

RCI Hospitality Holdings, Inc. (RICK): 3.0

An Evolution from Traditional Strip Clubs to a Community-based Platform of Adult Nightclubs

RICK 1.0: Several Average Strip Clubs

RICK 2.0: A Rollup of Better Performing Adult Nightclubs

Rick 3.0: A Community Built around the Best Adult Nightclubs



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Part One: A Traditional Platform Business

Introduction

RCI Hospitality Holdings, Inc. (RCI Hospitality or RICK) owns 52 adult nightclubs clubs along with 11 sports bar restaurants. In this paper, we are going to focus on the nightclubs as they are the core of RICK's portfolio and operate as platform businesses in their local markets. Moreover, as RICK executes its consolidation strategy, the business model will transform from one dominated by many small, disconnected clubs to a business characterized by having larger, regional platforms that are a part of one nationally recognized platform with a very strong brand and moat.

Four points to remember throughout this paper are:

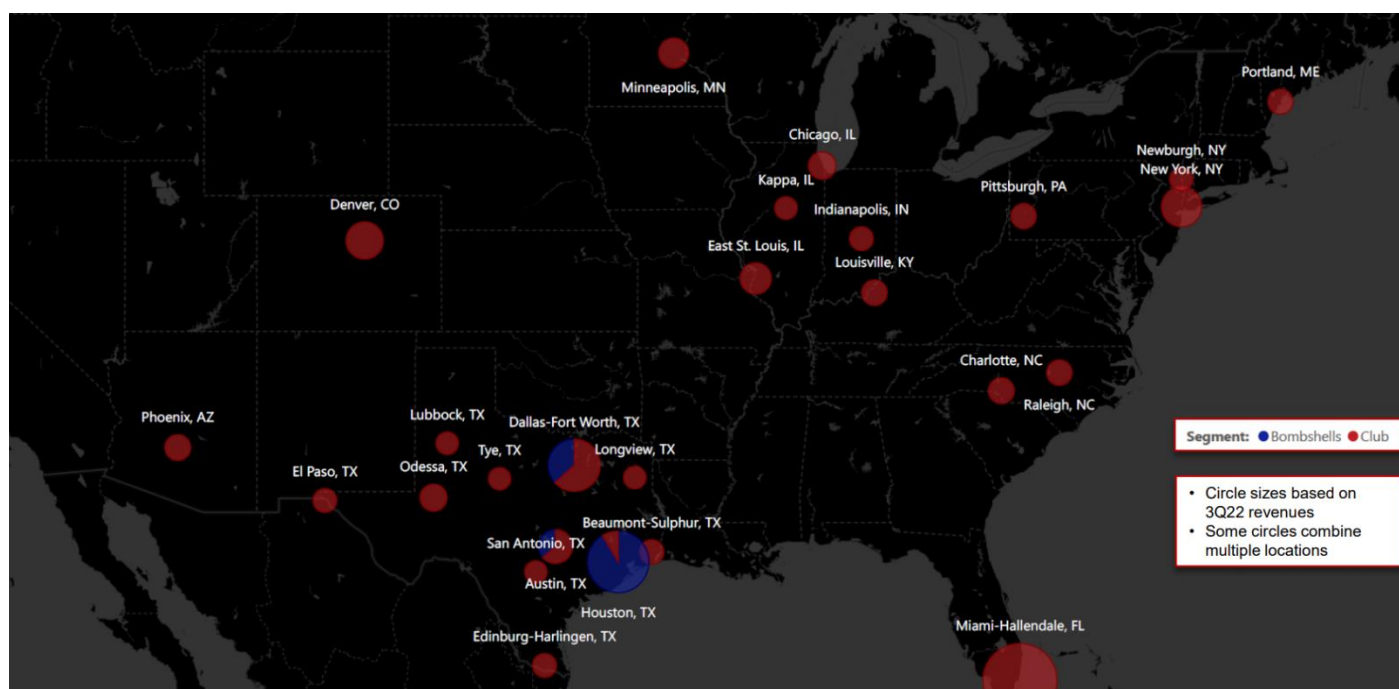
- 1) RICK creates value by building a community around safety, trust and having a good time;
- 2) Safety, trust and having a good time are built around millions of daily interactions between participants on the company's network, and RICK is responsible for establishing the community standards and rules that govern these interactions along with providing the multitude of services that enable these interactions to occur in its adult nightclubs;
- 3) Social interactions grow nonlinearly as new members are added to a social network; and
- 4) As an increasing number of social interactions occur on the RCI Hospitality platform of adult nightclubs, more and more high margin revenue opportunities will organically accrue to RICK.

In other words, RICK will bring in new users to its platform and also increase the average revenue per user (ARPU) overtime as the community grows. This value creation will show up as higher revenue per club and better operating margins in the future.



Major brands include:

- Rick's Cabaret: Elegant clubs with fine dining restaurants
- Scarlett's Cabaret: High-end, high-energy "party" style club
- Vivid Cabaret: High-end, high-energy "party" style club
- Tootsie's Cabaret: Nation's mega club with 74,000 square feet
- Club Onyx: High-end clubs for African American professionals
- Jaguars Club: Lively BYOB clubs for blue collar patrons and the college crowd
- XTC Cabaret: Lively BYOB clubs for blue collar patrons and the college crowd



The Platform Business Model

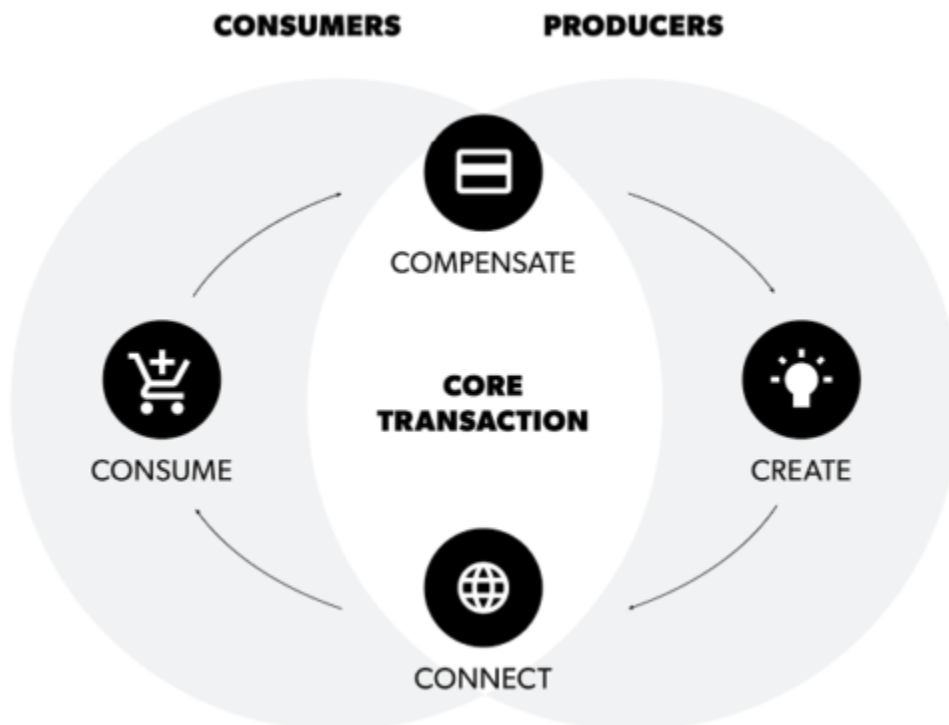
The *Platform Business Model* focuses on helping to facilitate interactions across many interdependent participants. These interactions can be short-term and transactional in nature or can involve building long-term social relationships. The role of the platform is to provide a governance structure and set of standards and rules that facilitate the interactions. Once interactions take place at scale, networks effects become strong and the platform develops into a standard for interaction and a main avenue for forming new connections.

It is important here to define what is meant by governance. Governance is the process that establishes and sustains the rules, norms and actions of a group of people. The process includes what values are promoted, how rules are established and enforced along with the benefits or costs of complying with or violating the rules and norms of the institution.

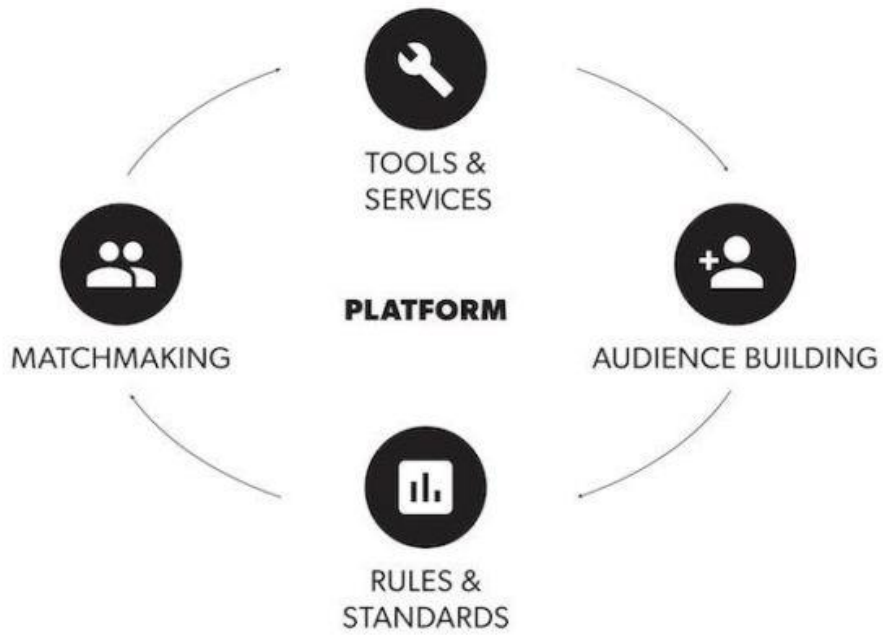
According to Applicoinc.com,

A platform is a business model that creates value by facilitating exchanges between two or more interdependent groups, usually consumers and producers.

*In order to make these exchanges happen, platforms harness and create large, scalable **networks** of users and resources that can be accessed on demand. Platforms create **communities** and markets with network effects that allow users to interact and transact.*

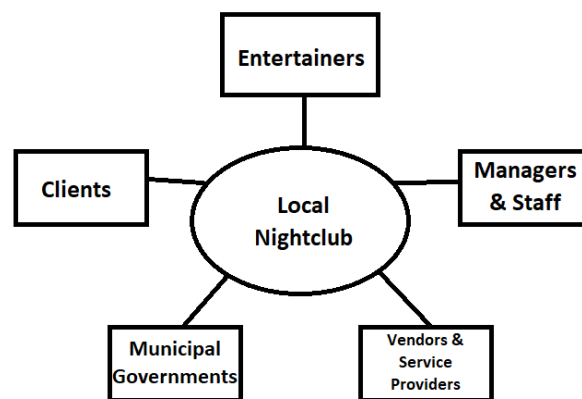


A successful platform must not only establish and enforce rules and standards, but it must also provide the tools and infrastructure to facilitate interactions along with working to add new audience members while matching supply and demand.



<https://www.applicoinc.com/blog/what-is-a-platform-business-model/>

Nightclubs as a Platform Business Model



Reputable adult nightclubs establish and enforce community standards and rules for guests, entertainers, suppliers, and employees. These rules and norms of behavior create a safe and trustworthy environment that allow all vertices on the platform to benefit. Entertainers are able to earn a good living while being safe and not being exposed to abusive behavior. Clients are able to have a good time in a safe and fun environment. Managers and staff benefit from being on the platform by being able to best monetize their specialized skillsets. Municipal governments benefit from having fewer illegal activities, safer citizens, and higher property values. Other suppliers benefit from having a new audience, additional revenue opportunities, and their reputations validated by being allowed on the platform.

The following is a list of a respectable adult nightclub’s most important rules:

- Respect toward the entertainers
- No rude or denigrating comments
- No stalking
- Adequate tipping
- No stealing
- No inappropriate touching such as licking, kissing or groping
- No verbal or physical violence
- Wearing of appropriate attire
- No illegal or unwanted physical displays
- No illegal drugs
- Monitoring of alcohol consumption
- No unauthorized photographs or videos
- No hogging the stage or an entertainer’s time
- Removal of dangerous patrons
- Screening of dangerous patrons

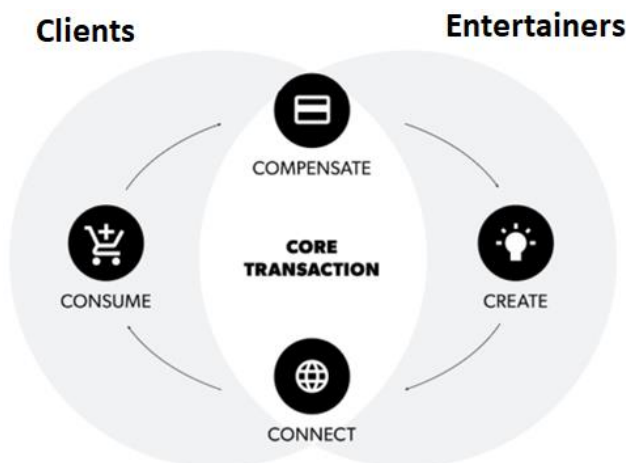
These rules can be difficult to enforce and require a specialized skillset to identify the bad behavior and tactfully enforce the rules without wrecking the party. Nightclub operators take years of experience to develop the requisite skills necessary to manage the operations.

