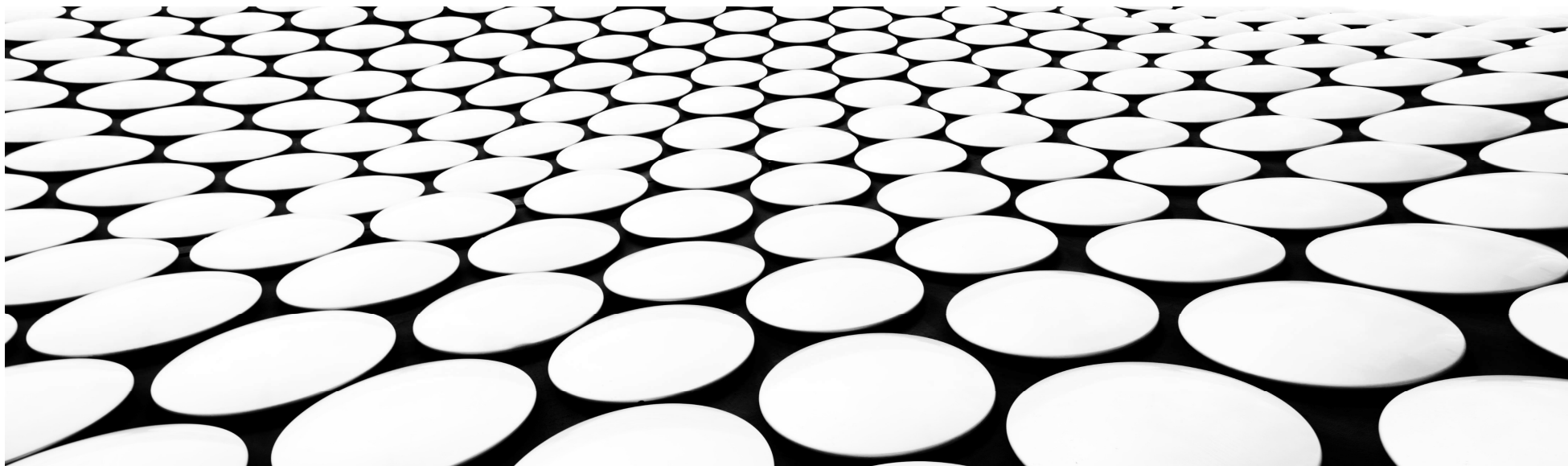


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# LIFESCIHUB

STRATEGIC SUBCONTRACTING OF THE SMALL “MICRO BUSINESS” DRUG DEVELOPMENT EXPERT TALENT POOL





# AGENDA

- Introductions
- Thank you!
- What the “Gig Economy” Looks Like in Drug Development
  - A focus on economics
- Impact of the Labor Laws

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## THE GIG ECONOMY IN PHARMA R&D


- Sheila Mahoney- independent consultant since 2014
  - Would have had to move to different state or country to continue to operate at VP Business Development and Corporate strategy level
- S Corporation, annual revenue of \$100-200K, both drug sponsor and R&D vendor ecosystem clients.
- Specializes in the intersection of drug development, technology and externalizing (outsourcing)



# THE GIG ECONOMY IN PHARMA R&D

- Founded LifeSciHub in 2017 to innovate drug sponsor reliance on “inefficient intermediaries”- see Table 1
- Example: Jeff Davidson, PhD, former VP of Biostatistics at Endo Pharmaceuticals, independent business (of 1) Alpha Kappa Statistics LLC since 2018  
(<https://www.linkedin.com/in/jeffreyadavidson/>)
- As VP of Endo, had hired temporary biostatistics experts at \$350/hr
- As an independent consultant, was offered the same type of project at \$180/hr *from the very same intermediaries*

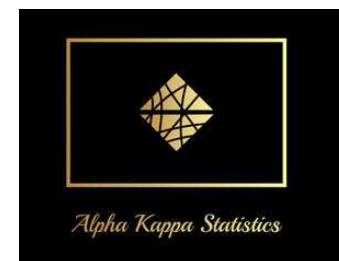
Table 1: Efficient vs. Inefficient Intermediaries

Intermediary Value	Efficient	Inefficient
Owns Project Risk (such as outsourcing)	✓	✗
Project Management	✓	✗
Resource Management	✓	✗
Training of Resources	✓	✗
Budget Management	✓	✗
Software and Systems Support	✓	✗
Proprietary Methodology and/or SOPs	✓	✗
Brand Value- Command of Function / Expertise Domain	✓	✗
Expert-to-Expert Curation of Resources	✓	✗
*Preferred Drug Sponsor Provider and/or Ownership of Drug Sponsor Master Services Agreement	✓	✓
Payment Processing	✓	✓
	outsourcing of whole projects	Finite use of highly specialized experts
 <p>Mark Ups: 30-100% (or more)</p>		

## LIFESCIHUB INNOVATION

- Started as a gig economy marketplace platform, User Requirements originally based on eLance (Upwork's predecessor)
- Strategic Subcontracting of the small "Micro" business drug development vendor ecosystem
- Average project:
  - 20 hours/month
  - 18 months
  - \$150/hr (range- \$75-350/hr)

