

ICT Cost-Benefit Analysis

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Introduction

- We're going to be looking at some major technologies in the [ICT development](#) notes and consider their costs and benefits to society.
- The cost-benefits analysis (CBA) will be a whole-class activity with small-group and individual components.
 - Complete individually first
 - Compare and combine notes with a partner or small group.
 - We will discuss and combine our results as a class.

Getting started

- Create a new document (MS Word or Google Docs). For each ICT innovation, you will list 3 costs and 3 benefits associated with the development / adoption of the technology.
- You're ready to go when your Doc looks like this:

ICT Cost-Benefit Analysis	
Technology: Telegraph	
Costs / Risks	Benefits

Cost-benefit analysis

- A.k.a. risk-reward analysis.

Costs / risks

- Consider costs to society, community, and family / individual.
- Here are some examples:
 - What collective resources (natural, capital, etc.) does it take to support the technology?
 - What are the direct (\$\$\$) costs to the end-user?
- Also consider "hidden" costs
 - Does the technology cause any harm to society? Physical? Mental? etc.
 - Does the technology supplant (replace) another technology? Can we do without the replaced tech?

Benefits / rewards

- Consider benefits to society, community, and family / individual.
- Some examples:
 - Does this technology result in a net monetary (\$\$\$) profit? For whom?
 - Does this technology enrich or enhance social, political, or professional interaction?
 - Does this technology inform or support intellectual or cultural pursuits?

Reflection questions

1. Tech:
 - a. Which tech do you think was the biggest advancement? Why?
 - b. Which do you think has impacted you the most? Why?
 - c. Can you think of other important information / communication technologies that were left off of the timeline? Why are they important?
2. Trends:
 - a. What trends / patterns do you notice in the progression of ICT?
 - b. Do you think the rate of progress is increasing or decreasing?
 - c. Where do you see ICT going in the future?
3. Equity:
 - a. What are some reasons that there aren't more women and minorities represented on the timeline given in the ICT Development notes? Do you think this is a problem? Why or why not? (*Tip: see the [Equity in Computing](#) notes and links*)
 - b. Do women and minorities have a significant role in current ICT research & development? Do you think that they will in the future? Explain.