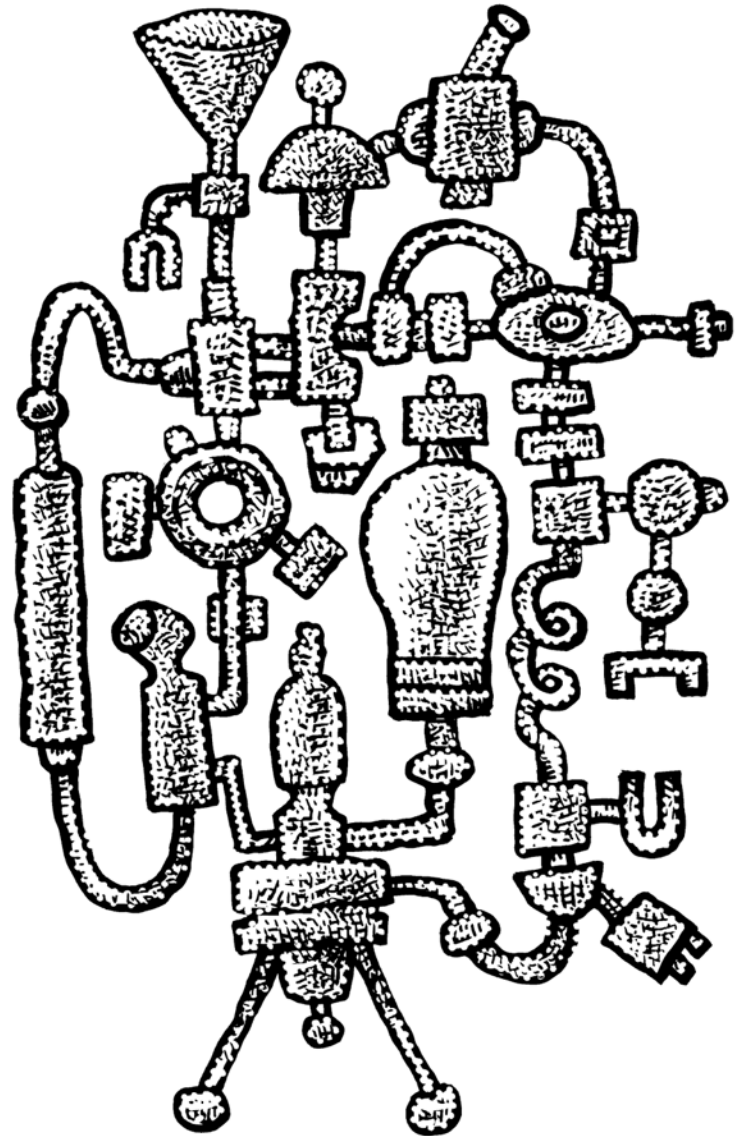


# *What does it take to create an innovative industry?*

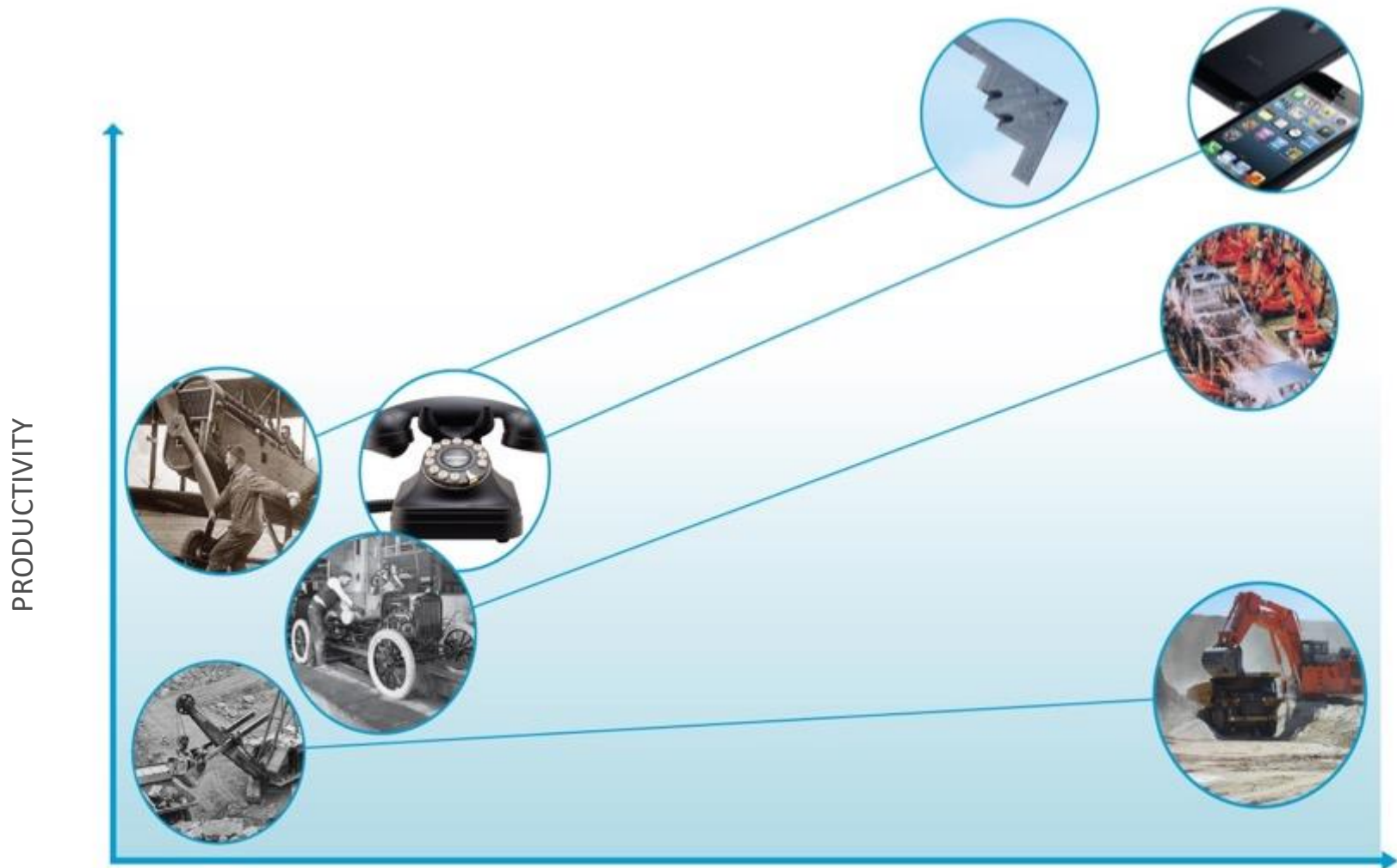
## Lessons from corporate innovation



*How would  
you design  