**Powered By**  **LifeSciHub**



## LIFESCIHUB INNOVATION



### Example Expertise

- 300+ members, potential for several thousand more. All are:
  - independently incorporated, LLCs and S-corps
  - 20+ years drug development expertise, full spectrum of drug development expertise
  - Have multiple clients and projects
  - Manage and pay their own taxes and health insurance
- 90% are businesses of 1, rest are 1-30
- Primarily US based but can expand to EU
- Many unstructured networks of experts
- 5% have created software products

Clinical trial manager  
Pharmacometrician  
Toxicology troubleshooter  
Modeling & Simulation  
CMC  
Medical Writers  
Regulatory Affairs Strategist  
Regulatory Publishers  
Document Formatter  
Commercialization strategist  
Quantitative Market Research

Supply Chain Manager  
Product Labeling expert  
Man in Plant  
Tech Transfer  
Pharmacovigilance  
Real World Evidence  
Trial Master File  
Product Launch  
Clinical Development  
Risk Based Monitoring  
Data Management

LifeSciHub Survey of Independent Workforce, 2020: <https://lifescihub.com/survey/>

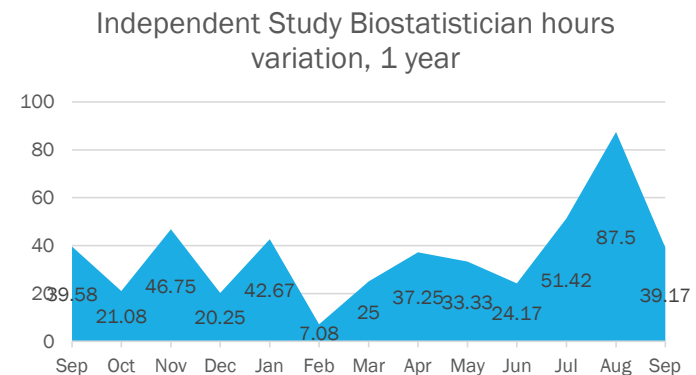
## LIFESCIHUB INNOVATION

- LifeSciHub pricing: flat, 20% markup
- LifeSciHub is “Radically Transparent”
  - Supply and Demand see what they other is paying/receiving, and LSH fee
  - Full P&L reported to membership annually, all members can audit our Quickbooks file upon request
- Value to drug sponsors:
  - Far better expertise quality at market rates
  - Contracting & invoicing consolidation
  - Contracting compliance



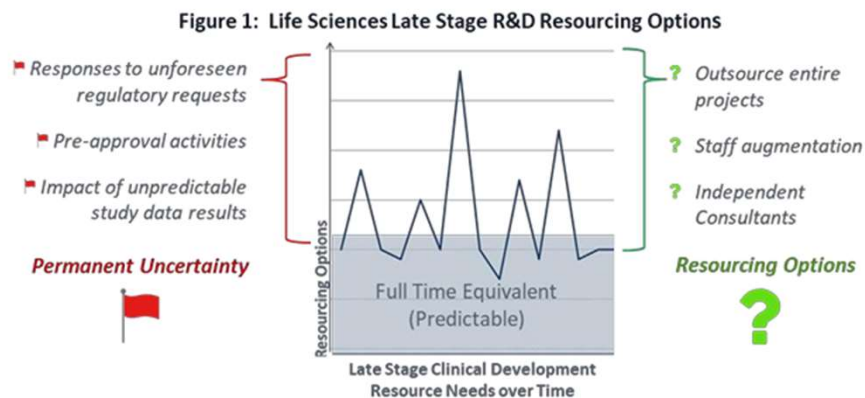
### Example Engagements

- Clinical trial biostatistician, 40-70 hrs month for 2 years
- Clinical trial supply expert, 25% FTE for 3.5 years
- Data Management expert, 75% FTE for 6 months, then 20% FTE for 1.5 years



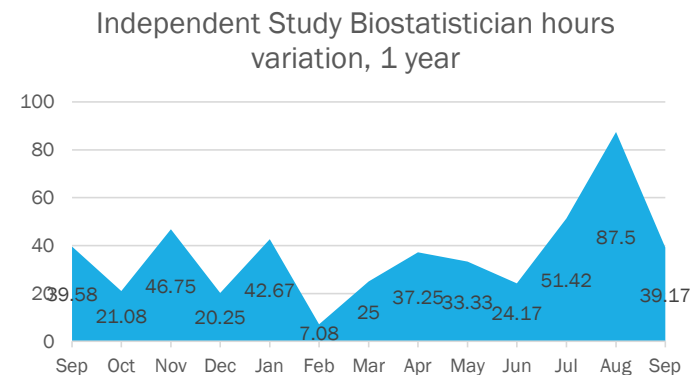
# LIFESCIHUB INNOVATION

- No drug sponsor can do the work of drug development with full time employees alone, the peak/valleys are too volatile



