



**Dongbu HiTek**  
Semiconductor Business

# Building Success via a Thriving Ecosystem

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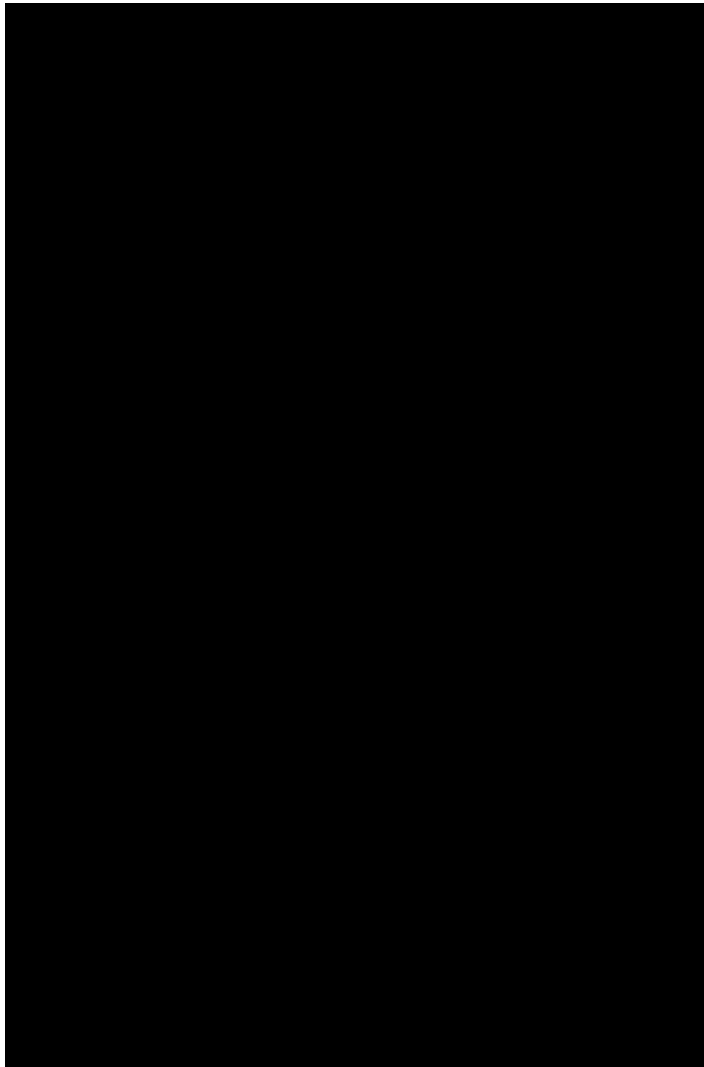
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# What is a Successful Ecosystem?

- ❑ System of companies that work efficiently together to complete an activity
- ❑ Enables a new business model so each company can FOCUS on what they do BEST
- ❑ Each company services a different function but all PROFIT from a successful collaboration

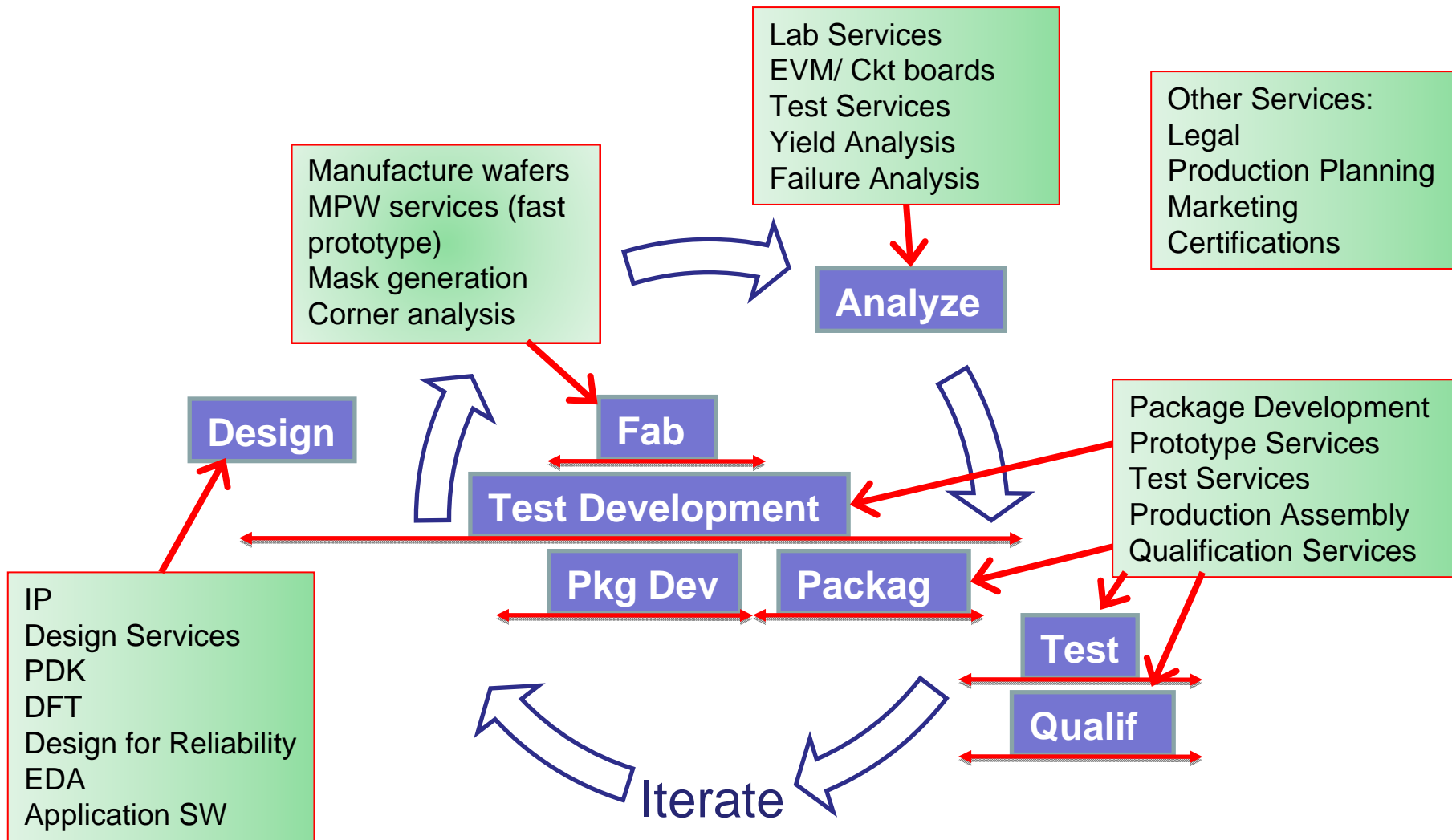
**Successful Ecosystem → Faster Time to Volume**