Adult nightclubs also provide the services and infrastructure that allow transactions to occur. Good nightclubs have clean, modern buildings with stages, lights, music, private rooms, and often food. The clubs also provide security and other entertainment services such as serving alcohol. Adult nightclubs screen for bad clients and remove them from the platform. This is a very important service for entertainers as it protects their safety. Nightclubs also provide the important service of working to maintain local licenses that allow transactions to occur.

Also, importantly, nightclubs are a signaling mechanism to both entertainers and clients. A well-established and respected club signals to entertainers that they will be safe and can earn a high income. Likewise, clients know that a well-established club has attractive and sociable entertainers. This creates a positive feedback loop that leads to higher demand from clients which attracts a supply of more attractive and socially adept entertainers. All of this works to match the right supply of entertainers with the correct clients.

RCI Hospitality also fulfills the matching function when it has multiple clubs designed with different formats. The clubs then complement each other, and RICK can supply different experiences to various demographic groups.

It should be noted that adult nightclub platforms are more important than the platform of a regular local nightclub that only provides alcohol and music. An adult nightclub operates in a niche community of entertainers, clients, and managers. Adult nightclubs require more specialized knowledge of local conditions related to entertainers, clients, municipal officials, and special laws and regulations. This knowledge is much more difficult to obtain and successfully employ than the knowledge and skillset to operate a regular nightclub.



Regional & National Nightclub Platforms

As RICK continues to consolidate nightclubs around the country and improve operations by upgrading buildings, replacing bad staff members, and training management and workers on the industry's best practices, it will transform nightclubs from being many, separate local platforms to being vertices in larger regional and national platforms. By increasing the popularity of its clubs, both clients and entertainers will know that RCI Hospitality owns the safest and most professionally operated nightclubs. This will reduce search costs for both groups leading to greater demand for RICK's services. Remember, RICK's services are not providing adult entertainment—this is provided by independent contractors. Rather, RICK supplies the infrastructure, safety and other services that allow the private contractors to create live adult entertainment. Furthermore, local governments will increasingly prefer to partner with RCI Hospitality as they know RICK is the most professional and creates the most value for the community.

RICK's stock market multiple will expand as it grows its competitive advantage by making more acquisitions. A larger number of popular clubs that have individuals who regular travel between them acts as signaling mechanisms and transmitters of information through word of mouth or social media postings. This will create more demand from all participants on RICK's platform.

For example, suppose a wealthy male executive lives in Miami and frequently visits one of RICK's clubs in Miami and is now travelling to Dallas. In such a case, the executive is likely to visit one of RCI Hospitality's nightclubs in Dallas due to his favorable experiences in Miami. And, further, the executive may bring along a new friend or colleague from Dallas to the nightclub. Thus, the reputation of the Miami club will benefit the entertainers in Dallas who can now expect to make more money.

Another example is a popular entertainer who has made good money at a RICK club in NYC and posts on Instagram to come to see her at one of RICK's clubs in Denver. Other less popular entertainers will also want to work at the Denver clubs due to the increased supply of clients. Also, as entertainers communicate both through word of mouth and digital means that they earn more compensation from RICK nightclubs and that RICK's clubs are safer than other clubs, more attractive and sociable entertainers will come to the RCI Hospitality platform—which will in turn attract more high spending clients.

Further, as we will explore in the next section, RICK is using new digital technologies to expand the number of vertices in its network along with deepening the relationships between the vertices.

Barriers to Entry

Regulations, financing, lower operating costs, and reputation, online reviews & social media followings make it very difficult to start new adult nightclubs.

Regulations

Adult nightclubs are regulated by local governments. To start a new adult nightclub requires obtaining both liquor and sexually oriented business (SOB) licenses. This process requires extensive background checks and approvals from various municipal officials including politicians, administrators, and police officials. Today, it is very uncommon for municipalities to issue new licenses or transfer licenses to inexperienced owners.

Financing

It is very difficult for new entrants to obtain financing to buy or start a new adult nightclub. Banks and other private institutions such as private equity groups do not want to lend to nightclubs. A single nightclub has risks related to losing a license or violating local laws. Many potential nightclub operators may have questionable pasts and may not qualify for financing. Additionally, wealthy businessmen and other sources of financing are unlikely to want to own a nightclub for two reasons: first, it may hurt their reputation and second, running a nightclub requires long hours and expert knowledge.

Lower Operating Costs

RCI Hospitality also benefits from lower costs due to its larger economies of scale. It has lower insurance and beverage costs which are two significant input costs.

Reputation, Online Reviews & Social Media Followings

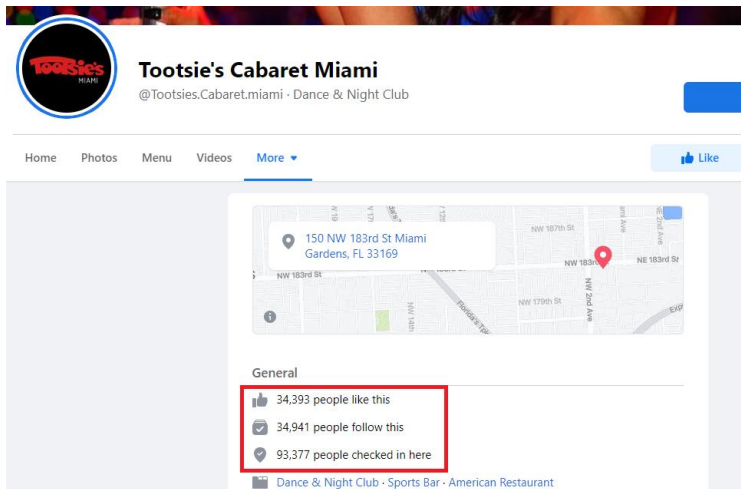
Local reputations along with online reviews create a barrier to entry for new clubs. New clubs would have to build a reputation to attract both dancers and clients. New clubs to compete against established word of mouth and digital reputations.

<https://livinginmiamibeach.com/best-strip-clubs-in-miami/>

<https://www.timeout.com/miami/nightlife/best-strip-clubs-in-miami>

<https://www.timeout.com/newyork/sex-dating/best-strip-clubs>

https://www.yelp.com/search?cflt=stripclubs&find_loc=New+York%2C+NY



Tootsie's Cabaret Miami
@Tootsies.Cabaret.miami · Dance & Night Club

Home Photos Menu Videos More ▾ Like

150 NW 183rd St Miami Gardens, FL 33169

General

- 34,393 people like this
- 34,941 people follow this
- 93,377 people checked in here

Dance & Night Club · Sports Bar · American Restaurant



← **Tootsies Cabaret**
@Tootsiescabaret

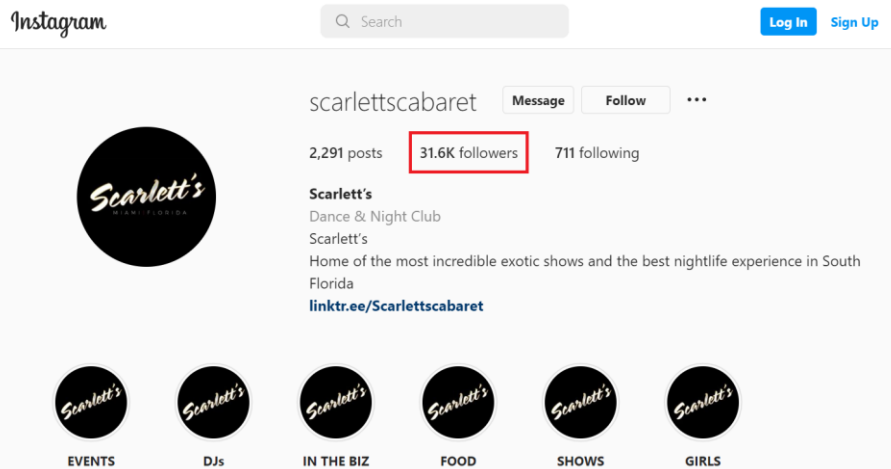


Tootsies Cabaret
@Tootsiescabaret

Mega Gentlemen's Club with 4 full liquor bars and full lunch & dinner menu. Featuring 150+ entertainers nightly. 305-651-5822

150 NW 183rd st Miami FI 33169 [tootsiescabaret.com](https://www.tootsiescabaret.com)
Joined March 2009

3,108 Following **6,772 Followers**



Instagram Search Log In Sign Up

scarletscabaret Message Follow ...

2,291 posts **31.6K followers** 711 following

Scarlett's
Dance & Night Club
Scarlett's
Home of the most incredible exotic shows and the best nightlife experience in South Florida
linktr.ee/Scarletscabaret

EVENTS DJs IN THE BIZ FOOD SHOWS GIRLS

Part Two: RICK’s Evolution to a Digital Platform Business

Traditional Digital versus Digital Platform Business Models

Businesses can use digital technology to provide a service or deliver a good but fail to create a platform. Examples of this in the adult entertainment space include OnlyFans and Pornhub. Although OnlyFans does seem to have some success in building a platform. These websites, especially Pornhub, have weak governance standards and create little value for the supply side by failing to create a strong community through the enforcement of rules that ensure safety and prevent abuse. Further, content creators are poorly compensated and often exploited. Both OnlyFans and Pornhub are rumored to have enabled exploitation by having weak standards and it is often unclear if content creators are properly compensated or if content is posted without permission.

RICK, however, is partnering to create digital technologies that will create industry leading governance standards and strong operating procedures to improve the safety and compensation of content creators. The evolution of its business model to incorporate digital technologies will also drive traffic at its physical clubs. RICK has deep knowledge of the content providers and clients on its digital properties because it has a large physical operating footprint with thousands of trained managers and staff members that regularly interact with participants. This will allow RICK to screen for abusive and non-compliant behavior. The enforcement of its rules and protection of its community members is what creates the RCI Hospitality platform.

Harnessing New Technology to Drive Club Traffic

- Bitcoin Acceptance
- Tip-N-Strip NFT Guest Benefits Program
- AdmireMe Mobile Friendly Website



www.tip-n-strip.io

www.admireme.com

AdmireMe.com

RCI Hospitality's new website, AdmireMe.com, allows entertainers and clients to interact virtually away from the clubs. Entertainers and clients can build a longer-term relationship in a safe digital environment and meet in a monitored physical environment. This will allow entertainers to earn more money by developing deeper social relationships with clients in a safe manner. Further, content creators can earn high compensation by creating an online following and then performing in person at clubs throughout the country. On the Q3 2022 conference call, RCI Hospitality CEO, Eric Langan, further elaborated on the potential of AdmireMe.com:

"Sure. I don't know as much -- I mean -- the original idea was never to compete with Only Fans. It was more to create a web-based business for our entertainers so that they could draw customers into our brick-and-mortar, which would that the customers meet new girls, which would, hopefully, they would follow on AdmireMe, which would bring them into our brick-and-mortar business, right?"

So we get a circular feed there of business. However, I've had a lot of, I would call influencers Only Fans. I don't know -- I don't know what the word is for the -- I call them whales in the casino business. So like the whales of Only Fans, we've had a lot of them say, hey, look, we would like to be on a site.

We would like to talk to you about having meet and greets for our followers at some of your clubs and do those types of things where we have a safe environment where we have security and we'd be protected basically if we wanted to do those types of things. And so we're talking with some of those girls now or I say actually girls, I should say, ladies or women, I think. They're all over 18. And we're very interested and very curious as to can we create this? Can we make this work, especially in markets like New York, Miami, Denver, Chicago, where a lot of these big influencers seem to live and have reached out to us from.

We got to get the site up and running. I think we're some very creative stuff as we move forward and [porn] stars in the industry with some combination of brick-and-mortar performances at some of our night clubs around the country as well as through AdmireMe and different social media deals as well. So it's going to be a lot of fun, I think. I'm very excited about it."