## Example Engagements

- Clinical trial biostatistician, 40-70 hrs month for 2 years
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- Data Management expert, 75% FTE for 6 months, then 20% FTE for 1.5 years





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## IMPACT OF LABOR LAWS

- Drug sponsors are (unnecessarily, with respect to the LifeSciHub membership) terrified of worker misclassification risk
- It doesn't matter if the LifeSciHub membership passes the ABC test w. flying colors
- Drug sponsors prioritize mitigating HR risk above all other considerations
- Ex: Organoids expert for CA site of Global Pharma
  - Organoids technology- commercially available in 2015
  - Drug sponsor requirement: 5 hours a month of tutoring on organoids, preferably by someone who had worked in Hans Clever's Utrecht Laboratory (inventor of organoids)
  - Massive potential impact in early drug discovery
  - Took 6 months to find the right people, project itself cost \$6,000
  - **Was judged too risky by HR because experts would be paid by 1099, not w2**
  - **Massive research dollars wasted on inefficient intermediaries**
  - **Direct impact on patient health, as well as US economic viability and resilience**

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## POLICYMAKERS: INHERENTLY BIASED?

- Government is an extremely traditional employment model
- Policymakers are government employees
- People who prefer traditional employment- regular paychecks and structure- are attracted to government jobs
- Potential inability to understand, appreciate or trust non traditional worker preferences.
- Does this bias exist?
- If so, is it contributing towards policymakers doubling down on traditional models, such as labor unions?
  - FYI- LifeSciHub membership abhors labor unions!



# REFERENCE SLIDES

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## HOW IS LIFESCIHUB DIFFERENT FROM OTHER DRUG DEVELOPMENT EXPERTISE SUPPLIERS?

- Designed on new worker preferences- to operate as small businesses, not “human resources”
  - Innovates contracts and administration barriers to engagement, flexibility and resilience
- Radically Transparent “Middleman”- Supply and Demand know all fees and payments
  - Economic result: Market rates, higher quality talent
- “Marketplace” model
  - For any given task, drug sponsor has the choice of 2-3 fit candidates that are already subcontracted to LifeSciHub
  - All candidates have and maintain their own businesses, other clients and projects.

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## THE HIGHEST QUALITY TALENT IS AVAILABLE IN THE SMALL BUSINESS VENDOR ECOSYSTEM

### RWE



Expert

Matt Veach,  
Revesight Consulting

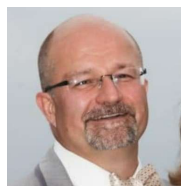
Last  
Industry  
Position

Global Head, Data Driven  
Research  
IQVIA

Why  
They're  
Great

Largely responsible for  
Quintiles merging w. IMS  
Health to become IQVIA

### Patient Engagement



Kevin Freiart,  
Salem Oaks Consulting

Sr. Dir, Group Lead  
Operational Excellence  
Pfizer

Focus on rare disease,  
patient education and  
engagement  
Very well known in rare  
disease circles

### Medical Writing



Jeff Fielhauer  
Greenforce Medical Writing, LLC

Principal Medical Writer  
Trilogy Writing &  
Consulting

"One of the best medical  
writers I have ever  
worked with"  
-VP Clinops small  
biopharma

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# THE HIGHEST QUALITY TALENT IS AVAILABLE IN THE SMALL BUSINESS VENDOR ECOSYSTEM

## Commercialization Strategy



Esther Nzenza  
Decisive Consulting

## Clinical Trial Supply



Patrick Milliken  
Clinical Supply Consulting, Inc.

## Document Formatting



Michelle Seitz  
The Formosa Group

Expert

Last  
Industry  
Position

Why  
They're  
Great

VP and Head of Int'l  
Marketing, Commercial  
Excellence, Market  
Access and Policy  
Alexion

Knows everyone and  
everything. Started as  
single consultant, 30  
people within 3 years

Assoc Dir, Clinical  
Supplies  
YPrime

Highly specialized on this  
specific task, unique  
optimization techniques,  
extremely highly recommended  
by drug sponsor clients

Process Consulting Specialist  
Accenture (formerly Octagon)

Knows all eCTD Templates,  
Word expert, can troubleshoot  
any Word Document, has  
formatted millions of pages of  
submissions

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## THE HIGHEST QUALITY TALENT IS AVAILABLE IN THE SMALL BUSINESS VENDOR ECOSYSTEM

- Manufacturing- “Man in Plant”
- Program Management
- ePro
- HEOR experts
- HEOR writers
- Market research- qual and quant
- Market research writers
- Study Start Up Systems and Expertise
- Life Sciences IT specialists- all systems
- Regulatory Publishers
- Regulatory Strategists- Global
- Registered Agents- various countries
- Risk Based Monitors
- Organoids Experts
- Medical Affairs Excellence
- Clinical Data Managers
- Vendor Oversight
- Auditors and GCP Experts
- Clinical Quality Strategy
- CMC Process
- Scientific Illustration
- Toxicology Troubleshooting
- Trial Master File Specialists
- And more!

