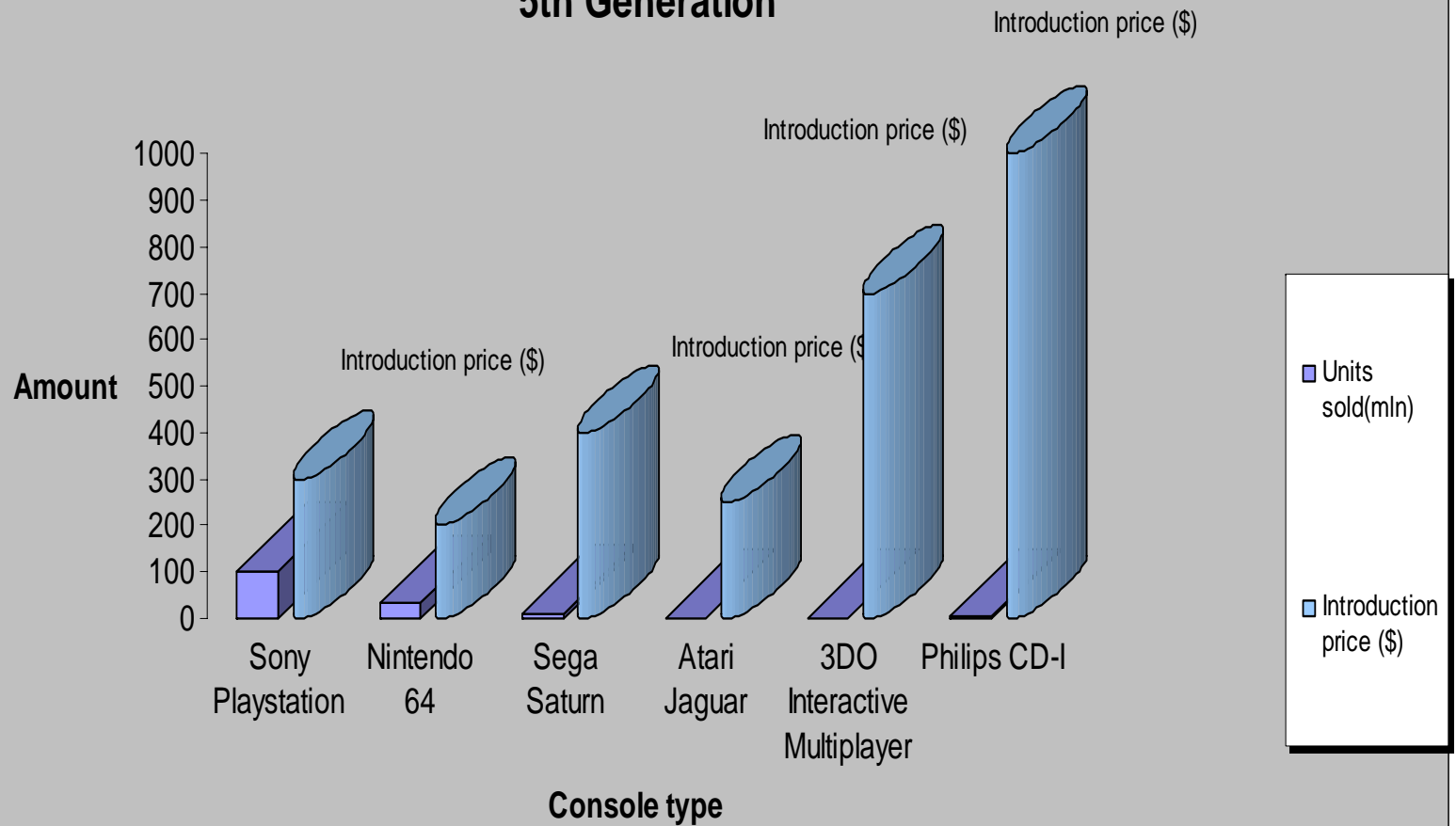
### 3rd Generation

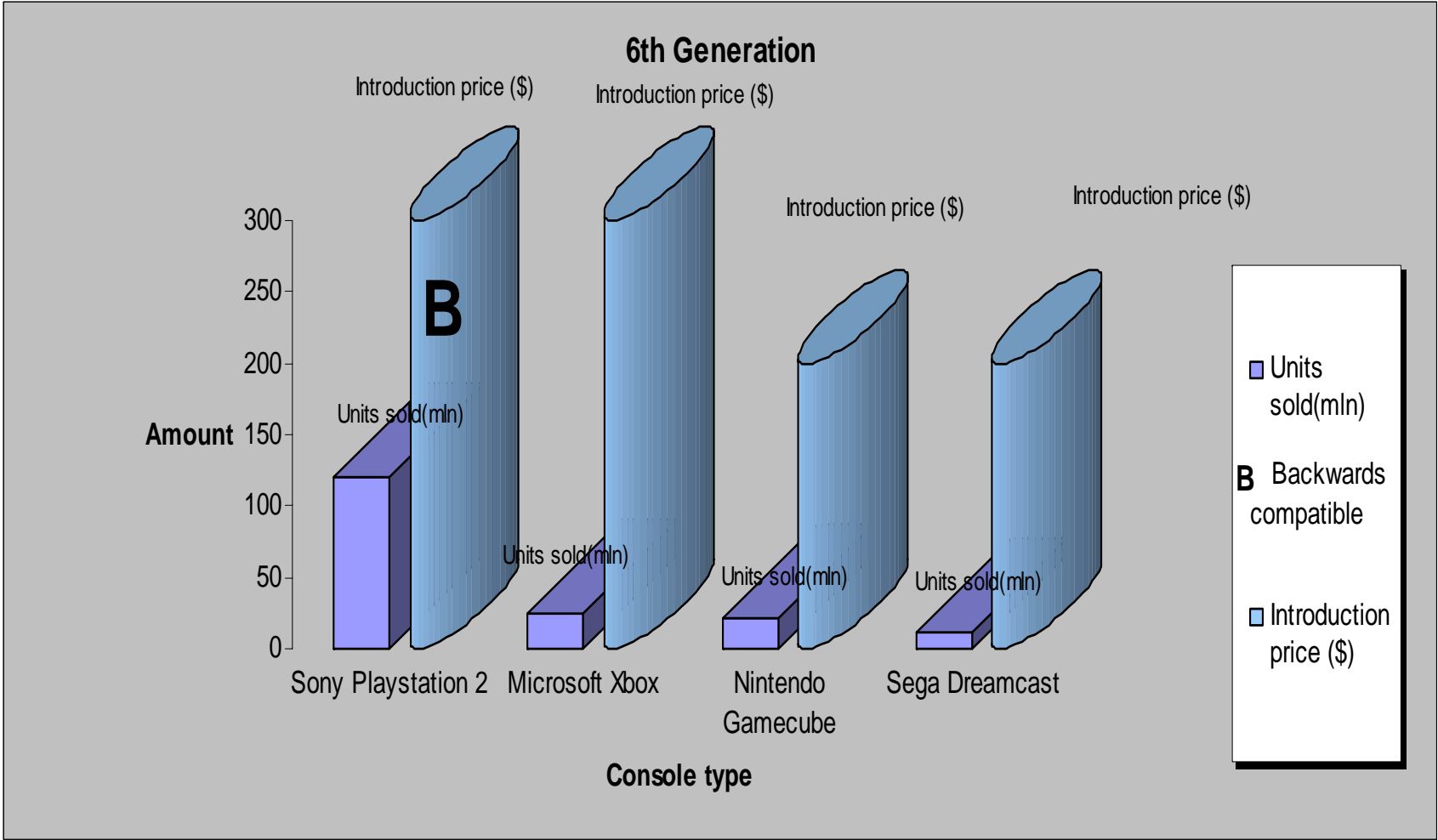