Web3 – Bitcoin and Tip-N-Strip

To deepen client relationships with its clubs and also help attract a younger demographic, RICK now accepts Bitcoin and is offering a collection of 10,000 unique NFTs that grant VIP access to over 35 of its clubs. The NFTs provide other perks such as access to exclusive events, live performances, parties, VIP experiences, along with being able to meet celebrities and entertainers. The holders also can vote on how and when events are held and when parties are triggered.

Young people have very little social capital in the real world and use virtual worlds to build relationships and enter new communities. RICK allows clients (often young and new to nightclubs) to make financial investments in the NFTs and find new friends by using their NFTs to interact with other members on the platform (such as posting on the internet or using social media profiles). NFT users now have a financial investment in the community along with a store of social capital through posts, comments, likes, etc.

Tip-N-Strip

Tip-N-Strip is a collection of 10,000 unique NFT's that put the party in your hands. Each NFT will grant access to over 35 of North America's premier clubs with unmatched perks.

10000
NFTs available

TBD
Price

Coming Soon
Status

Welcome to the Party

- Free admission to over 35 clubs in 13 states.
- Each Tip-N-Strip will grant you access to exclusive events and parties.
- Rare Tip-N-Strips will grant you access to the ultimate VIP experience.
- Tip-N-Strip is created in partnership with some of America's largest and most recognizable Adult Hospitality brands.

Utility

Unlike most NFT projects, Tip-N-Strip will launch with a fully executed roadmap and utility that is accessible to holders upon reveal.

Base Utility All holders will be invited to the The Ultimate Party at Tootsie's Cabaret in Miami, FL! Celebrity guests, feature entertainers, live performances and much more. This will be a party you don't want to miss!

The Collection

<https://www.tip-n-strip.io/nft/tip-n-strip-2023-03-02-7f4a>

Ultimate Party Pass
\$475.00

The Ultimate Party Pass is a utility NFT that gives holders access to over 35 of North America's premier clubs and unlocks entry, line skips, bottle service, and access to annual parties. Secure your presale pass now!



Tip-N-Strip @TipNStrip Following

Tip-N-Strip @TipNStrip · Aug 22
 Only an hour remaining to sign up for tonight's poker tournament! Over \$3000 worth of prizes in the pool!
 📅 Monday, August 22nd
 🕒 8pm EST.
 💰 Free Entry
 🏆 Top 4 + bounties
 🌐 play.clubgg.net/dlink/XTCjdmjQ...



Quirkies and 9 others
 4 8 22

AshleyDCan @AshleyDCan

AshleyDCan
 @AshleyDCan

MAYC #1469. Titty Queen. Professional Shitposter. Creator of @NFTitties80085 & @SheSurvivesNFT. Partnered w/ @AmericanCancer. Brand Ambassador: @KaddeXOfficial

📍 Titty City 🌐 linktr.ee/ashleydcan 🎂 Born February 20
 📅 Joined November 2014

3,666 Following **78.3K Followers**

Followed by Tip-N-Strip, RicksCEO.eth, and Hong Kong Stock Observer

Tweets Tweets & replies Media Likes

75.1K Tweets - 4,831 Tweets per month

Pinned Tweet
AshleyDCan @AshleyDCan · Aug 23
 Excited to say I have partnered with @RicksCabaret to host their mint party for Tip-N-Strip!

This NFT will get you access to 35 of North America's premier clubs and get you VIP access.

I am throwing a party in Dallas to celebrate! Join me this Saturday to see some titties 🍷



RicksCEO.eth @RicksCEO · Aug 26
Another club to use your [Tip-n-strip.io](https://tip-n-strip.io) utility at !!!

Dean Reardon @Reardon_Dean1 · Aug 26
Opening of Scarlett's San Antonio last night! It was fantastic. Grand Opening weekend is September 22nd to the 24th so book your tables now!
#RCI 🍷
\$RICK

1 5 12 ↑

Tip-N-Strip Retweeted
LegendaryM4.eth @LegendaryM4_ · Aug 14
#BottlePoppin @scarlettcabaret @TipNStrip If you are not here, then where the f*ck are you!?!? #Miami #TipNStrip #CasaNoble #YKYK

0:03 174 views

4 10 ↑

Tootsies Cabaret @Tootsies... · 7/17/22
Last night's party hosted by @TipNStrip and @ricksceo and sponsored by Casa Noble Tequila and Svedka Vodka was incredible to say the least! Sign up for the Tip-N-Strip NFT so that you may have a party like this!

#party #miami #nft #nftcommunity #tequila #followus #tootsies

5 14 ↑

Tip-N-Strip @TipNStrip · 8/5/22
It's time for the next Tip-N-Strip community poker night! The Grand Prize this week is VIP seating with 2 bottles for you and 10 guests at any TNS club!
📅 Thursday, August 11th
🕒 8pm EST.
💰 Free Entry
🔗 play.clubgg.net/dlink/XTCjdmjQ...
More prizes will be announced soon! Don't miss out!

1 7 13 ↑

These Twitter posts show how RCI Hospitality is using NFTs to deepen relationships and build communities. Retweets and likes are forms of social capital that is built up over time. Ask yourself how important retweets and likes are to a young person with limited high-power relationships in the real world. Also, notice the liquor partnerships in the above pictures.

Part Three: The Facebook Platform

Facebook Community Standards

What are Community Standards?

[Community Standards](#) outline what is and is not allowed on Facebook.

These policies are based on feedback from our community and the advice of experts in fields such as technology, public safety and human rights.

Community Standards are written to ensure that everyone's voice is valued and Facebook takes great care to craft policies that are inclusive of different views and beliefs- in particular those of people and communities that might otherwise be overlooked or marginalized.

Why is this important for my group?

Being committed to maintaining groups as a safe place where meaningful connections happen is paramount. Groups created for hate or harassment have no place on Facebook.

It is important for Groups to remain a safe space for people to connect. Groups are proactively monitored for hate speech and calls for violence using a combination of the latest technology and human review. If there is a Group found like this, it is taken down and if necessary, the authorities are alerted.

Posts that violate Community Standards on things like hate speech are removed and we remove any groups that consistently violate those standards. This enforcement policy ensures that when reviewing a group to decide whether or not to take it down, we now look at admin and moderator content for violations. This includes posts by members that they have approved.


Members who repeatedly post violating content may be required to have all their future posts approved by admins before they can be seen in the group.

<https://www.facebook.com/community/using-key-groups-tools/understanding-community-standards/>

Facebook, like RICK, establishes what actions are and are not allowed on its platform. Facebook is also committed to safety and members who violate the platform's community standards run the risk of being removed from the community and losing the social capital they have built up through prior posts, interactions, likes and comments.

Policies and Reporting > About Our Policies

What types of things aren't allowed on Facebook?

 Copy link

To see the full list and learn more about our policies, please review the [Facebook Community Standards](#).

If you see something on Facebook that doesn't follow the Community Standards, please use the [report links](#) near the content.

Here are a few of the things that aren't allowed on Facebook:

- Nudity or other sexually suggestive content.
- Hate speech, credible threats or direct attacks on an individual or group.
- Content that contains self-harm or excessive violence.
- Fake or impostor profiles.
- Spam.

Learn more about [how Facebook uses technology and review teams to detect, review and take action on content](#).

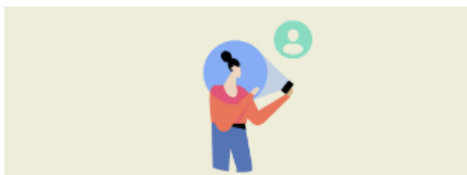
Facebook aims to create a safe environment for all its platform users by establishing and enforcing rules. It protects its users by removing abusive content and fake profiles.

Likewise, RICK nightclubs protect their users by enforcing their standards (see page 6) along with removing non-paying or rude customers.

Our commitment to voice

The goal of our Community Standards is to create a place for expression and give people a voice. Meta wants people to be able to talk openly about the issues that matter to them, even if some may disagree or find them objectionable. In some cases, we allow content—which would otherwise go against our standards—if it’s newsworthy and in the public interest. We do this only after weighing the public interest value against the risk of harm, and we look to international human rights standards to make these judgments.

Our commitment to expression is paramount, but we recognize the internet creates new and increased opportunities for abuse. For these reasons, when we limit expression, we do it in service of one or more of the following values:



AUTHENTICITY

We want to make sure the content people see on Facebook is authentic. We believe that authenticity creates a better environment for sharing, and that’s why we don’t want people using Facebook to misrepresent who they are or what they’re doing.



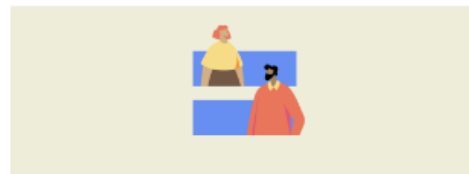
SAFETY

We’re committed to making Facebook a safe place. We remove content that could contribute to a risk of harm to the physical security of persons. Content that threatens people has the potential to intimidate, exclude or silence others and isn’t allowed on Facebook.



PRIVACY

We’re committed to protecting personal privacy and information. Privacy gives people the freedom to be themselves, choose how and when to share on Facebook and connect more easily.



DIGNITY


We believe that all people are equal in dignity and rights. We expect that people will respect the dignity of others and not harass or degrade others.


<https://transparency.fb.com/policies/community-standards/>

Community Standards

Our Community Standards apply to everyone, all around the world, and to all types of content.

Each section of our Community Standards starts with a "Policy Rationale" that sets out the aims of the policy followed by specific policy lines that outline:

 Content that's not allowed; and

 Content that requires additional information or context to enforce on, content that is allowed with a warning screen or content that is allowed but can only be viewed by adults aged 18 and older.

VIOLENCE AND CRIMINAL BEHAVIOR

Violence and Incitement
 Dangerous Individuals and Organizations
 Coordinating Harm and Promoting Crime
 Restricted Goods and Services
 Fraud and Deception

SAFETY

Suicide and Self-Injury
 Child Sexual Exploitation, Abuse and Nudity
 Adult Sexual Exploitation
 Bullying and Harassment
 Human Exploitation
 Privacy Violations

OBJECTIONABLE CONTENT

Hate Speech
 Violent and Graphic Content
 Adult Nudity and Sexual Activity
 Sexual Solicitation

INTEGRITY AND AUTHENTICITY

Account Integrity and Authentic Identity
 Spam
 Cybersecurity
 Inauthentic Behavior
 Misinformation
 Memorialization

RESPECTING INTELLECTUAL PROPERTY

Intellectual Property

CONTENT-RELATED REQUESTS AND DECISIONS

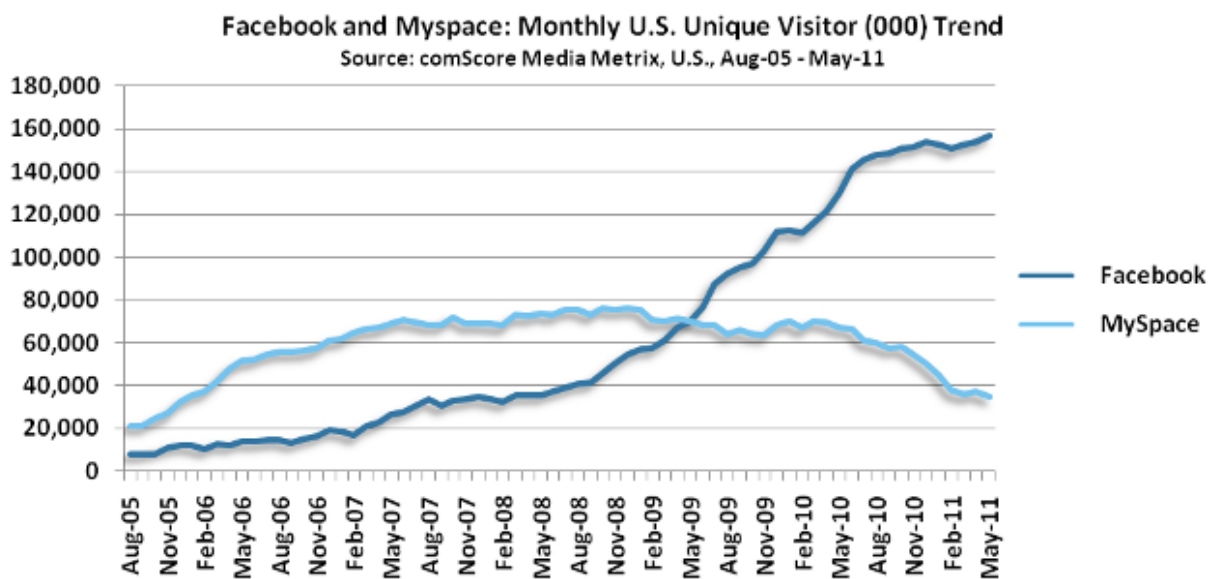
User Requests
 Additional Protection of Minors

Facebook's *Community Standards* aim to create authenticity, safety, privacy, and dignity. Facebook grew rapidly by building a community around safety and trust. These core principles allow members of the Facebook community to interact, share information, find goods and services, and have a good time.