## HOW RATES WORK

- Drug sponsor & expert negotiate directly
  - “Marketplace” model- different consultants have different availability, interests, situations, preferences and, subsequently, rates
  - LifeSciHub Goal:
    - Make 2-3 very fit introductions
    - Sponsor chooses whom to interview and makes a selection accordingly
    - Supply-side competition
- LifeSciHub Flat Mark Up Fee: 20% above what is negotiated
- LifeSciHub handles all contracts, invoicing and payment processing
- All fees are reported transparently to both parties throughout life of engagement
- LifeSciHub P&L is reported in full to all users annually, available for auditing upon request

### Drug Development Task Market Rates

Task	Range*+	Domain
Highly Strategic	300-400	HEOR, Biostat, Tox Troubleshooting, etc.
	200-300	Dir level clin ops, med affairs, admin task strategists, Clin quality, various
	100-200	Regulatory publishing, medical writing, trial master file, document formatting
Administrative		

\*Experience Level- 10 to 30+ years

+Rate can be influenced by volume & duration of project



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# THANK YOU! Q&A?

NEXT: REFERENCE SLIDES

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# **LIFESCIHUB INNOVATION: COMPARISON TO TRADITIONAL SUPPLIERS**

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## DIFFERENT **SUPPLY** MODEL

### LifeSciHub Platform

- All ex-industry, usually 20+ years or more
- Do not require 40 hours/week or benefits:
  - Have other clients
  - Spouse with benefits
  - Semi-retired
- Diversity supplier, plus over 50% diversity supplier subcontractors
- Extremely high quality
- Vendor engagement- 1099s only
- “Future of Work”

### Traditional 3<sup>rd</sup> Party

- People who want full time jobs and corporate ladder career path
- People who want/need full 40 hours- condition of employment
- High risk of leaving “gig” once they find a full time job
- Legitimate worker classification risk
- Questionable quality
- Human resources engagement

## DIFFERENT **ECONOMIC** MODEL

### LifeSciHub Platform

- “Open Talent” Tech platform derived from the Sharing Economy (Uber, Lyft, Airbnb)
- Gig Economy Approach
  - Independently incorporated businesses of 1 (or more)
  - Independent by choice- no worker classification risk
    - Interested in practice expertise, not “climbing the corporate ladder”
- Highly aligned incentives
  - Flat fees- 20%
  - Totally transparent to both Hiring Entity and Expert Provider
  - No rate cards- experts evaluate and propose, negotiate directly with hiring entity

### Traditional 3<sup>rd</sup> Party

- Agency, Staffing firm, consulting firm
- Human Resources Approach
  - Main goal- Delivering FTE-like non FTEs: 40 hour workweeks, employer of records, w2
  - Avoiding worker classification risk
- Quality-Negative Financial Incentives
  - 3<sup>rd</sup> party holds information “captive”
  - Incentivized to sell price up, supply cost down, keep the difference
    - Net negative impact on quality

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## DIFFERENT **ECONOMIC** MODEL

### LifeSciHub Platform

- Completely reliant on first degree expert relationships and recommendations
- “Monetized Network”
  - Not a referral fee- economically resembles publishing royalties or entertainment residuals
  - Facebook, etc has proven the quantifiable value of digital networks. LifeSciHub places a quantifiable value on professional networks
- “Supply Connector” model
  - Members that refer either drug sponsor projects or expert providers to a specific project get 5% of all revenue generated for that project
- “Demand Connector” Model
  - Members that help LifeSciHub establish a Master Services Agreement with a drug sponsor get 5% of all revenue generated from that MSA

### Traditional 3<sup>rd</sup> Party

- Relies on CV databases. The larger the database, the greater the chance of finding an expert
  - Often fails
  - Disconnected from expert community
  - “Vetting” is focused on checking licenses and CV accuracy (low value) traditional 3 references supplied by expert (inherent bias)
- Managed by HR people, not drug development people
  - Fundamental lack of true understanding, impacts ability to find highly specialized expertise
- Incentivized to increase profit at the expense of quality

# DIFFERENT PROCESS

## LifeSciHub Platform

- Development of talent pools over time
  - 90% LSH are available now- almost all independent consultants can spare 5-10 hrs a week immediately and plan larger blocks as needed
  - Goal: introduce 2-3 good fit experts, put in “Talent Pool:
    - No obligation to use
    - Expert Providers have their own work, will keep themselves busy
    - Find a good person, stay in touch, keep them informed on your needs, they will block time for when you need them
- Business administration as efficiency innovation
  - Legal Agreements are already in place. Only SOW needed. VAST improvement over current process

## Traditional Approach

- Wait until open position, then evaluate who is interested/available at that time
  - Assumes workers either are or want to be full time employees
  - Therefore, no sense looking ahead if the need is 6 months from now
  - Can only look when position is open
- Business administration as afterthought
  - Add months of delay and sometimes prevents engagement due to HR and Legal empowerment/priorities.

