

# A Detailed, Modern Space Economy

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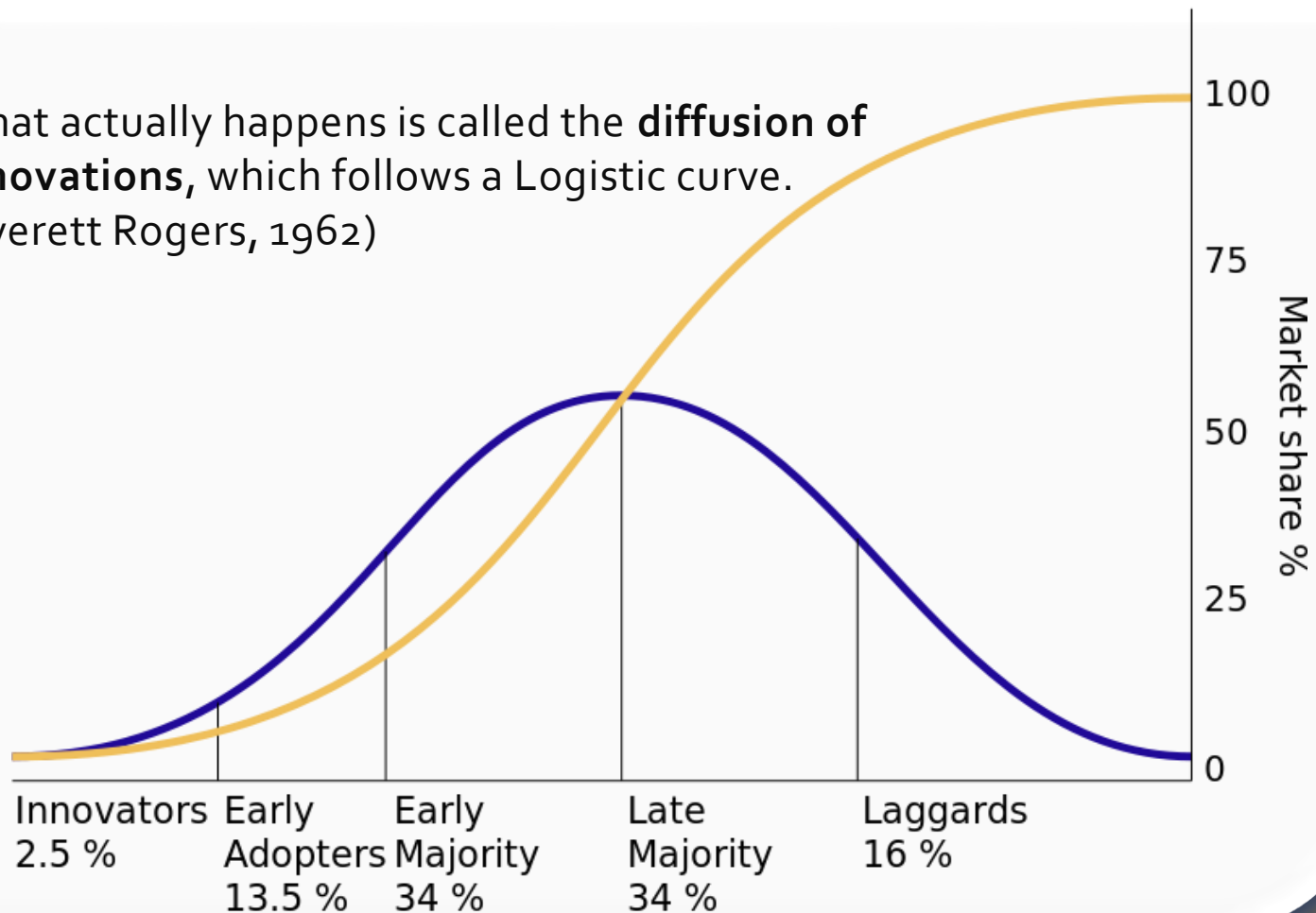
# Lessons from History