Likewise, RCI Hospitality's nightclubs' community standards should aim to create trust, safety, privacy, and dignity for all users on its platform. The establishment and enforcement of standards that promote these values will help grow its community along with creating more value for current users.

Facebook versus Myspace

In the early days of social media platforms, Myspace was more dominant than Facebook. However, Facebook was able to overtake Myspace in both popularity and usefulness fairly quickly.



Facebook was able to outcompete Myspace due to several factors. First, Myspace’s platform became corrupted by corporate spamming and junk mail. Companies would sign up and imitate human beings and insidiously market products and services by infiltrating social groups. Myspace was ineffective at policing its users and failed to build in safeguards to protect against abuse. Facebook, on the other hand, would remove misbehaving vertices from its network.

Second, Myspace had advertisements everywhere which led to a messy interface. Facebook’s interface was simpler and cleaner and required less technical knowledge to operate.

Third, Myspace was not created by tech experts and had poor management. Facebook was run by industry (tech) experts who could innovate faster and perfect the site. Myspace was part of a larger marketing company that did not put user experience first. Facebook worked overtime to create new innovations.

Fourth, Facebook let third-party developers create apps on its network while Myspace initially was locked to outside developers. Facebook worked tirelessly to add features that enhanced the social networking experience while Myspace focused on revenue (most often from ads). The ads slowed down the site and weakened the user experience.

Fifth, Myspace had a public image problem as the network became overwhelmed with scantily clad individuals and sexualized photos.

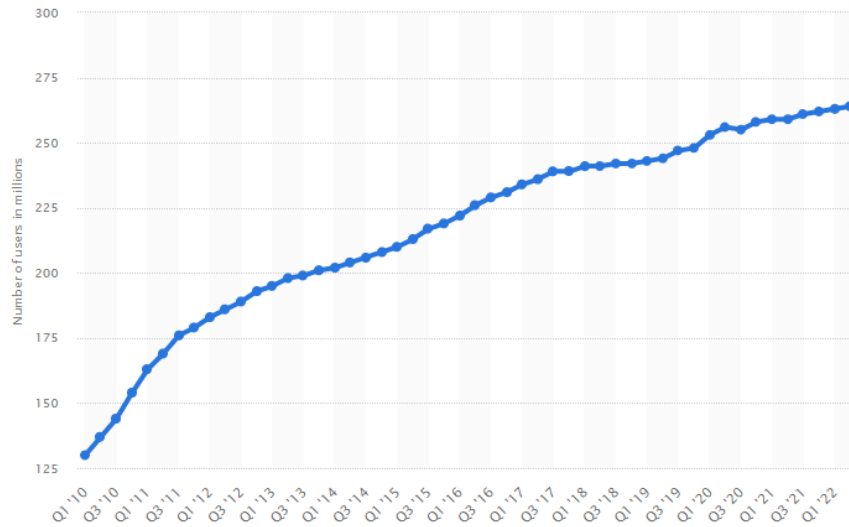
Sixth, Facebook always acted as a gatekeeper and controlled who was allowed on the platform. The platform was first restricted to Harvard, then other Ivy League schools, then slowly to other universities and young people, and finally to all adults. The gatekeeper function created exclusivity and also naturally selected individuals who would most benefit from the network.

<http://www.onlinemarketing-trends.com/2011/06/facebook-domination-vs-myspace-fall.html>

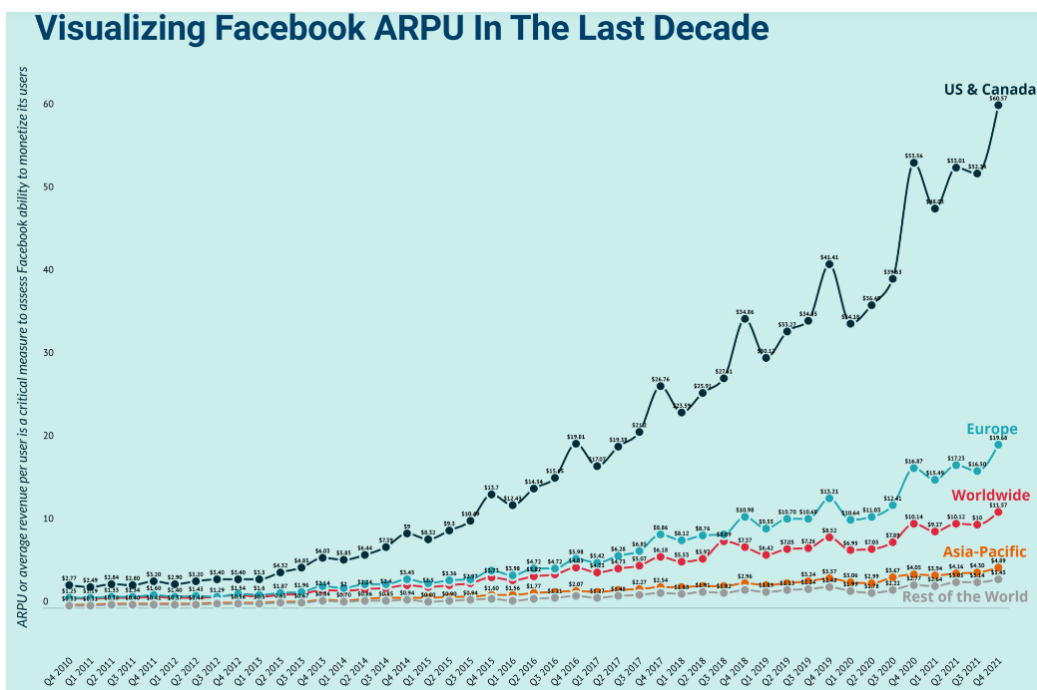
Monthly Active Users (MAUs) versus ARPU

Facebook first built its monthly active users by creating a community using better standards than the competition. And once it had significant market share, it was able to increase ARPU by exploiting new revenue opportunities.

Facebook monthly active users (MAU) in the United States and Canada



Visualizing Facebook ARPU In The Last Decade



<https://fourweekmba.com/facebook-arpu/>

<https://www.statista.com/statistics/247614/number-of-monthly-active-facebook-users-worldwide/>

What RCI Hospitality can Learn from Facebook's Community Growth

RCI Hospitality can outcompete other nightclub operations by replicating Facebook's success.

- First, RICK cannot be corrupted to malicious vertices. This would include gang members, non-paying customers, rude patrons, and negative entertainers.
- Second, RICK needs the best interface in the industry. The interface for RCI Hospitality is the quality of the infrastructure (buildings, stages, lighting, music systems, etc.) in its clubs along with the addition of digital properties going forward.
- Third, RICK needs the best management. Deep industry knowledge along with real-time reporting analytics at corporate headquarters allows RICK to react quickly and adapt to emerging trends.
- Fourth, RICK should aim to attract the vertices with the highest popularity. This would be popular entertainers, high spending clients, online influencers, and other adult entertainment stars.
- Fifth, RICK needs to maintain a stellar reputation with its clients and entertainers. Protecting safety while promoting income earning opportunities will increase its reputation.
- Sixth, RICK is the gatekeeper that screens for the best clients and entertainers which keeps the platform's reputation the highest in the industry.

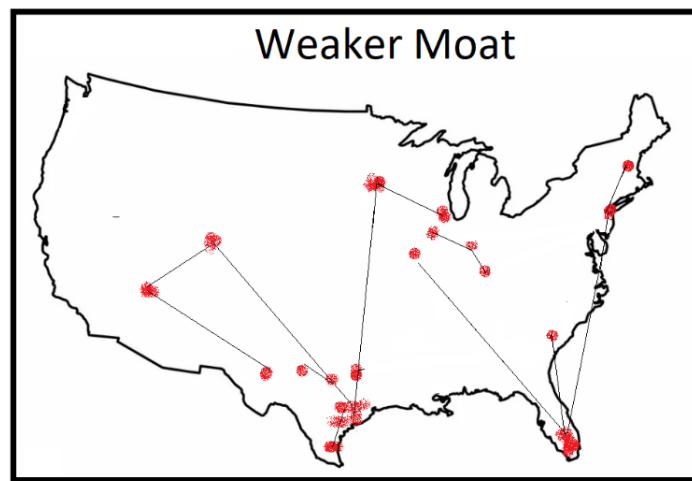
From 2005 to 2009, Facebook made it socially acceptable to be on social media. In the early days, many individuals avoided social media due to the bad connotations associated with other sites. Individuals would not admit or freely share that they visited social websites. However, by enforcing strong community standards and maintaining a clean platform, Facebook drew in new users as people began to tell friends and family about Facebook. Likewise, if RCI Hospitality is able to maintain high community standards that make adult entertainment more acceptable, it will bring in new clients along with drawing away patrons from other less well ran clubs.

Further, by having the highest community standards and not allowing drug usage or prostitution, RICK is able to maintain its reputation with local leaders and police officials and be the purchaser of choice for selling clubs as SOB licenses need approval before being transferred to a buyer. Also, well-maintained nightclubs improve community property values which are a major source of funding for local governments.

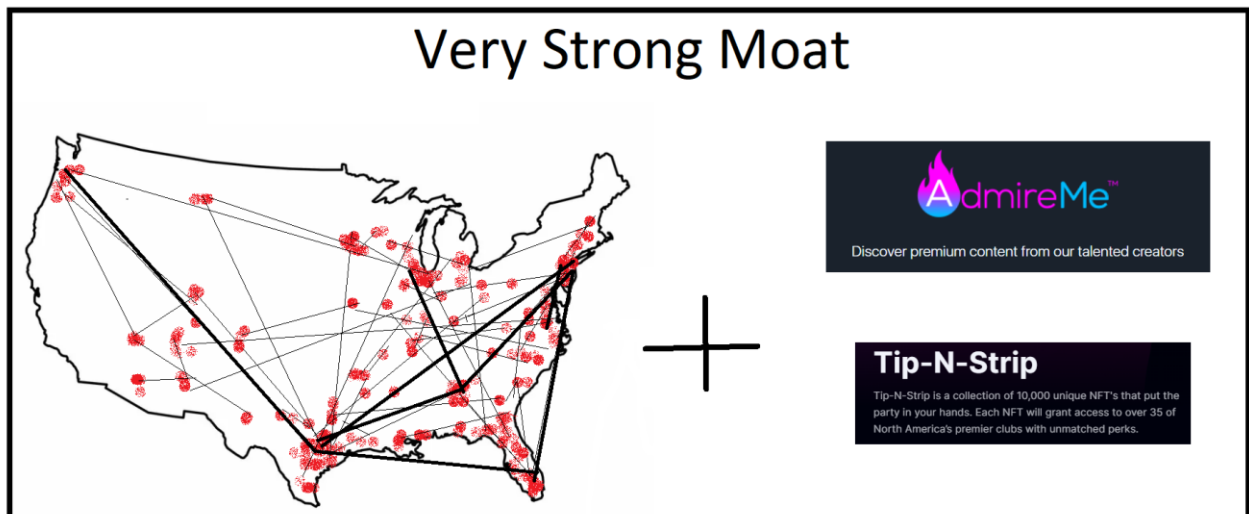
Part Four: Conclusion

Moat Strength

RCI Hospitality currently operates many small, local adult nightclubs. These nightclubs operate in markets with strong barriers to entry (page 9). These barriers include small local network effects, regulation, financing, lower operating costs, and reputation. However, RICK still faces local competition and is in the early innings of building a full national network that will scale and create an impenetrable network that allows for many new revenue opportunities.



The above picture shows clubs that are strong hubs in several local networks. Below, on the other hand, depicts RICK's future of having clubs that are hubs in larger regional and national networks. These hubs have strong links between each other and form huge network effects, strong barriers to entry, bring in new clients, and create additional revenue opportunities.



The Increasing Importance of Platforms

As RICK continues to buy new clubs it will grow its moat. To strengthen its moat, RICK is best served by having both local brands tied to a certain geographic markets along with brands that cover regional and national markets. Acquisitions can either have a historically strong or weak brand. When an acquisition brand is strong it may be best to continue to operate the club with the historical brand and use new digital tools to plug it into the RCI Hospitality platform. At times, however, RICK can increase demand at acquired clubs by rebranding the acquisition. This gives RCI Hospitality the opportunity to plug an acquired club into its network and have the acquired club benefit from the brand equity of other clubs. The acquired club with a new brand can now target specific demographic groups using RICK's regional and national brands. RICK did this with the club acquisition in Odessa, TX as it rebranded it *PT's Showclub*.