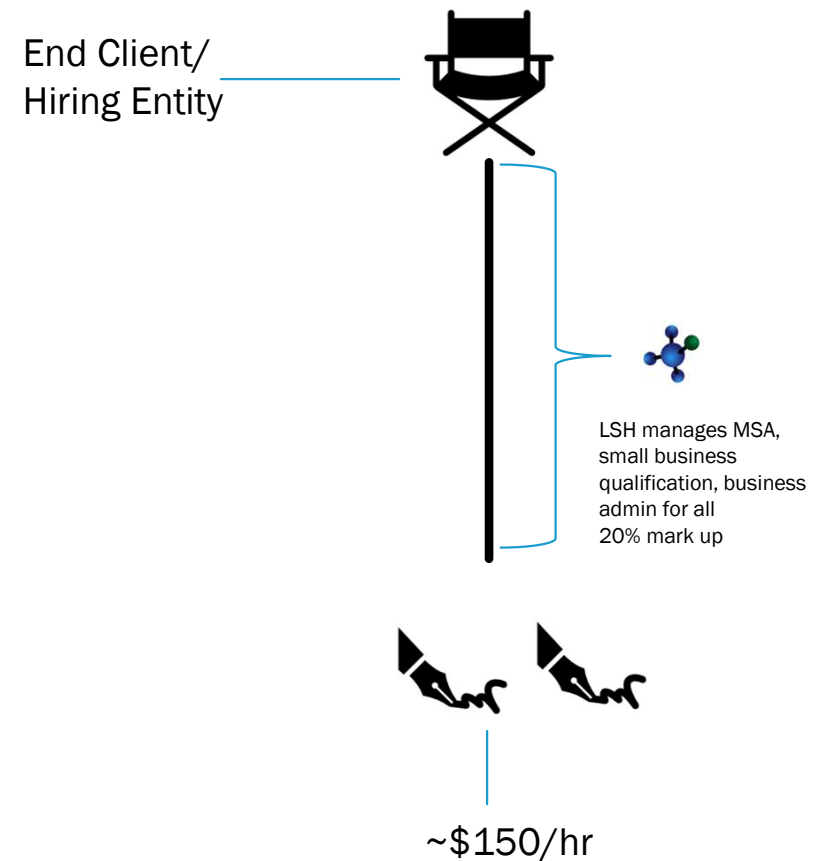
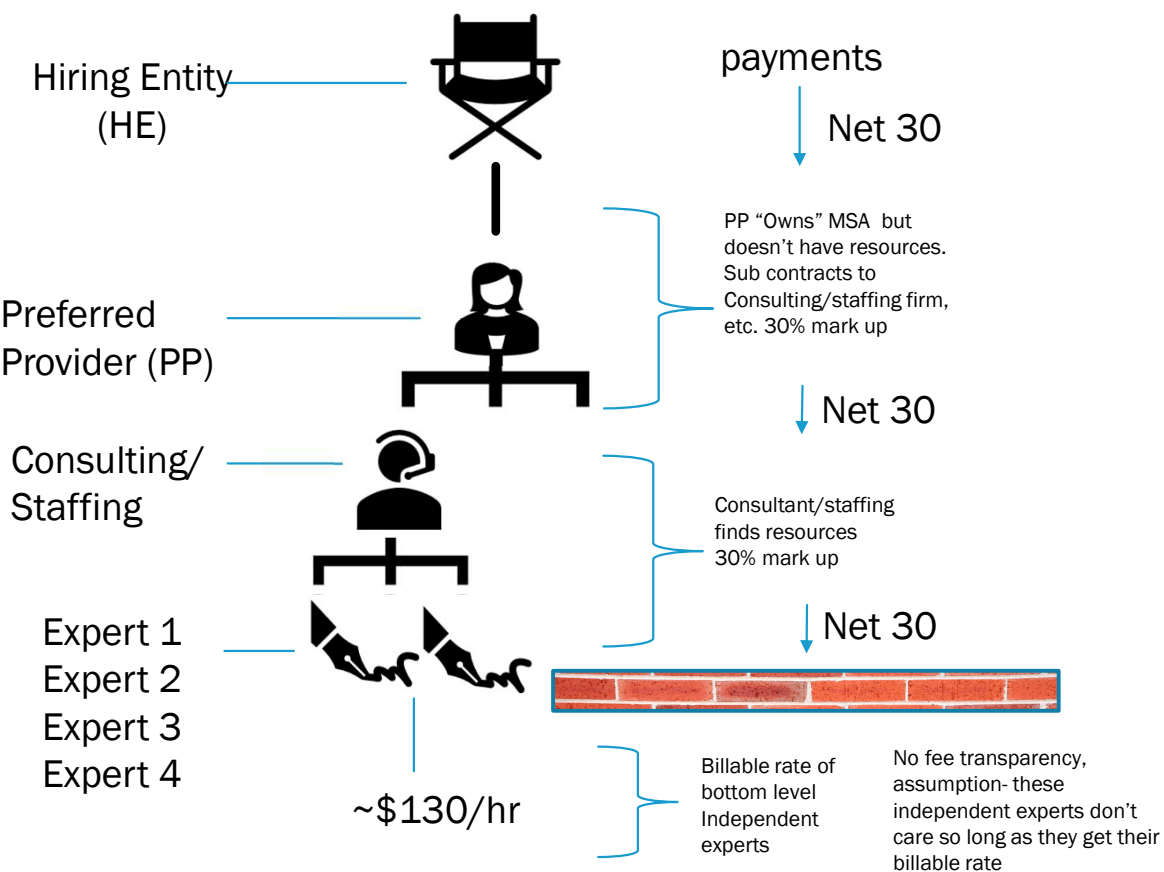