# As Settlements Grow, They Find Independence... Or Corruption



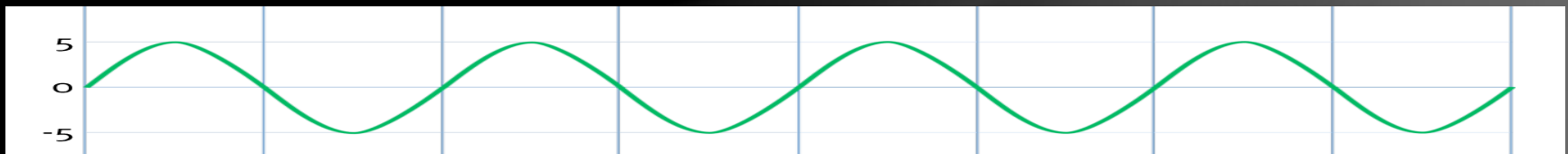
# Diffusion of Innovations

What actually happens is called the **diffusion of innovations**, which follows a Logistic curve.  
(Everett Rogers, 1962)



# Economic Cycles and Waves

| Name            | Years | Industry/Impact                 |
|-----------------|-------|---------------------------------|
| Bullwhip Effect | 1-1.5 | Supply Chain (1)                |
| Leeman Wave     | 1-1.5 | Supply Chain (many)             |
| Moore's Law     | 2-4   | IT Hardware                     |
| Juglar Cycle    | 7-11  | Fixed Investment                |
| Kuznets Swing   | 15-25 | Infrastructure, Land, Migration |
| Kondratiev Wave | 45-60 | Technology                      |



# The Money Spectrum



# Combining Solutions

# Distributism

| Parameter       | Value   |   |
|-----------------|---|---|
| Basis           | Distributism (AKA Distributionism): US/UK, 1900-1945  |   |
| Summary         | “Unbridled capitalism doesn’t produce too many capitalists, but too few.” - <i>G. K. Chesterton</i> |   |
| Basic unit      | Family/ Small businesses are individuals and families with means of production.                     |   |
|                 | Embraced  | Avoided   |
| Credit          | Credit Unions   | Banks   |
| Labor           | Training Guilds   | Labor Unions  |
| Incorporation   | Employee-Owned  | Investor-Owned  |
| Economy         | Distributed Manufacture   | Economy of Scale                                      |
| Class structure | Middle-class stabilized   | Middle-class exploited from Statists and/or Oligarchy |