Dean Reardon, VP of Operations at RICK stated:

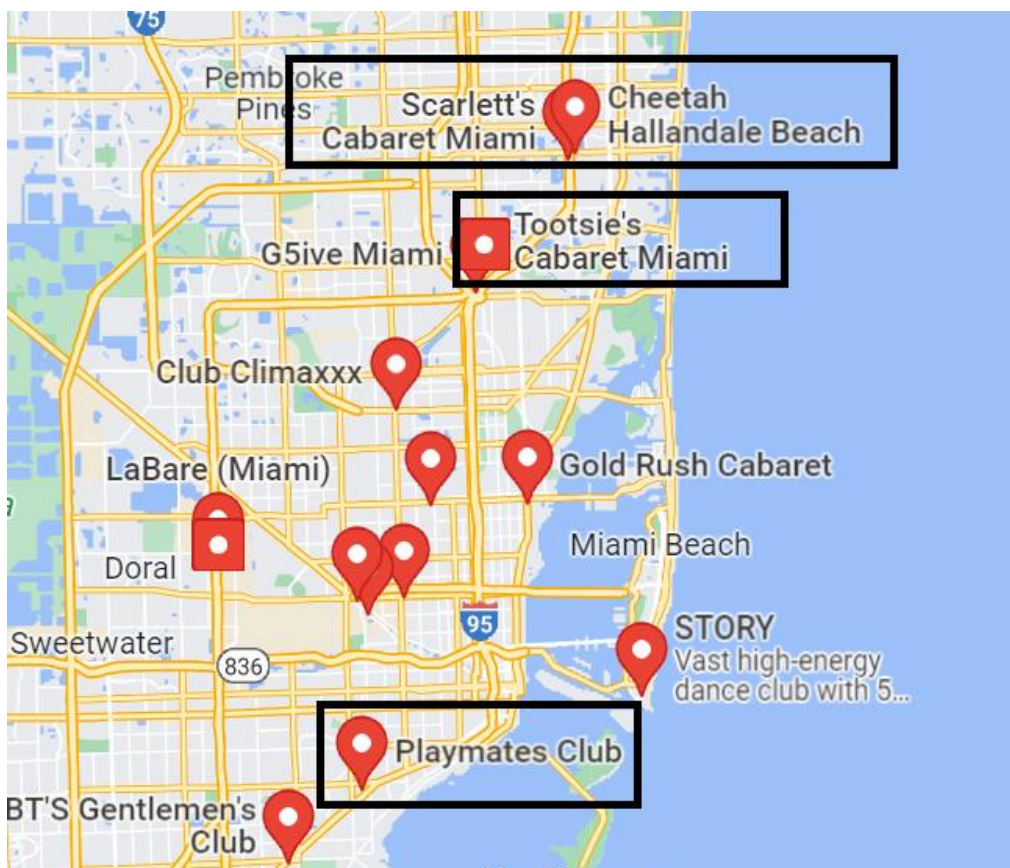
"The new club will be branded as a PT's Showclub. It will offer quality adult entertainment with liquor service. We believe it will both complement and appeal to markets different from our other brands in the area—Rick's Cabaret Odessa and Jaguar's Club Odessa."

Notice the matching function that RICK is accomplishing here in Odessa, TX.

Further, in a recent press release, Shawn Barnes, General Manager of Scarlett's, was credited with creating a décor reminiscent of a luxurious, timeless speakeasy, with elegant black and gold leather couches and banquettes; marble tabletops streaked with black and gold; a black felt pool table; and low level, soft gold chandeliers. "*Rick's* (steakhouse in Scarlett's Cabaret Miami) was designed to attract its own clientele as well as complement Scarlett's party experience with a quieter, more relaxed environment, featuring alluring house music," said Barnes. In another interview, RCI Management President Ed Anakar further elaborated, "We always felt there was something missing at Scarlett's. We envisioned a space where you could really relax, where the music wasn't as loud, and you could enjoy a good meal or a cigar. After seeing the success that we were having with Rick's Cabaret, we decided to bring that same experience to Miami."

This was a great example of using the Rick brand to drive new revenue opportunities and strengthen the relationships on the platform. Clients who may not have gone to Scarlett's due to the loud party environment now may visit the club to enjoy great food, a chill mood, and interact with a different set of entertainers. Clients are now exposed to another RICK brand.

In 2022, RICK acquired two more clubs in the Miami area. In May, it acquired Playmates Club and in July it acquired Cheetah. This brings RICK’s ownership to four clubs in the Miami area. These moves are very complementary and create a RICK’s regional platform in South Florida. Having a higher density of clubs in the Miami area allows RICK to better match client demand with the right entertainers. It also allows RCI Hospitality to gain a more extensive knowledge of the market (what entertainers are sociable, which clients are trouble, etc.) and deepen relations between vertices in its social network. For example, management at Cheetah in Miami may recommend to a client that Scarlett’s is an excellent place for a bachelor’s party. Or alternatively, a young professional who may have historically visited Scarlett’s for the party atmosphere may be ready to experience a more relaxed environment. Management can then recommend Playmates Club. Further, the young Miami professional who has now been exposed to the Rick brand and maybe going to a Bear’s game in Chicago and is now very likely to visit the Rick’s Cabaret club in Chicago.



<https://www.timeout.com/miami/nightlife/best-strip-clubs-in-miami>

1. Scarlett's Cabaret

Nightlife Strip bars and clubs \$\$\$\$

Scarlett's in Hallandale Beach packs in seven stages of some serious twerking talent. The late-night crowd here is strong on the weekends (thanks to the 8am closing time on Friday and Saturday). Brace for what's normally a \$20 cover fee at the door and a dress code that forbids shorts and sandals for dudes. Every Sunday, Monday and Tuesday certain bottles are \$150— which is actually a good deal for strip clubs

2. Tootsie's Cabaret

Nightlife Strip bars and clubs Miami \$\$\$\$

This classic Miami strip joint is known to serve some surprisingly tasty food. Tootsie's features a full-service restaurant that offers breakfast, lunch and dinner (Rick Ross apparently loves their lemon pepper wings). The club itself is absolutely huge and also quite impressive with four bars, over 300 TVs and a 400-square-foot main stage. If you're brave enough, the prime rib is \$5.95 every Monday.

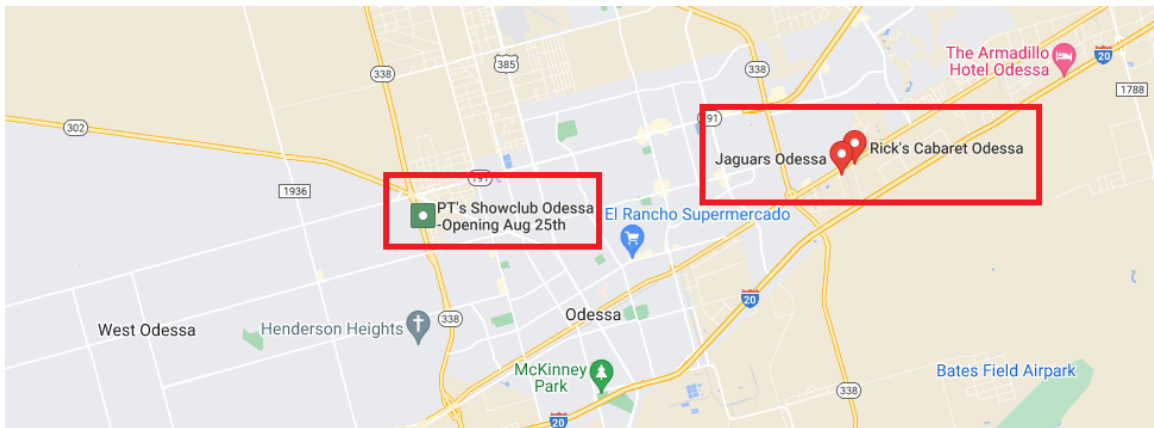
4. Cheetah Gentleman's Club

Nightlife Strip bars and clubs \$\$\$\$

Strip club aficionados have been going to Cheetah for years. The sizable, fully nude club has six stages, three different levels, a cigar selection and—of course—a small army of talented dancers. Admission is on the more affordable end: free until 7pm, \$10 from 7 to 9pm and \$20 after 9pm daily. And get this: The club does free lunch every day from 11:30am to 3pm.

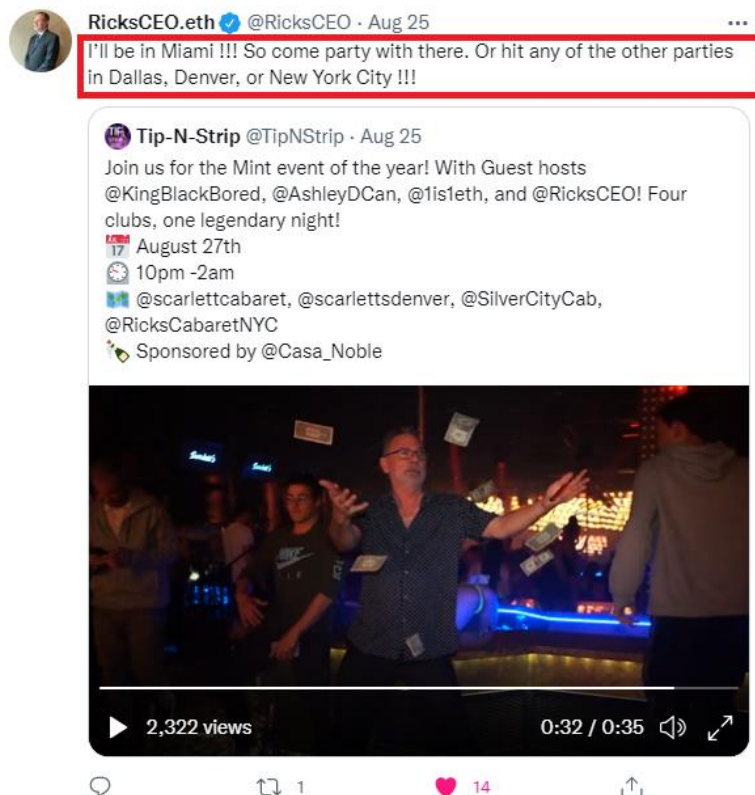
11. Playmates Club

Located in Coral Gables off Bird Road, Playmates has stepped up its game in recent months under new ownership. It's more of a laidback and approachable party vibe here, but you can still expect bottle service, a VIP room, a full kitchen, hookah and, of course, friendly, fully nude dancers.



Miami, FL and Odessa, TX are good examples of RCI Hospitality using multiple clubs in a geographic area to create strong relationships and build out its platform.

Furthermore, using NFTs as VIP passes at most of its clubs creates a national network. Now, clients have instant VIP access to many clubs spread across the country, not just one club in a specific city. This does two things. First, a loyal client in Miami is now more likely to visit a RICK club in Dallas when travelling because he has national VIP access. Second, it creates demand for the Dallas club as the Miami patron is now aware of events that are happening in Dallas due to the community interactions on the Tip-N-Strip platform.

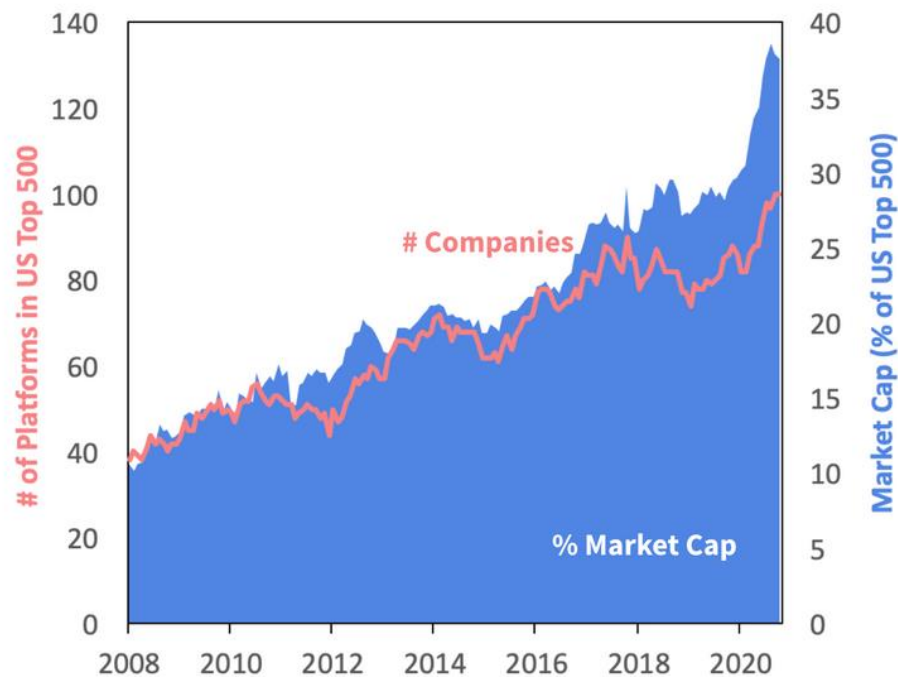


If RICK wants to maximize its value (cash flow multiple) it needs to rebrand itself from a collection of small clubs to a platform company with national and regional market power. Platform companies have both grown in importance and outperformed other companies in the stock market. The reason platform companies are so valuable is they allow for the continual rollout of new services and revenue opportunities with little to no need to raise capital.