# 4th Generation

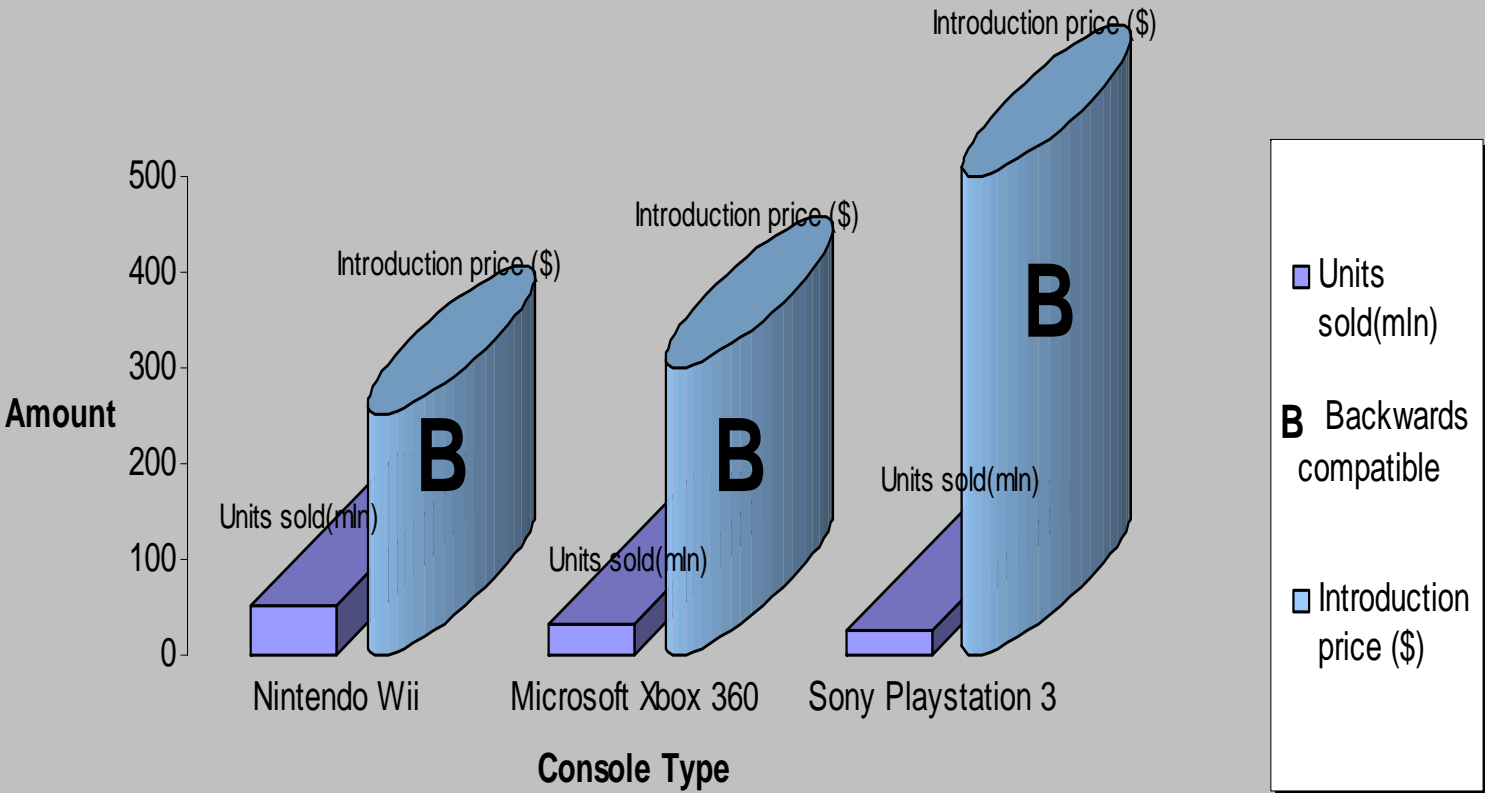


## 5th Generation





# 7th Generation





## Conclusion

- Positive but not decisive impact of backwards compatibility on standards dominance
- Degrees of backwards compatibility