the least  
innovative  
industry in  
the world?*

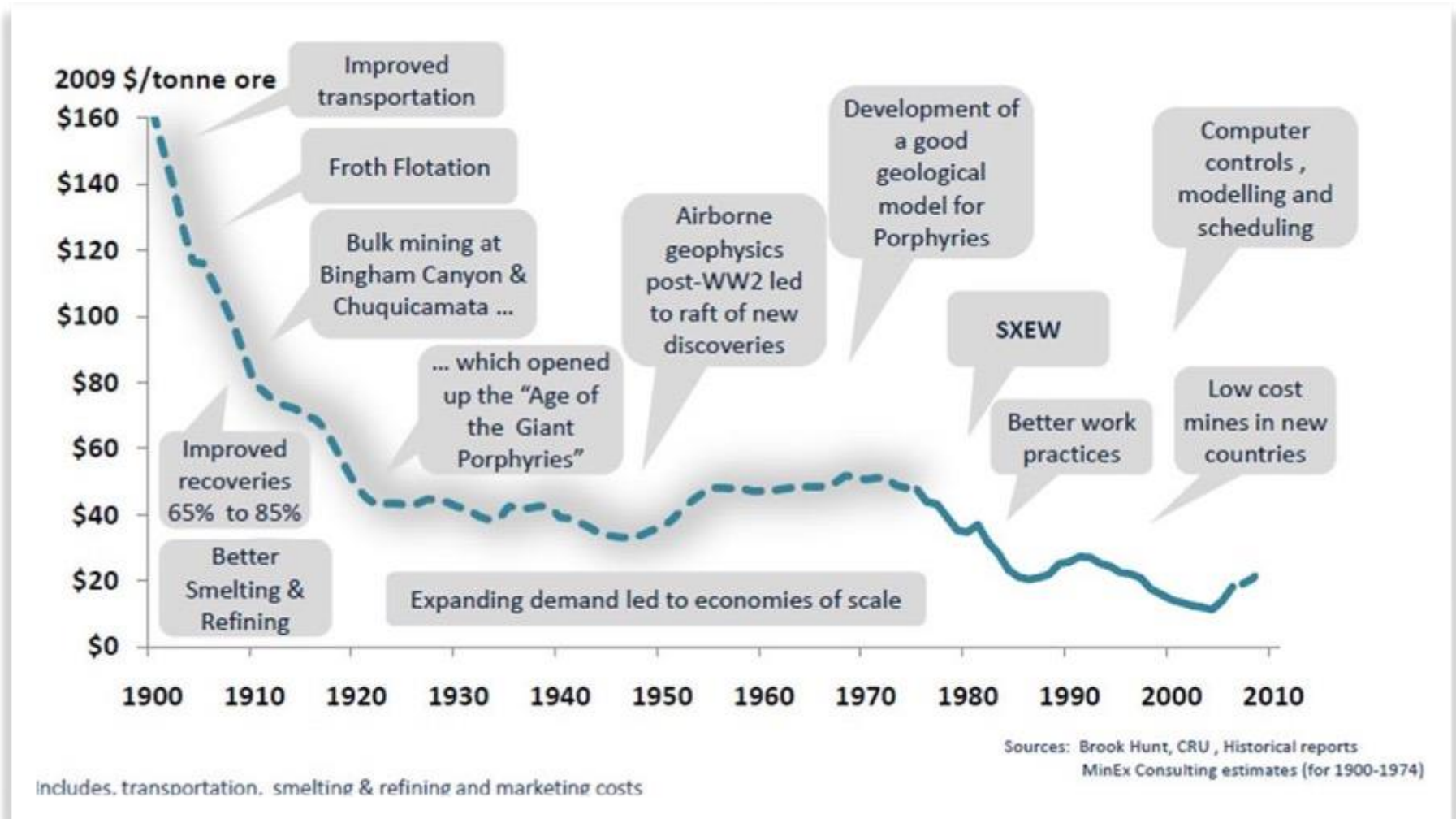


*While technological innovation has fundamentally transformed many industries, mining is lagging*