# **LIFESCIHUB ECONOMICS**



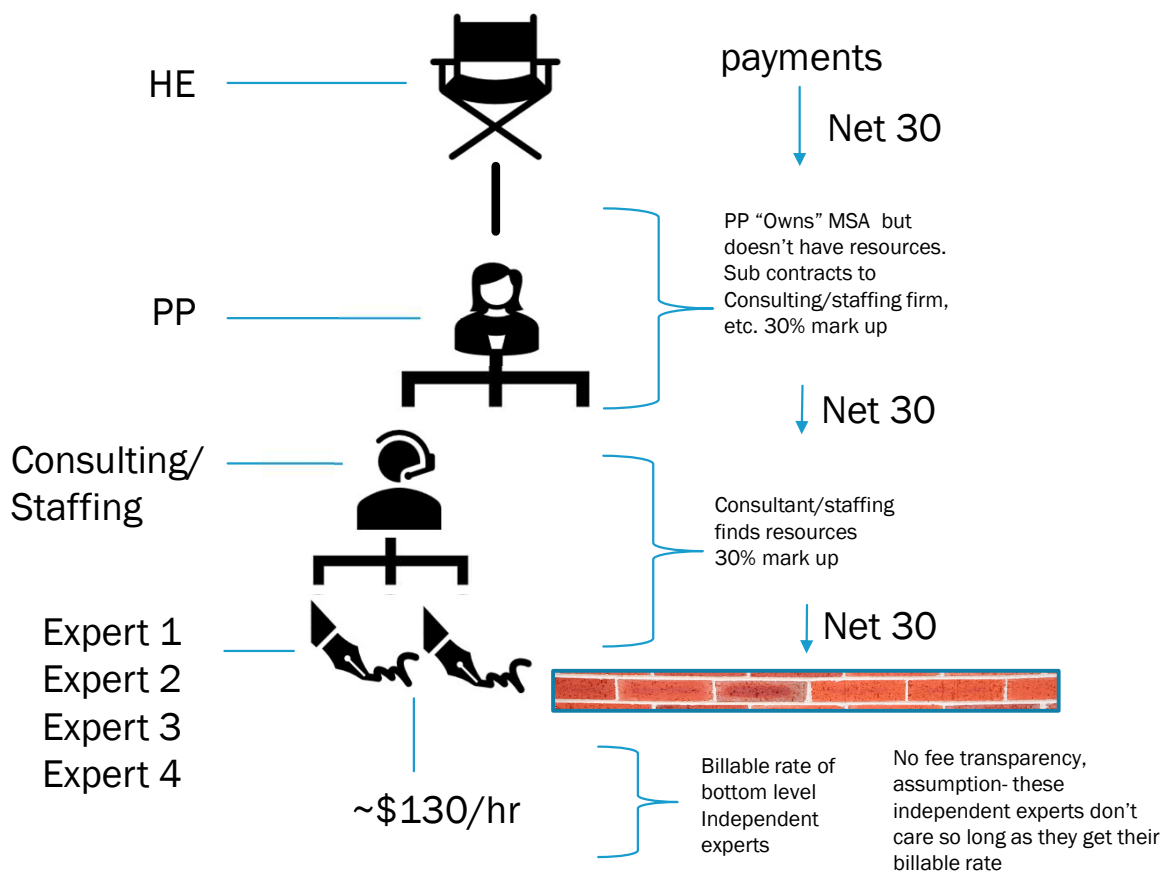
Classic Subcontracting  
Model  
\$220/hr, 2 markup layers