Sparkline Capital in a recent blog shows how platform companies have outperformed the general stock market.

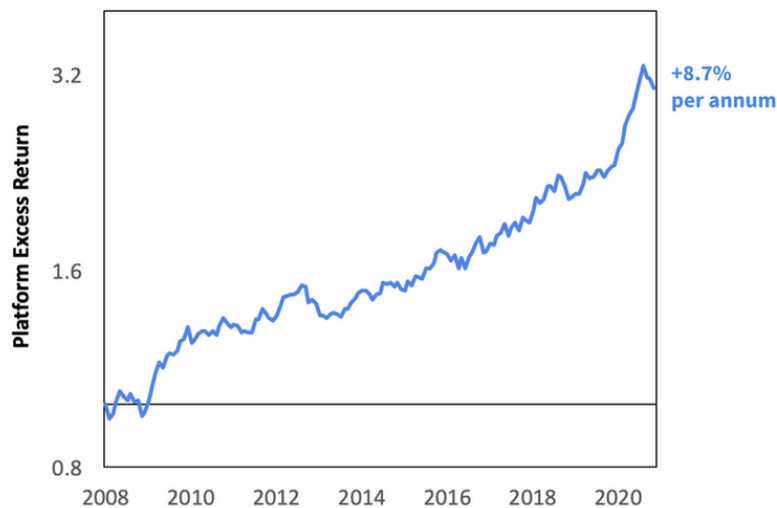
<https://www.sparklinecapital.com/post/the-platform-economy>

Exhibit 11
Platforms Rising



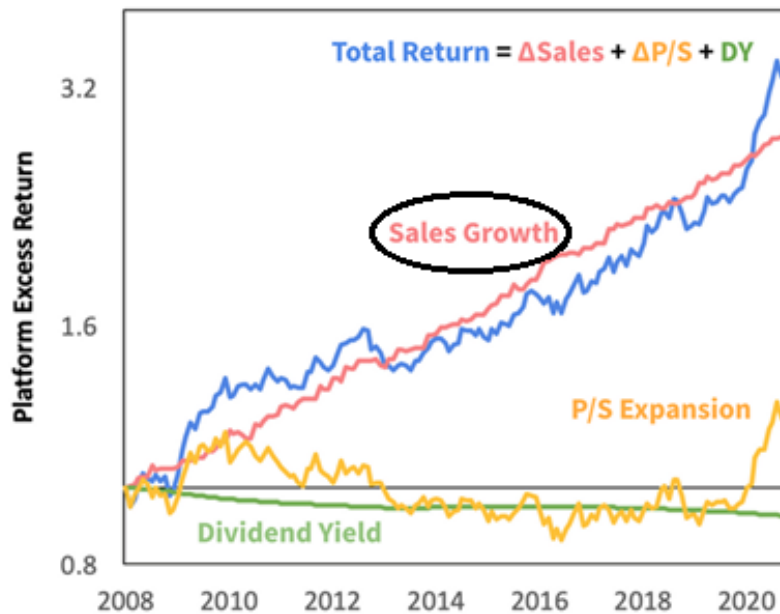
Source: S&P, SEC, Sparkline

Exhibit 12
Platforms Have Outperformed



Source: S&P, SEC, Sparkline

Exhibit 14
Platforms Fueled by Growth



Sparkline Capital points out that platforms have thrived over the last several decades because they have been highly disruptive. Platform companies have been able to take market share from less efficient incumbents thereby creating value by replacing *inefficient gatekeepers* (bad club recommendations), *consolidating a fragmented market* (many poorly operated clubs with bad community standards), and *bringing untapped supply to the market* (new clients who first discover adult nightclubs online or more demand by making adult night clubs more acceptable).

How to Miss by a Mile: Linear vs Nonlinear Valuation

In 2014, venture capitalist Bill Gurley wrote a blog in response to NYU Professor Aswath Damodaran's valuation of Uber titled *How to Miss by a Mile: An Alternative Look at Uber's Potential Market Size*. Professor Damodaran concluded at the time that Uber's value was \$5.9 billion based on certain assumptions related to the company's total addressable market. Mr. Gurley, an early investor in Uber, responded that Professor Damodaran was failing to offer critical reasoning and predications. Professor Damodaran was using linear prediction methods based on historical figures (taking the global taxi and limousine market and multiplying it by 10%). Like many analysts, he failed to account for how technology and the building a community on a platform would greatly affect future opportunities. Professor Damodaran's valuation model was based on conventional competitive markets. Bill Gurley, however, made his investment using the framework of increasing returns or the tendency for that which is ahead to get farther ahead due to positive feedback loops. Increasing returns do not generate equilibrium but rather create instability. The winner becomes the standards for the industry.

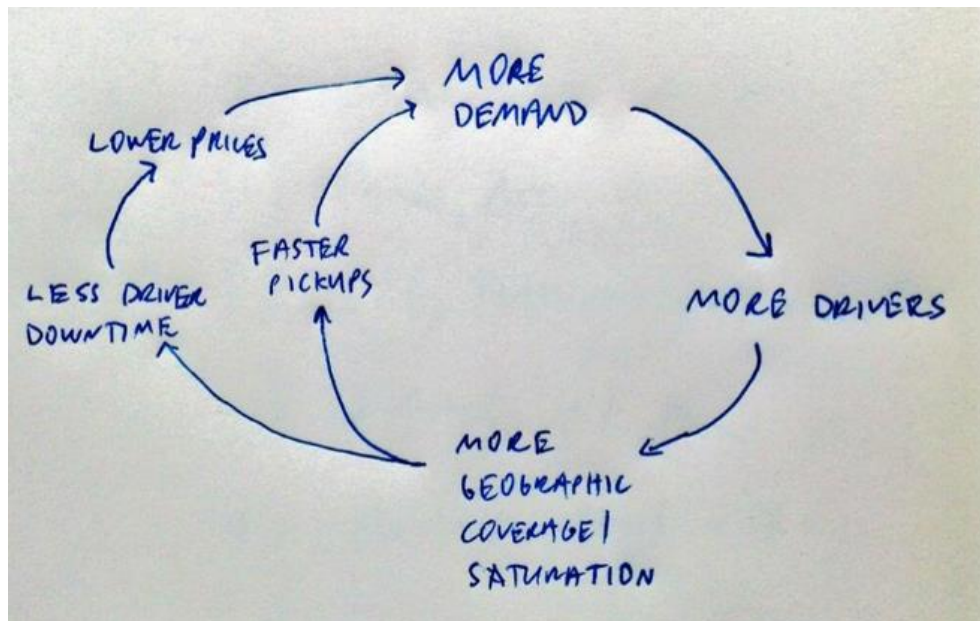
In Mr. Gurley's model, Uber's positive feedback loop comes from three drivers of its network effects: Pick-up times, Coverage Density, and Utilization.

So the right questions are, "is Uber exposed to some form of network effect where the marginal user sees higher utility precisely because of the number of previous customers that have chosen to use it, and would that lead to a market share well beyond the 10% postulated by Damodaran?"

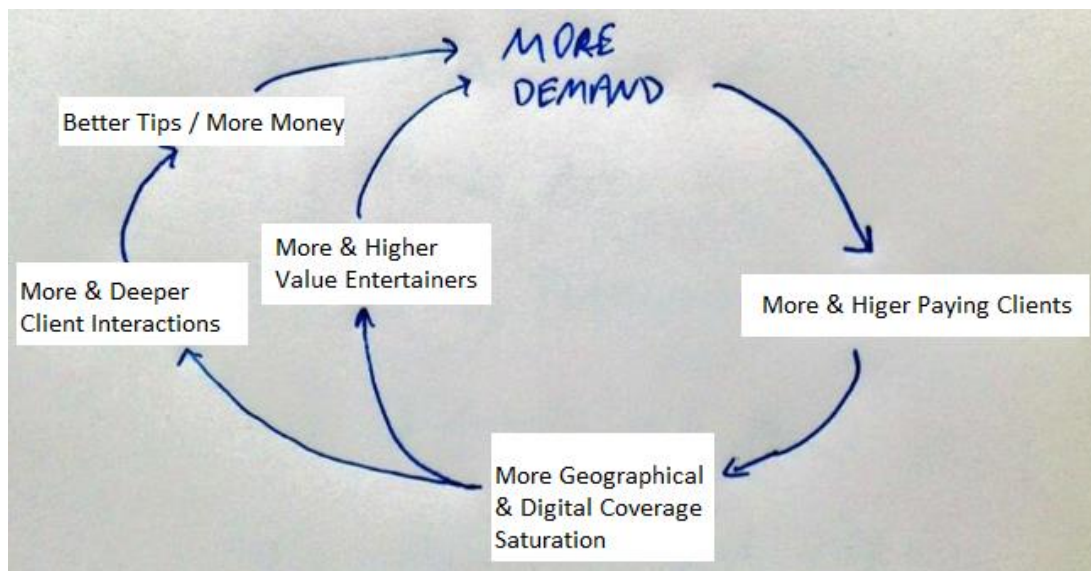
There are three drivers of a network effect in the Uber model:

1. **Pick-up times.** As Uber expands in a market, and as demand and supply both grow, pickup times fall. Residents of San Francisco have seen this play out over many years. Shorter pickup times mean more reliability and more potential use cases. The more people that use Uber, the shorter the pick up times in each region.
2. **Coverage Density.** As Uber grows in a city, the outer geographic range of supplier liquidity increases and increases. Once again, Uber started in San Francisco proper. Today there is coverage from South San Jose all the way up to Napa. The more people that use Uber, the greater the coverage.
3. **Utilization.** As Uber grows in any given city, utilization increases. Basically, the time that a driver has a paying ride per hour is constantly rising. This is simply a math problem – more demand and more supply make the economical traveling-salesman type problem easier to solve. Uber then uses the increased utilization to lower rates – which results in lower prices which once again leads to more use cases. The more people that use Uber, the lower the overall price will be for the consumer.

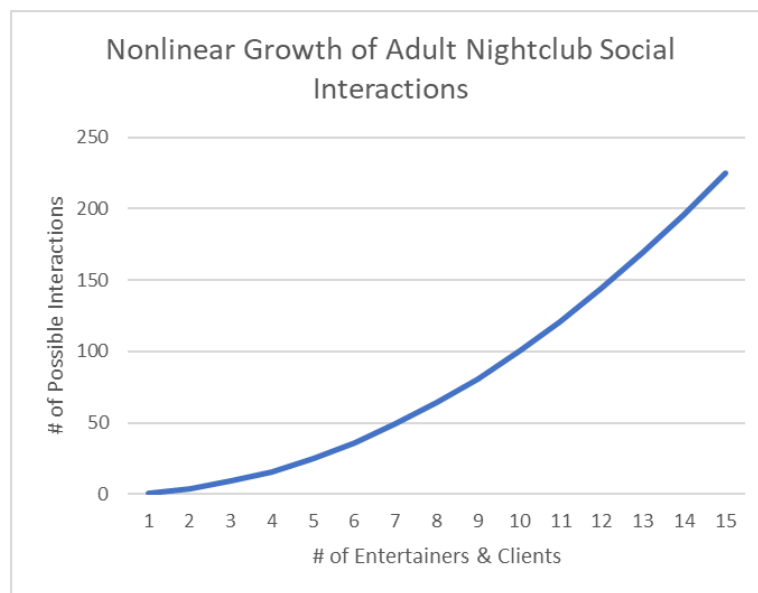
These three drivers of network effects lead to a virtuous cycle of increasing demand and better supply. For Mr. Gurley, the economies of scale available to Uber from being the market leader are immense. These economies of scale span city borders and open the service to new customers. A large network also opens Uber up to new partnerships that were not available to traditional ride hailing service companies.