# *Historically, technical innovations have lead to step change reductions in operating costs for miners*



# *What Can We Learn From The Most Innovative Companies?*



# Hierarchy of Needs For Corporate Innovation





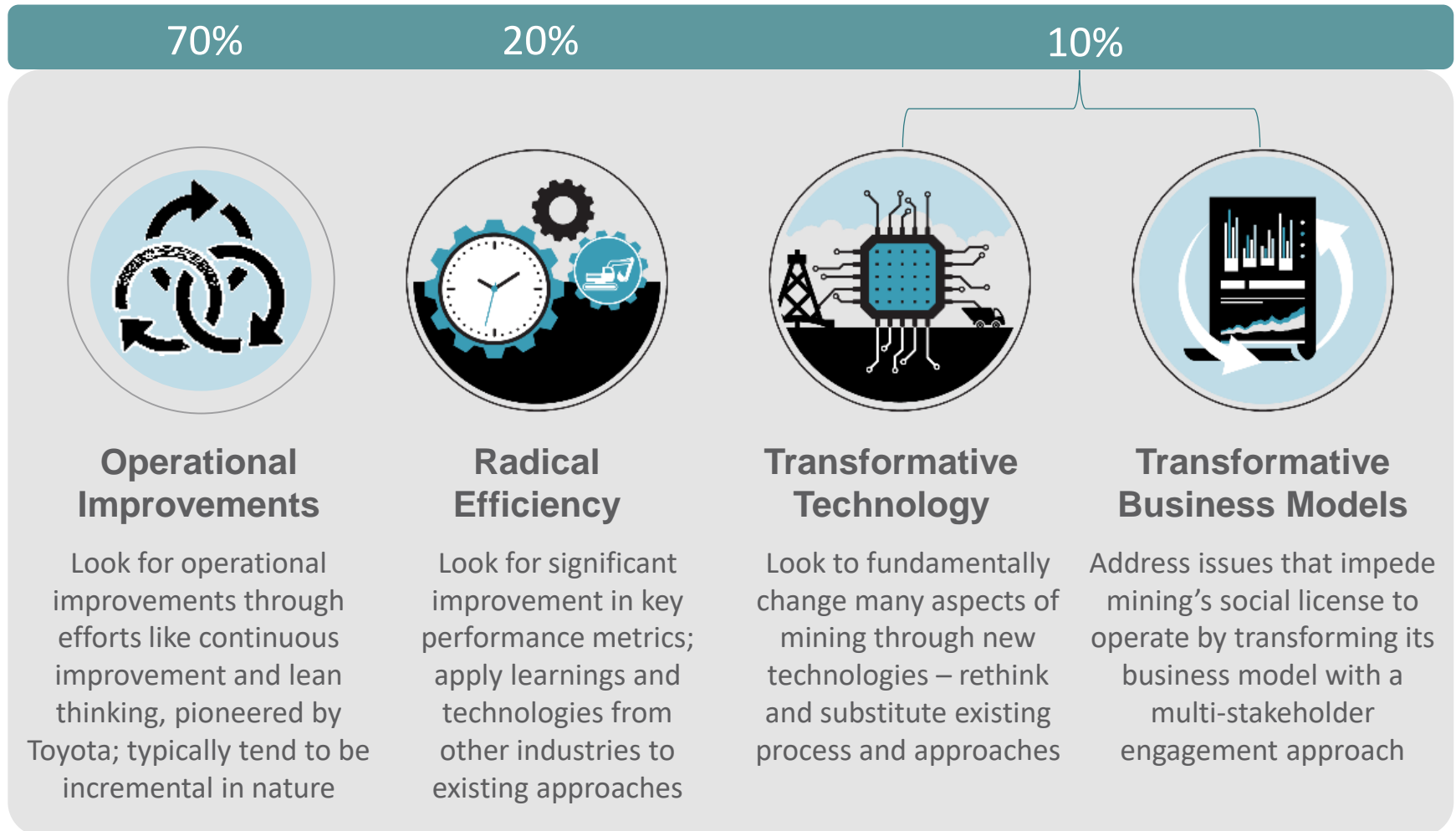
# *A Great Empire: Fortresses & Ships*

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# Addressing All Four Pillars of Innovation



# Innovation Strategy: The Fortress and the Ship



**~70%**

## Continuous Improvement

Look for operational improvements through efforts like continuous improvement and lean thinking; typically incremental in nature



**~20%**

## Radical Improvement

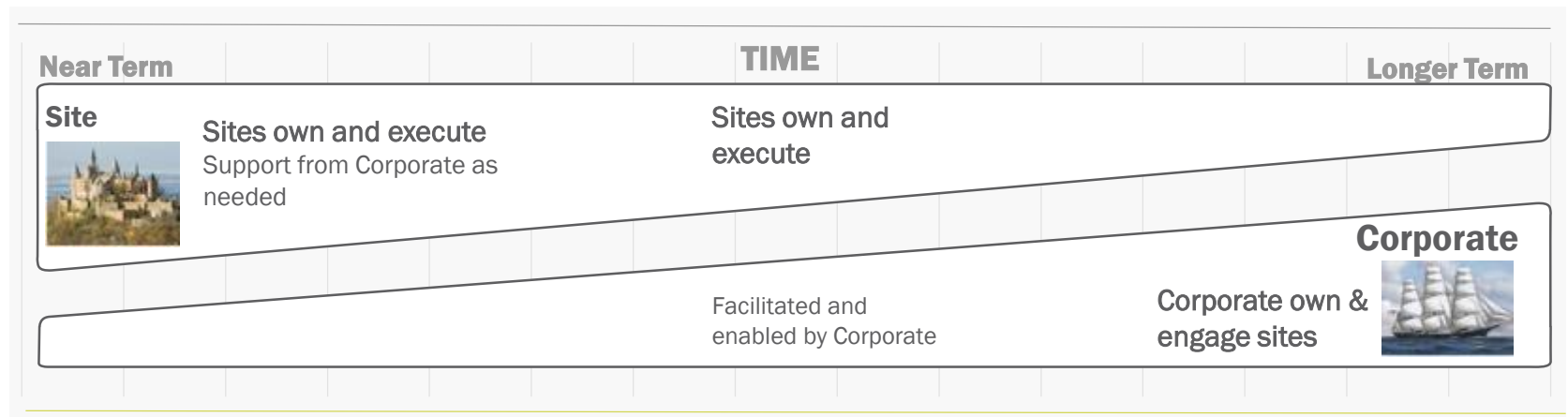
Significant improvement in key performance metrics; apply learnings and technologies from other industries to existing approaches



**~10%**

## Transformational

Look to find and nurture new businesses that will transform the company and / or industry



# *State of Innovation In Mining Today*

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*Edison did not deliver the  
lightbulb through  
continuous improvement  
of the candle!*

# Seven Foundational Aspects of a Successful Innovation Strategy

*Based on our experience, and applying leading innovation practices with clients, the following are the seven key aspects of successful innovation organizations which will be addressed in this engagement*



1. **Leadership** is aligned around strategic context (why), opportunity filters (what), and approach (how)



2. **Organization design** distinguishes between the different approaches to innovation



3. Appropriate **systemization** of the innovation processes and **balance** between corporate and sites



# Seven Foundational Aspects of a Successful Innovation Strategy



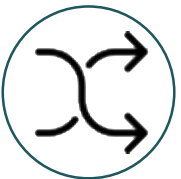
4. **Outside-in** approaches to avoid conventional thinking (confirmation bias) and corporate antibodies (inside-in)



5. Governance, funding models and selection criteria are **'fit for purpose'**



6. A **balanced portfolio** of opportunities, e.g. across time horizons (short to long term), distance from the core business (from core to adjacencies, and new)



7. Smart approach to **organizational change and communication**

# *What does it take to create an innovative industry?*

## Lessons from corporate innovation