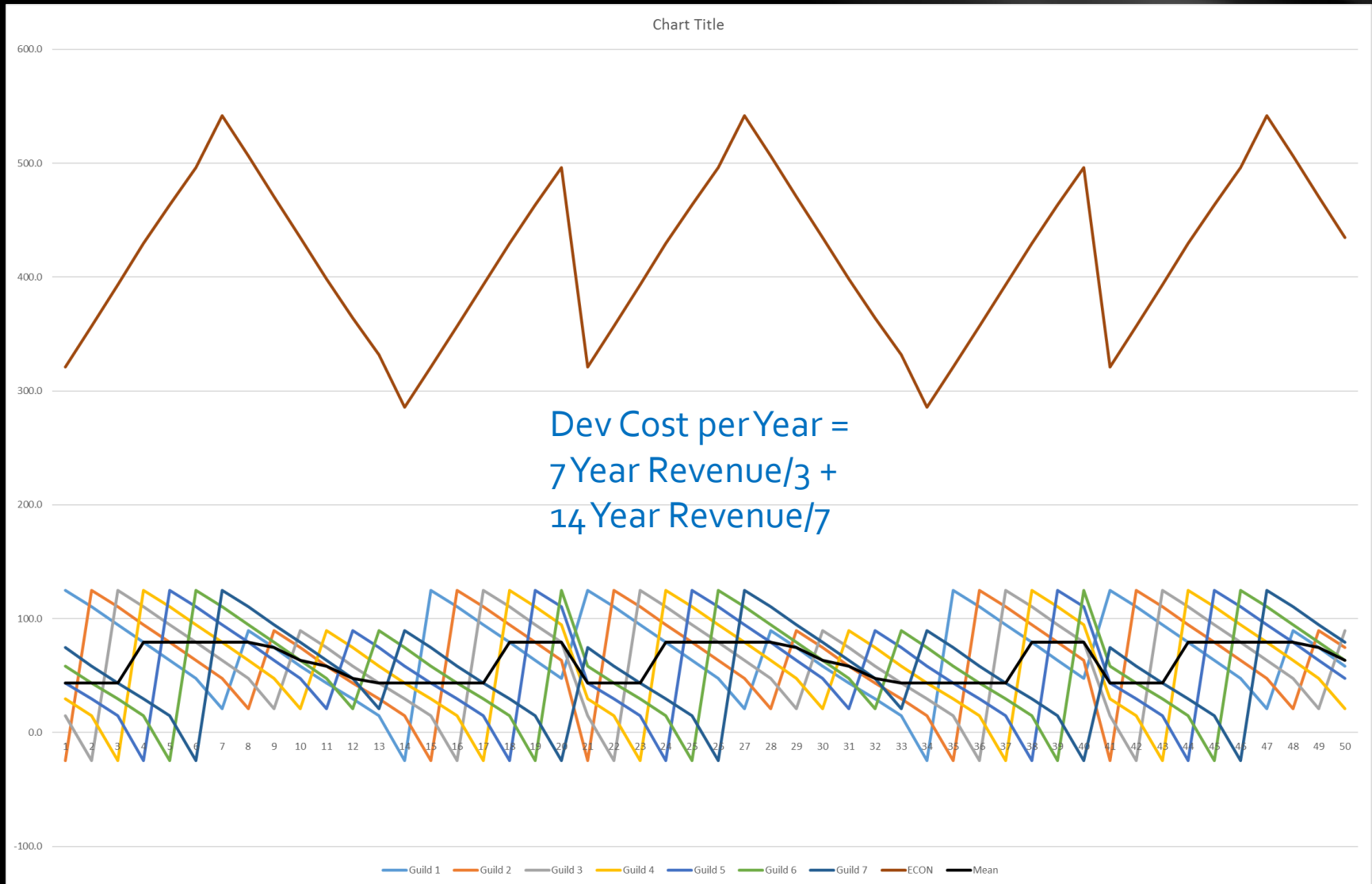




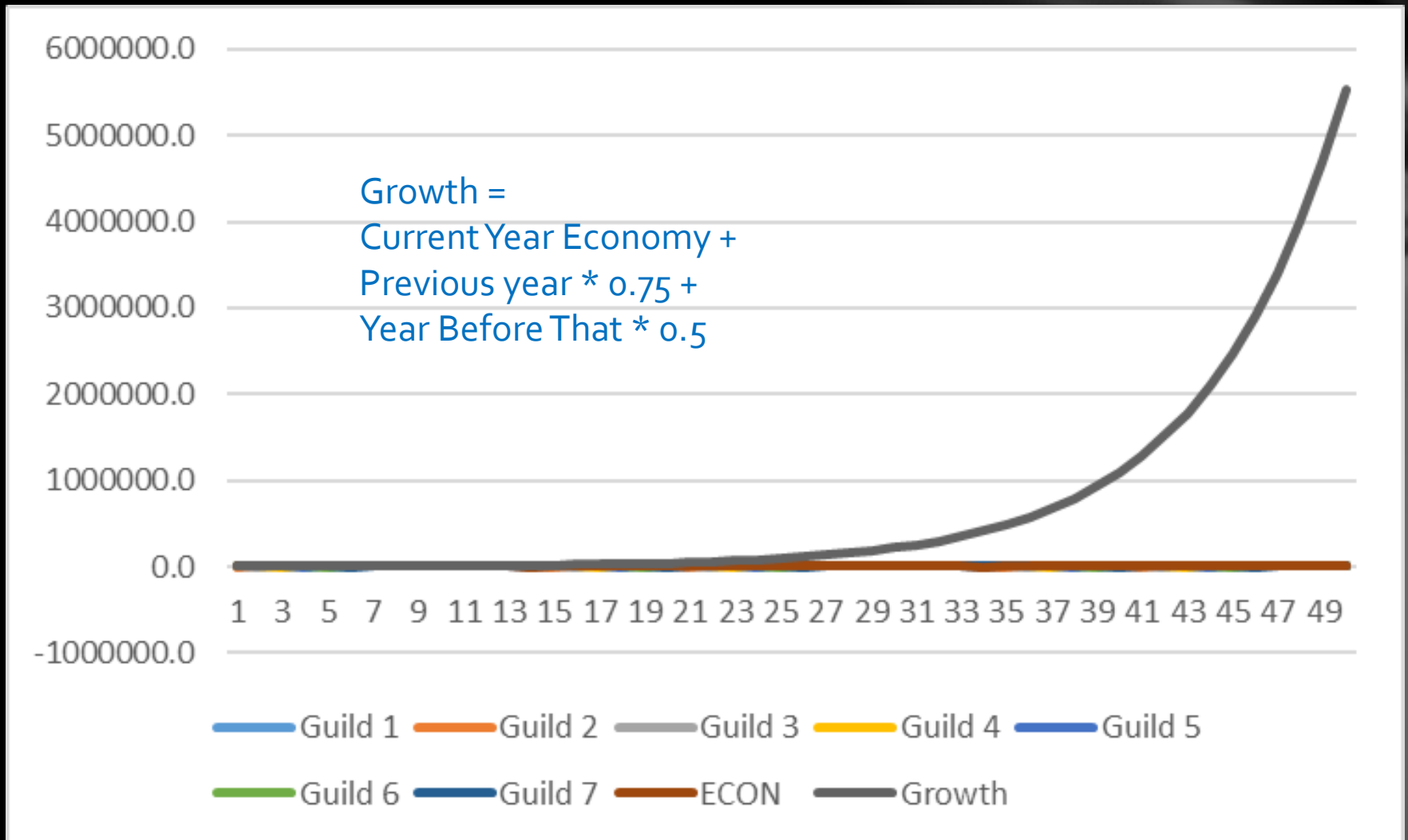
# Scheduled IP Resets by Guild

| Time Interval       | Actions   |
|---------------------|---|
| 7 Years             | <ul style="list-style-type: none"><li>• Intellectual Property goes to open source locally.</li><li>• IP would then depreciate over seven years and reset.</li></ul> |
| 14 Years            | <ul style="list-style-type: none"><li>• IP traded within the economy beyond the settlement goes open source.</li></ul>  |
| 21 Years            | <ul style="list-style-type: none"><li>• IP becomes part of historic records, education system.</li></ul>  |
| Split Across Guilds | <ul style="list-style-type: none"><li>• To distribute the economic impact, would reset one guild per year until 7 years complete.</li><li>• Then repeat.</li></ul>  |