Likewise, the market is valuing RICK based on a traditional business model. However, this is rapidly changing and RCI Hospitality’s network effects are being driven by three factors: frequency and depth of entertainer/client interactions, geographic and digital coverage density, and the RCI Hospitality reputation and brand.



Social interactions or economic transactions in the model of RICK as a platform grow nonlinearly when plotted against the number of vertices in the RICK’s social network. For example, assume you have two entertainers and two clients. In this case you can have a total of four transactions between entertainers and clients. Now, assume you add a third client. Then you can have six transactions. Assume, further, you add a third entertainer. Now you can have 9 transactions. Client 1 can have 3 transactions, client 2 can have three transactions, and client 3 can have three transactions. The number of social interactions increases by n -squared (n^2) if the numbers of entertainers and clients are equal (see Appendix section on graph theory and networks, this is an example of a bipartite graph).



This exponential scaling effect has two benefits for RICK. First, people will know RICK has the liveliest entertainment venue with the highest number of valuable entertainers along with the best paying clients. This dynamic will be a natural draw for new participants. Second, it will give RICK more opportunities to generate revenue and reinvest into its network.

In the future, RICK will be able to offer more services such as enhanced VIP experiences, digital media marketing, social media influencer events (higher door fees & bottle service), special meetups, etc. Further, as more social interactions take place at RICK’s clubs, more promotional opportunities will emerge from new event sponsors such as drink companies (e.g. Grey Goose banner over a stage), entertainment companies (e.g. UFC), event promoters, celebrities, merchandising, etc.

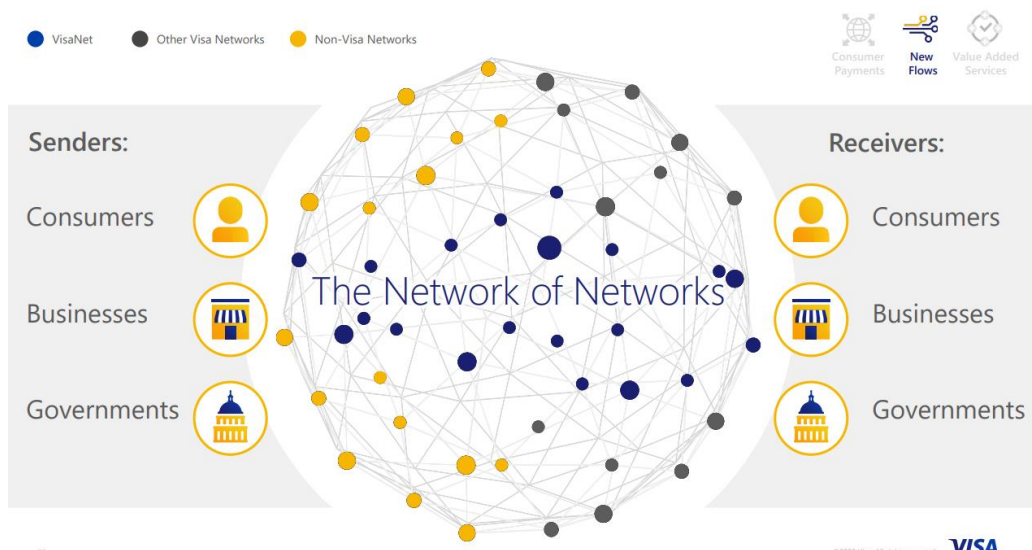
<https://abovethecrowd.com/2014/07/11/how-to-miss-by-a-mile-an-alternative-look-at-ubers-potential-market-size/>

Visa, Mastercard, and Payment Networks/Platforms

Visa and Mastercard are two platform companies in the financial transactions industry that are cash generative and growing. Both companies facilitate interactions and the completion of financial transactions. The two payment network companies have market-to-cash flow multiples of 24x and 29x versus 9x for RCI Hospitality Holdings, Inc.

The following slides are taken from Visa’s investor day presentation and demonstrate how the company communicates its platform ecosystem. Pay attention to how Visa communicates about groups or partners on the network, the evolution of services, security, reliability (trust), deepening relationships, growing transactions, and new service opportunities.

We continue to extend our partnerships as the payments ecosystem expands



The power of the Visa brand



Visa is the unequalled category-leading brand



The Visa brand drives substantial value to Visa, clients, partners and the ecosystem



We continue to **evolve our brand** as Visa's business and the payments landscape evolve



26

©2020 Visa. All rights reserved. **VISA**

Visa's technology promise includes security, reliability and scale for the benefit of our payments ecosystem participants

Technology is a vital pillar of Visa's business

Processed **140 billion** transactions in 160 currencies, for 15,500 financial institutions across 200 countries and territories

Resiliency is core to the fabric of our network

99.999% availability

We have opened our network for clients

~**600 API endpoints** opening access to our network, receiving over **1 billion API calls** per month

Our network connects the ecosystem

Multiple data centers with **10 million miles** of privately leased telecommunication lines



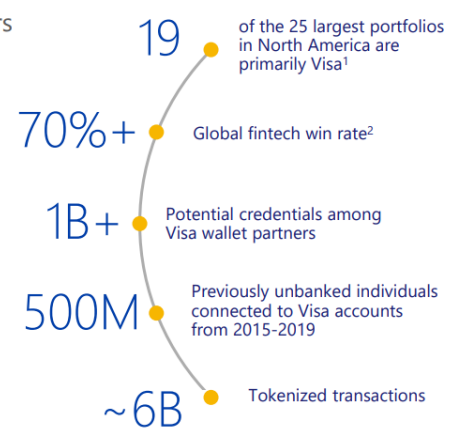
38 Source: Visa analysis.

©2020 Visa. All rights reserved. **VISA**

Growing credentials to bring new consumers into the digital payments ecosystem

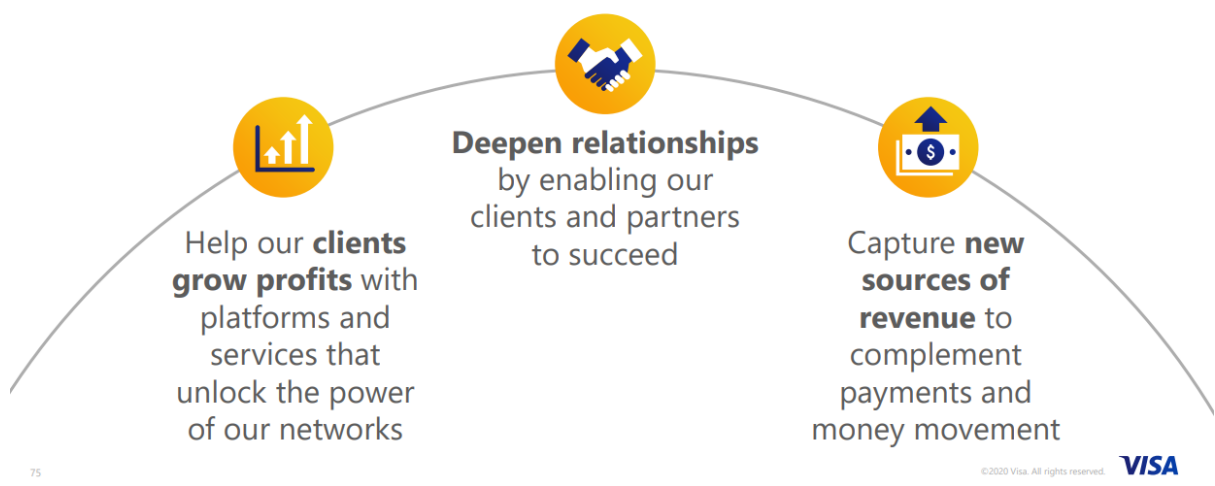
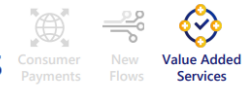


- Continue **to lead and grow share** with traditional issuers and co-brands
- Expand **issuance** with neobanks, fintechs and digital platforms
- Embed **Visa credentials** in digital wallets
- Reach the **unbanked** through new products and government partnerships
- Drive **tokenization** to enable new use cases



62 Notes: 1. Includes debit and consumer credit. 2. Fintech win rate based on analysis of deals won as a percentage of total pool of deals over a certain size. Sources: Nilson; U.S. Consumer Payment Panel Study; Publicly reported numbers from large wallet partners; Visa Operating Certificates; VisaNet Data; Visa Analysis.

Value Added Services grow revenue and help clients capitalize on best-in-class capabilities and innovation



https://s1.q4cdn.com/050606653/files/doc_presentations/2020/02/Visa-Inc-2020-Investor-Day-Full-Presentation.pdf

Conclusion

RCI Hospitality is rolling up the adult nightclub industry. This is creating large followings for popular clubs and deepening relationships in its network of clubs, entertainers, clients, and other service providers. Further, RICK is investing in new technologies to deepen the relationships between vertices in its network. RICK is doing this while generating significant cash flows that it is using to return to shareholders and to buy new clubs. Overtime, these actions will create significant value for all stakeholders.

RICK can continue to build its community by implementing industry leading community standards that create trust, safety, privacy, and dignity for all users on its platform. The establishment and enforcement of standards that promote these values will help grow its community by attracting new users along with creating more value for current users.

RICK's cash flow multiple is too low given its total addressable market, growth opportunities (both organic and acquisitive), and the barriers to entry for adult nightclubs. Visa communicates to the market the power of its networks and has not sacrificed cash flows for growth. Visa benefits from serious network effects which has allowed it to grow and at the same time return cash to shareholders. RICK, likewise, can grow with very little cash needs or it can accelerate growth by reinvesting all profits into acquisitions (often with 30% plus cash-on-cash returns). RICK, however, needs to communicate how it is building out its social network and what future service opportunities it has to maximize its current market multiple. If RICK is successful (which is highly likely), it will create very significant amounts of wealth going forward.

Nightclubs: Significant Acquisition Opportunities

Market

- 2,200 clubs / ~500 meet our acquisition criteria
- We are one of the largest, but our market share is minimal
- Long-term owners interested in selling
- We are the acquirer of choice as the only public company in the space with access to bank financing

Financial Dynamics







- Buy earnings accretive clubs at 3-5x adjusted EBITDA
- Purchase related real estate at market value
- Strong record paying off seller financing from acquisition cash flow

Recent Acquisitions (October-November 2021)

- 12 clubs in 7 states
- Pre-COVID 2019: Generated \$40M in revenues and \$14M in Adjusted EBITDA

Current Acquisition Target

- Buy clubs that can add \$20M of Adjusted EBITDA in FY23

Our Top Club Brands	
	Elegant clubs with restaurants
	High-end, high-energy party club
	Nation's mega club with 74,000 square feet
	High-end clubs for African-American professionals
	Lively BYOB clubs for blue collar patrons and the college crowd
	Lively BYOB clubs for blue collar patrons and the college crowd

Appendix:

Nightclub Platforms and Social Networks

RICK’s platform allows for the development of local social networks (and increasingly regional and national social networks). The local social networks are usually built around a single club but sometimes two or three clubs in larger metropolitan areas. The local clubs usually have very dense social networks where participants (clients, entertainers, security guards, bartenders, DJs, etc.) know each other very well. But the links connecting the geographically separated local networks are usually weak. However, RCI Hospitality is changing this through its rollup strategy and the deployment of digital technologies.

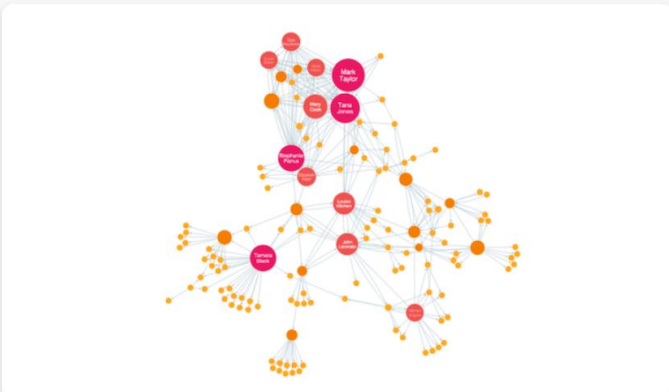
Centrality is a measure of understanding social networks, often depicted with graphs. The measurements calculate the importance of any given vertex in a network along with its relationship with other vertices.

<https://cambridge-intelligence.com/keylines-faqs-social-network-analysis/>

Degree centrality

The degree centrality measure finds nodes with the highest number of links to other nodes in the network.

Nodes with a high degree centrality have the best connections to those around them – they might be influential, or just strategically well-placed.