# Transition of an Industry



Ranking for Year 2009 (Source iSuppli)		
Rank 2009	Company	Revenue Million (USD)
1	Intel Corporation	32410
2	Samsung Semiconductors	17496
3	Toshiba Semiconductors	10319
4	Texas Instruments	9617
5	STMicroelectronis	8510
6	Qualcomm	6409
7	Hynix	6246
8	AMD	5207
9	Renesas Technology	5153
10	Sony Semiconductors	4468
11	Infineon Technologies	4456
12	NEC Semiconductors	4384
13	Micron Technology	4293
14	Broadcom	4276
15	Elpida	3948
16	MediaTek	3551
17	Freescale Semiconductor	3402
18	Panasonic Corporation	3243
19	NXP	3240
20	Sharp Electronics	2977

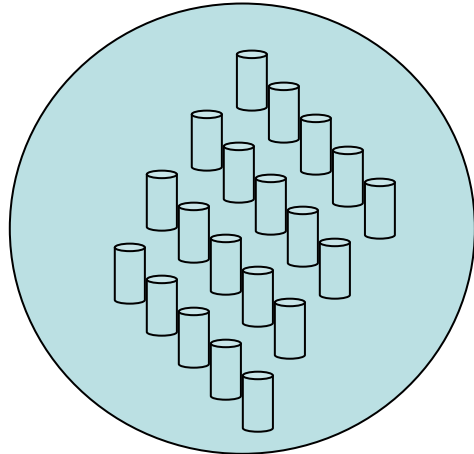
# A Semiconductor Ecosystem



# Single Entity vs Ecosystem

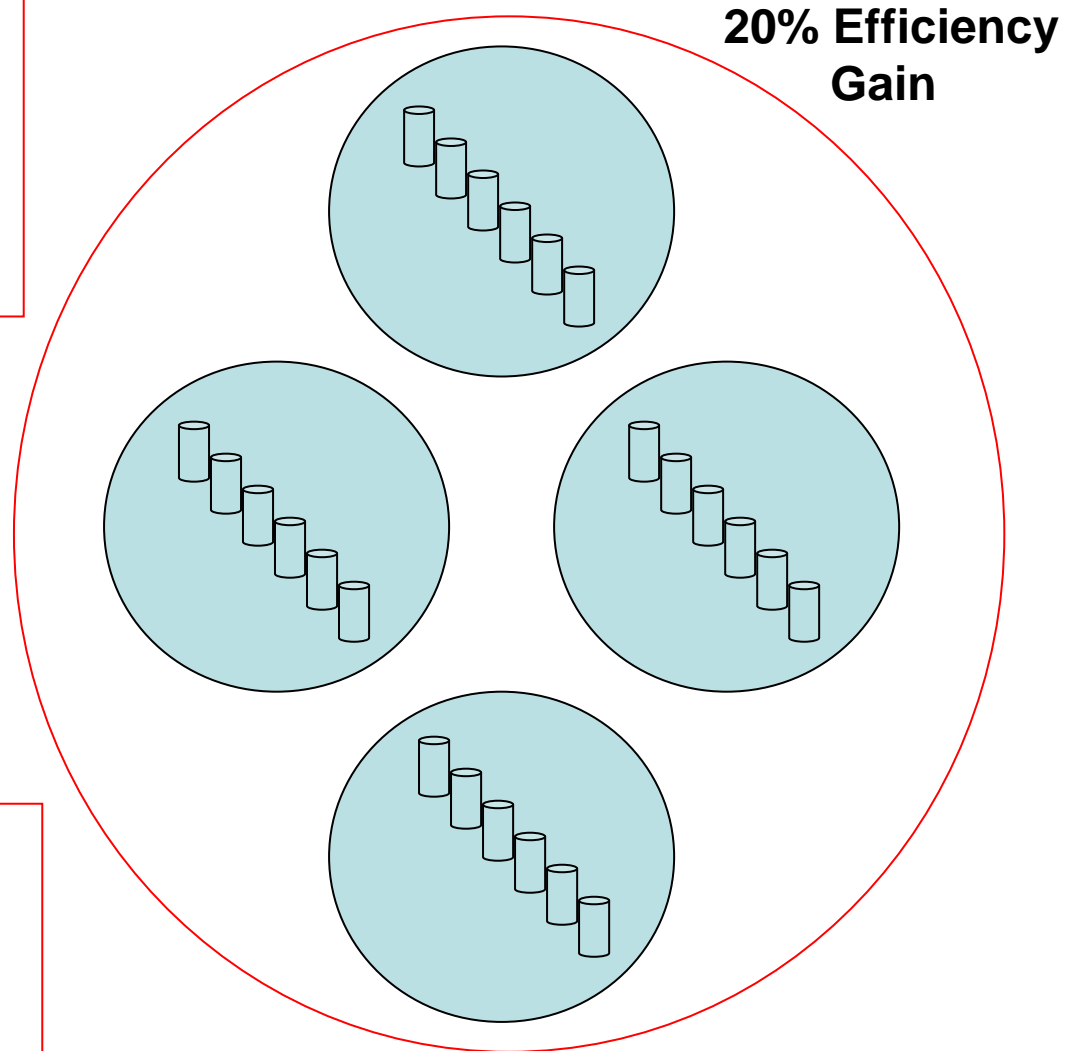
## Advantages of Focus:

- Improved economies of scale
- More clarity in mission
- Better talent retention
- Growth in core differentiation



## Advantages of Aggregation:

- Ease of transitions
- Common management chain
- More informal communication



# Keys to Success: Business Relationships

- Build on strengths and differentiated capabilities of each participant
- Clear understanding of division of responsibilities
- Good business for each side (mismatch leads to poor execution) while maintaining competitive cost structure
- Trust and communication: joint commitment to success

**Divide and Conquer**

# Keys to Success: Operational Efficiency

- Effective handoffs: automate as much as possible
- Transparent WIP management
- Clear definition and delivery of best-in-class quality
- Top priority for customer and end customer support with efficient problem resolution: continuous learning
- Establish clear measures for success: track and improve

**Continuous Improvement**

# Keys to Success: Best Fit and Expertise

- Be clear – focus on what you do best
- Partners stay competitive in areas critical to customer