LifeSciHub Connector  
Model  
\$180/hr One mark up layer

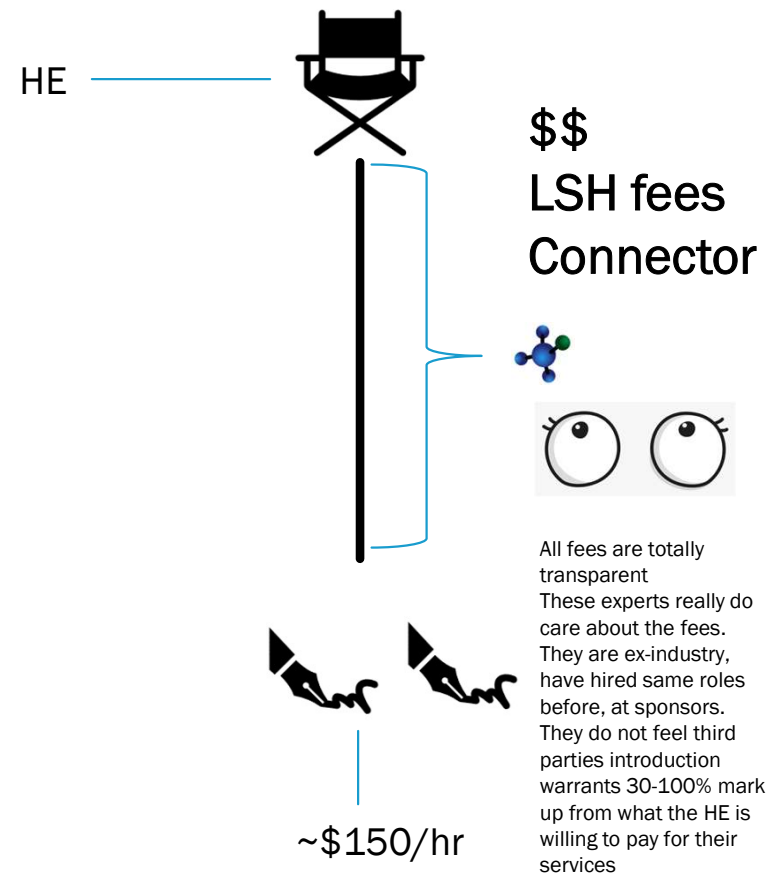




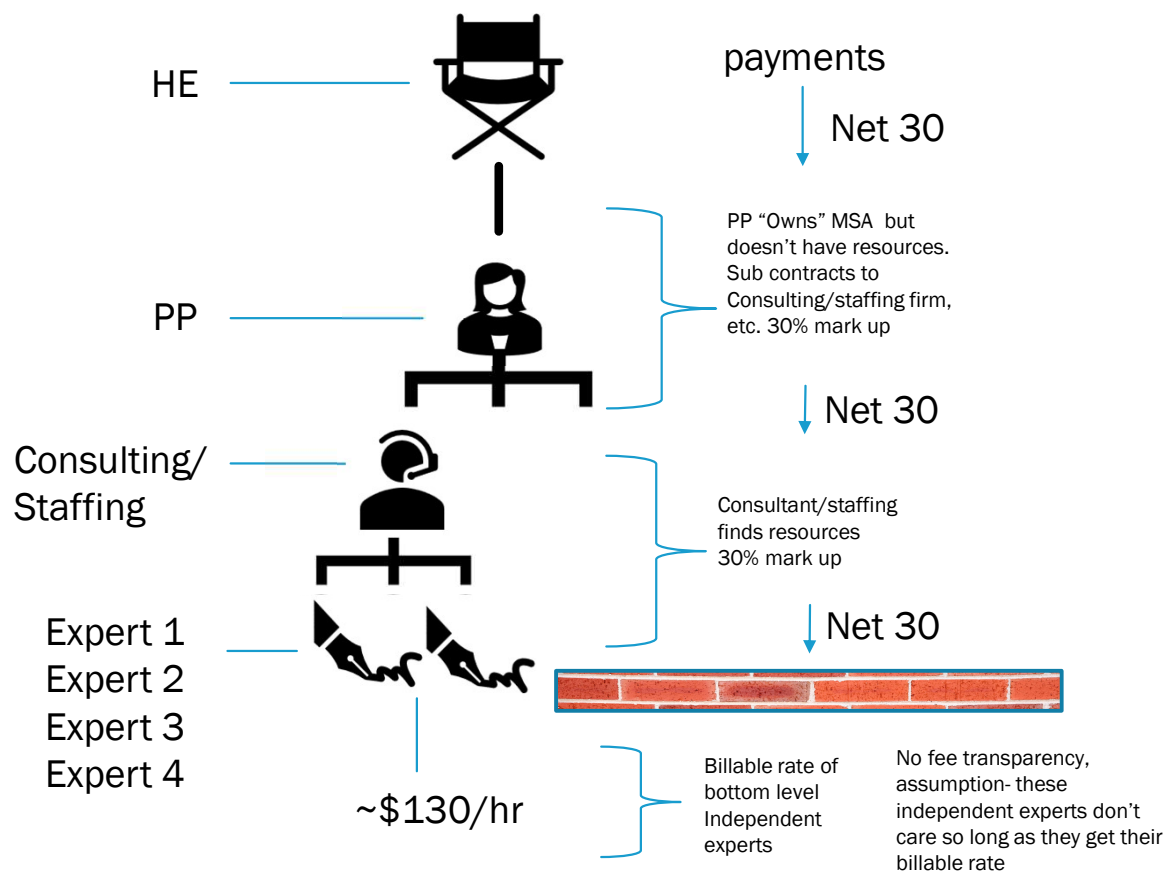
Classic Subcontracting  
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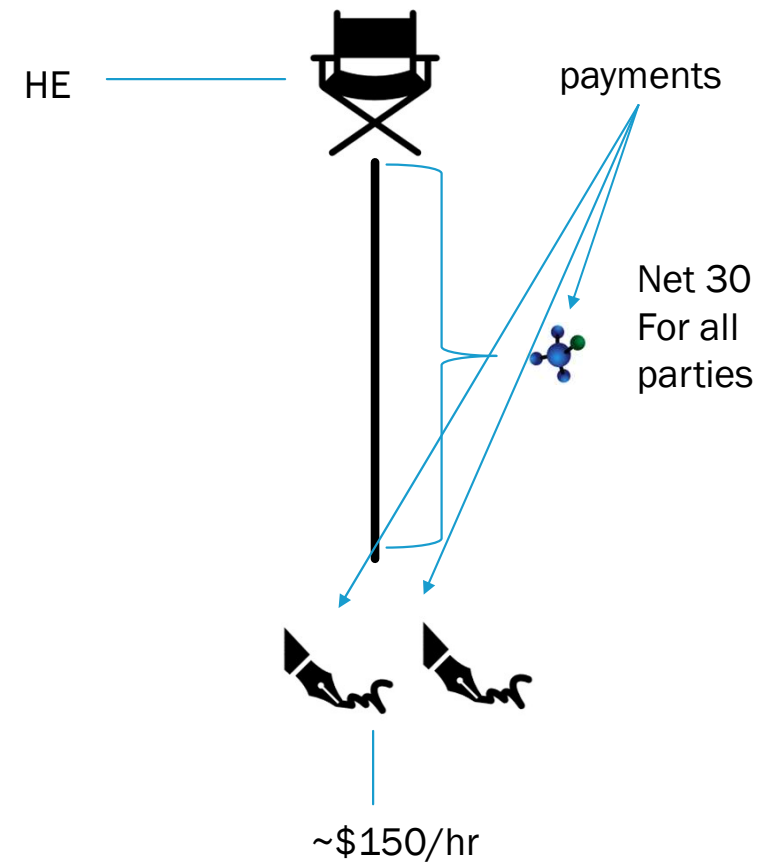
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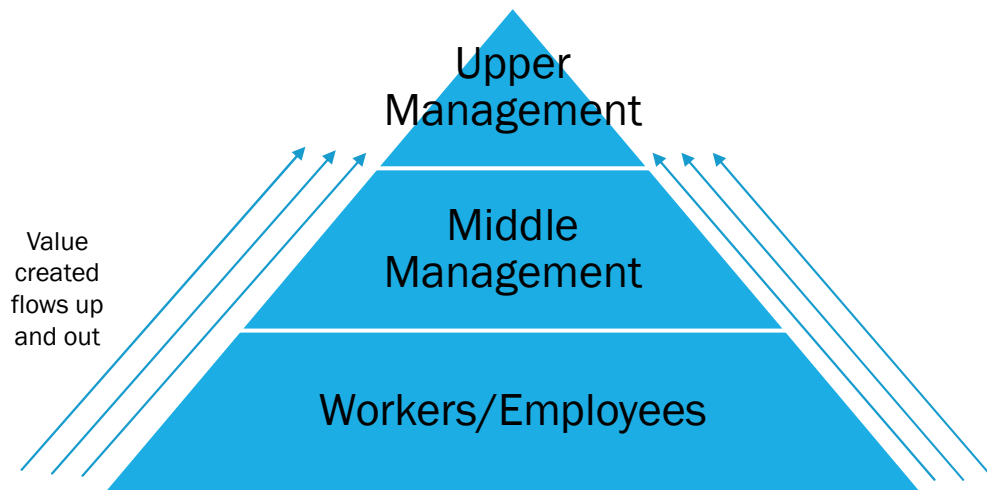
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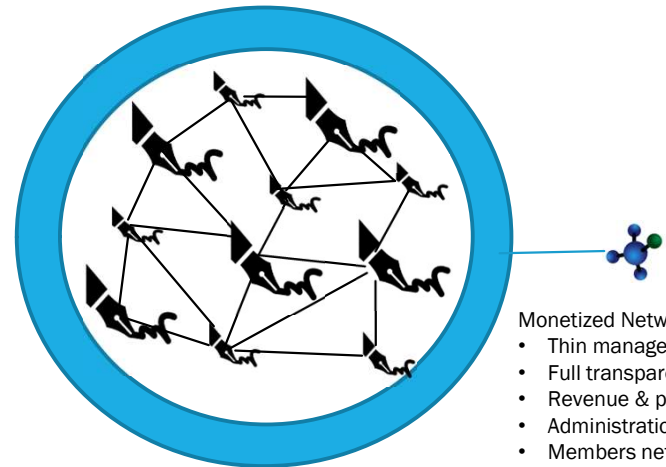
LifeSciHub Connector  
Model  
\$180/hr One mark up layer



## Traditional Centralized Hierarchy



## LifeSciHub Decentralized Monetized Network



### Monetized Network Business Model

- Thin management layer
- Full transparency
- Revenue & profit sharing
- Administration not value-add
- Members network effects are value add
- Decentralized Autonomous Organization (DAO)
- Crypto for organizations
- Value created is shared with the creators of that value, in equal proportion of value relative to other creators based upon mutually agreed upon terms

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**THANK YOU!**