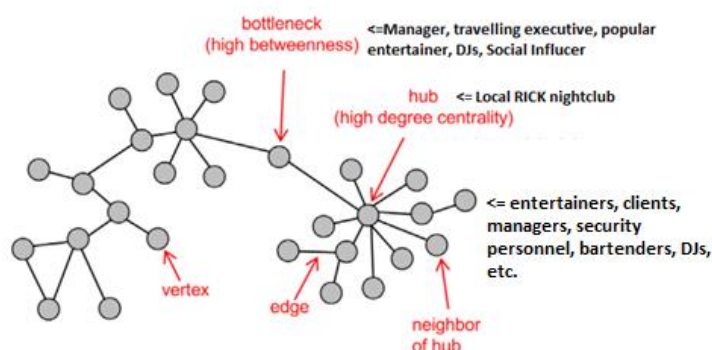
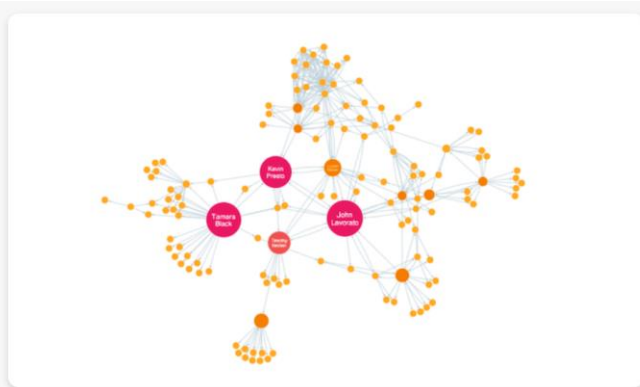
Degree centrality essentially answers the questions: Who is the most or least popular vertices in this network? Who can call upon the most resources in this network? In other words, who is the popular kid and who is the rich kid?

In nightclubs, an entertainer with a large number of clients who visit the club just to see her would be considered to have high degree centrality. Also, clients who spend large amounts of money would have high degree centrality. DJ’s can also have high degree centrality. Further, physical clubs and websites that are very popular can be vertices in the network.

Betweenness centrality

Nodes with a high betweenness centrality score are the ones that most frequently act as 'bridges' between other nodes. They form the shortest pathways of communication within the network.

Usually this would indicate important gatekeepers of information between groups.



<http://faculty.nps.edu/rgera/MA4404/06-CentralitiesBetweenness.pdf>

Betweenness centrality essentially answers the questions: Who or what can most strongly control information flow around the network? Who or what would cause the most disruption to flow if they or it were removed? Vertices with a high betweenness centrality act as bridges between other vertices and get to see the information that passes through.

Nightclub managers, bartenders and security personnel have high betweenness centrality in a local network as they interact with many vertices in the network and obtain and share important information. Also, managers, clients, entertainers, and club managers that visit multiple nightclubs have high betweenness centrality between two geographically separate networks. These individuals link the different clubs into one community and share information between major vertices with high degree centrality.

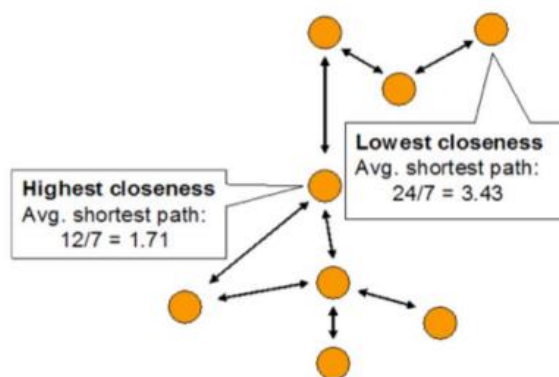
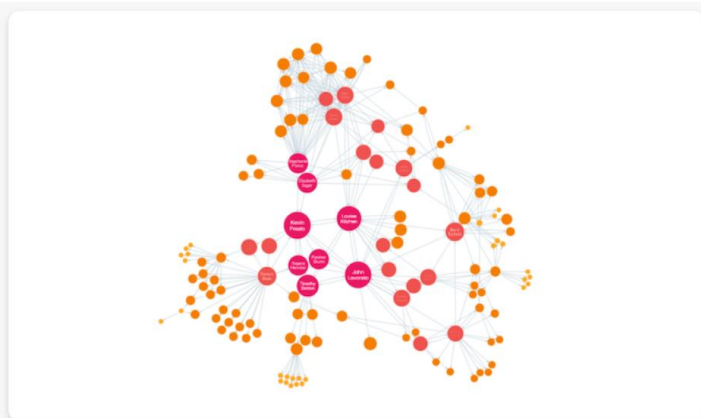
For example, say a visiting entertainer from Minneapolis tells an entertainer in St. Louis she can earn a lot of money in Minneapolis because she is attractive and sociable. Thus, the travelling entertainer is sharing valuable information and acting as a link between two platforms. Also, a DJ travelling between clubs can build a bridge between two communities by endorsing another club or an entertainer. Social media platforms, such as Facebook, Instagram, YouTube, and TikTok are tools that can be used to increase betweenness centrality.

Closeness Centrality

This is the measure that helps you find the nodes that are closest to the other nodes in a network, based on their ability to reach them.

To calculate this, the algorithm finds the shortest path between each node, then assigns each node a score based on the sum of all the paths.

Nodes with a high closeness value have a lower distance to all other nodes. They'd be efficient broadcasters of information.



<http://faculty.nps.edu/rgera/MA4404/06-CentralitiesCloseness.pdf>

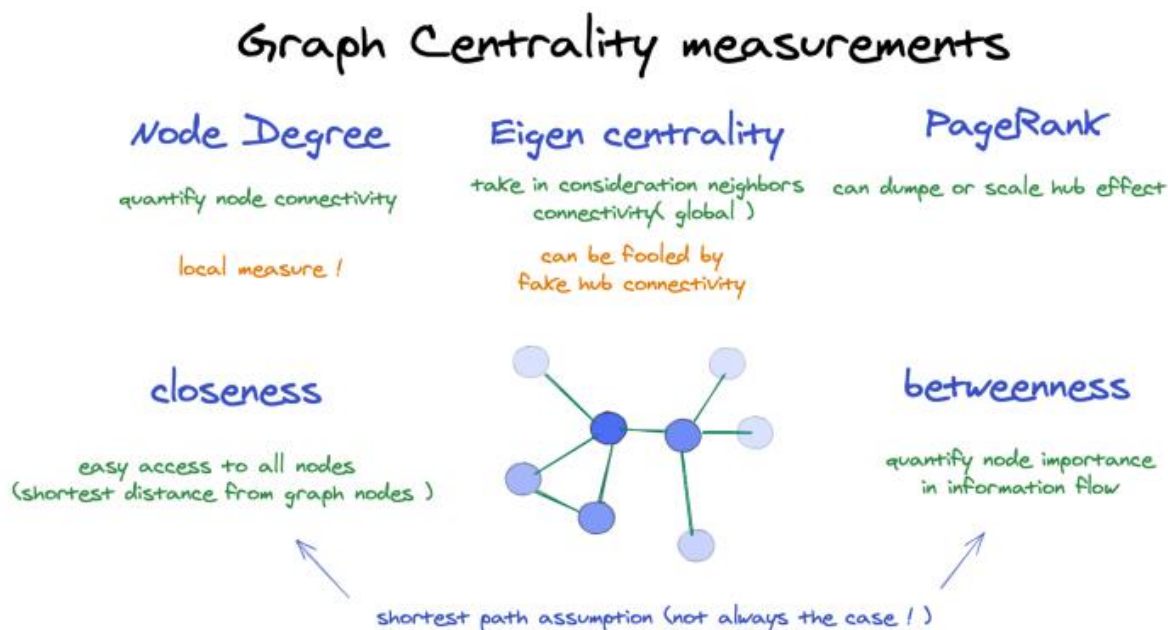
Closeness centrality essentially answers the questions: Who can most efficiently obtain information on other vertices in the network? Who could most quickly spread information in a network? As we all know from middle school, we want to be in the middle of a network by being close to friends, although we don't necessarily have to have many direct friends to know who said or is doing what.

Managers and entertainers often have high closeness centrality as they interact with other members some of whom may be very popular.

Google and Eigenvector Centrality

Eigenvector Centrality, is a more complicated measure of a node’s influence on other nodes in the network by measuring how many links connected nodes have with other nodes that are also important. Google’s PageRank is a variant of Eigenvector Centrality that assigns a scaled score based on this measure of connections and their connections connections. Google’s PageRank system is a matching service that matches people with the best webpages.

Both RICK and Google create value by minimizing search costs—both companies also provide other services but reducing search costs is a big part of the value proposition. RICK reduces the time it takes to find a great party and Google reduces the time it takes to find a great webpage. RICK monetizes its services through door fees, bottle services and alcohol sales whereas Google monetizes its services through advertising.



<https://towardsdatascience.com/notes-on-graph-theory-centrality-measurements-e37d2e49550a>

The Scaling of Cities

This section is not necessary to understanding the investment thesis for RICK. However, it gives a good theoretical understanding of the scaling of social networks. The following discussion is taken from Geoffrey West's great pop science book, [Scale](#). In his book, the physicist discusses how numerical scaling properties affect everything from the size of animals, aging, cities, and companies.

Superlinear and Sublinear Scaling

Before discussing cities, we need to talk about *superlinear scaling* and *sublinear scaling*. Nonlinear scaling means that the measurable behavior of a system does not simply double when the size of the system is doubled. Superlinear scaling is when the rate of change increases as the size of the system increases (exponential growth). The extra increase in the measured activity relative to the increase in the size of the system is *increasing returns to scale*. In sublinear scaling, on the other hand, the rate of growth slows as the system increases in size.



The Job of a City

Cities are dominated by two dominant components, physical infrastructure and socioeconomic networks. The job of a city is to facilitate and enhance socioeconomic activities—such as employment, wealth creation, innovations, entertainment, health care, and much more—by providing the appropriate infrastructure such as parks, restaurants, cafes, stadiums, theatres, hospitals, roads, gas lines, lighting, garbage collection, office buildings, and more to encourage and increase social connectivity.

Infrastructure and Sublinear Scaling

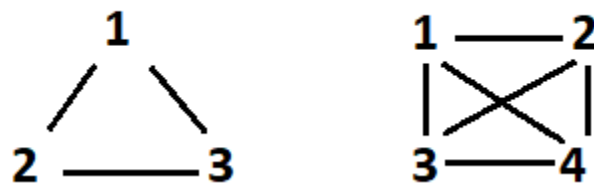
Infrastructure scales in a sublinear manner. This means that as cities get bigger, they need less infrastructure to serve the same amount of people. For example, if the size of the city doubles, the city will not need to double the number of roads or gas stations to serve its people. City dwellers are more efficient and produce less waste than people living in small towns.

Social Networks and Superlinear Scaling

Socioeconomic activity, in contrast to infrastructure, scales in a superlinear fashion. With the development of language, human beings acquired the ability to exchange and communicate information on a whole new scale than our ancestors with limited communication abilities. The ability to communicate has allowed us to accomplish much more than pre-homo sapiens with limited communicative abilities could ever imagine (if they were able to imagine about far off future events). As people formed larger and larger groups, the amount of information exchanged, stored, and processed grew exponentially.

Cities provide the means and mechanisms to increase connectivity and drive feedback loops that lead to continuous increasing returns of scale to information exchange. To see how this works, imagine two dinner parties. At the first party are three people. This could be a great or boring party. Maybe all three of the people like each other, or perhaps all three dislike each other and fail to form a connection. Now, imagine a dinner party with ten people. Here the odds are much higher that each individual will find someone they like and are able to interact with. Now, it is very likely that groups will form leading to the free-flowing exchange of ideas and information. The reason this happens is simply because there are more possible combinations of people and groups, and out of a higher number of random interactions will form unpredictable and lively social networks.

The key point here is that the number of links between people increases much faster than the increase in the number of people in the group (same as our analysis for the number of entertainers and clients in RICK's clubs). If there are just two people, the number of links in the group is one. If there are three people, the number of links in the group is three. If there are four people, the number of links in the group is now six. This is superlinear scaling. The formula for the number of possible independent pairwise links (interactions) in a group is $n \times (n-1)/2$ (for bipartite graphs, e.g. m entertainers and n customers this is $m \times n$).



If it were possible for everyone in a city to interact meaningfully with everyone else, all socioeconomic activities would scale with a factor of 2. In other words, socioeconomic activities would scale with the square of the population. Now, that is some superlinear scaling! In reality, however, most socioeconomic activities scale with a factor of 1.15. For example, wages, the number of professionals, patents, wealth creation, GDP, and crime all increase with a factor of 1.15 as the population grows.