- Collaborative problem solving – transparent to customer
- Ability to think beyond current status quo
- Innovate across company boundaries

**Innovative Solutions**



# Example: Creating a Premier Ecosystem

## Strategy: Focus on Analog and Power

Engage with partners with proven analog and power expertise

- ❑ An IP company with extensive knowledge of Bipolar/ CMOS/ DMOS process technologies. > 30 analog and power patents in less than 2 years
- ❑ A test services company with analog DFT methodologies that reduce the cost of test development and production test
- ❑ An FA company with world-class expertise in electrical FA to identify root causes of parametric circuit failures
- ❑ Established process technologies and design kits with detailed design kits and process monitoring for best in class analog and power performance

World Class  
Technologies for  
Analog and Power



The Analog **POWER**House™  
Connection

Comprehensive  
PKDS, ESD libraries  
and support

AnorA

[www.anorasolutions.com](http://www.anorasolutions.com)



*mixed, analog, digital & advanced technology*



[www.micro-labs.com](http://www.micro-labs.com)

IKSemicon

POPcoreTech

- IP
- Design Services
- Failure Analysis
- Test Development
- Product Engineering
- SCM

The logo for Triune Systems consists of three green, 3D-style triangles of varying heights and positions, arranged to suggest a mountain range or a stylized 'T'.

**TRIUNE  
SYSTEMS**

# Conclusion

- ❑ Efficient ecosystems allow potential for companies to focus on core competencies and generate economies of scale
- ❑ Disaggregated companies do face challenges to create efficient workflows across company boundaries and a profitable business model for all participants
- ❑ The best ecosystems build on a clear understanding of their differentiated value

**Building a Thriving Ecosystem**