# Economic Cycles (Rev – Exp)

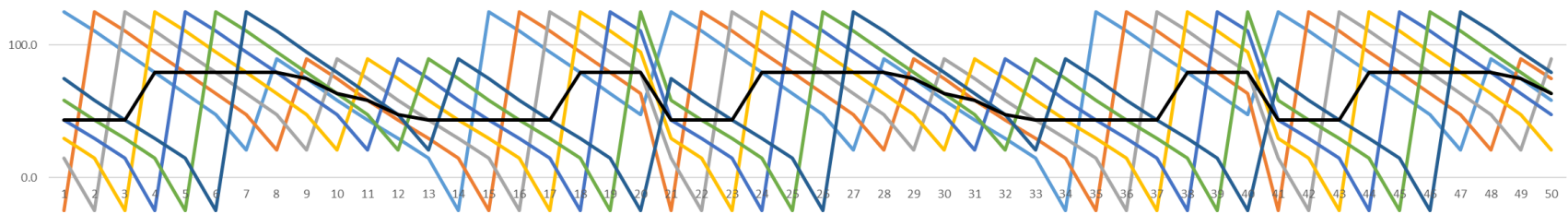


# Economic Cycles (Rev – Exp)



# Shifting Sabbatical - Advantages

| Guild      | Value   |
|------------|---|
| Economy    | Economic cycles are predictable 49 year pattern.  |
| Employment | Incentive for talent to shift guilds periodically – allows transfer of skills and methodologies across industries.                              |
| Technology | By shifting talent and technology, able to merge abilities across the entire industrial spectrum rather than silo into specific isolated areas. |
| Stability  | Since most people would know multiple industries, a split or disaster would not eliminate knowledge pool (opposite of “technology trap”)        |



# Spontaneous Corporations

| Guild                   | Value  |
|-------------------------|--|
| Start Project           | <ol style="list-style-type: none"><li>1. Project voted on within guild web site, then to direct democracy if large enough.</li><li>2. Resources invested in project as needed. If consumer product, “Kickstarter” style pre-sales.</li></ol>   |
| Determine Resources     | <ol style="list-style-type: none"><li>1. Employment contracts for freelance work teams within/across guilds as needed</li><li>2. Construction resources allocated (Guild + Private).</li><li>3. Use Ethereum-equivalent contracts for product/ service /materials/ talent.</li></ol> |
| Hire Talent             | <ol style="list-style-type: none"><li>1. Put call out for talent/bids.</li></ol>   |
| Assemble production run | <ol style="list-style-type: none"><li>1. Managed through guilds, then membership.</li><li>2. Ad hoc, employee owned company.</li></ol>   |
| Dissolve or Continue    | <ol style="list-style-type: none"><li>1. If economically viable, continue structure.</li><li>2. Add/change membership as needed.</li></ol>   |

# Career Path (Local)

| Age   | Skills   | Rewards  |
|-------|--|--|
| 0-7   | Early Childhood/Literacy   | Computer Core  |
| 8-14  | Start basic agricultural work<br>Trivium/Quadrivium training             | Food production module   |
| 14-21 | Spend 1 year learning basics<br>of each guild                            | Habitat module (basic)   |
| 22-28 | First guild choice or<br>Advanced education (Ph.D.)<br>Work within guild | Additional Habitat/<br>Food Space for Family.<br>Workshop modules. |
| 29-35 | Guild cycle 2<br>Expand role or switch fields                            | Repeat to age 42, 49, 56, 63.<br>Able to work all seven guilds.    |
| 64-   | Optional retirement  | Sell off unneeded resources<br>or leave to family/guild.           |

# Career Path (New Arrivals)

| Year | Skills   | Rewards                                     |
|------|--|---|
| 0-3  | Learn/work in basics of two or more guilds.<br>Learn legal, financial systems. | Computing, food, habitat.                   |
| 4-7  | Work in guild that sponsored person's arrival at settlement.                   | Remaining resources for independence.       |
| 8+   | Work in guild of choice  | Will need to earn keep without sponsorship. |









# Further Research

| Category   | Status  |
|------------|---|
| Realism    | <ul style="list-style-type: none"><li>• Detailed Technology Model</li><li>• Detailed Resource Model</li><li>• Detailed Labor Model</li></ul>              |
| Settlement | <ul style="list-style-type: none"><li>• Technology Growth Projections</li><li>• Population Growth Projections</li><li>• Skill of Population</li></ul>     |
| Habitat    | <ul style="list-style-type: none"><li>• “Starter Kit” scale and capacity</li><li>• Trade required with Earth</li><li>• Trade across settlements</li></ul> |

# Questions?

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