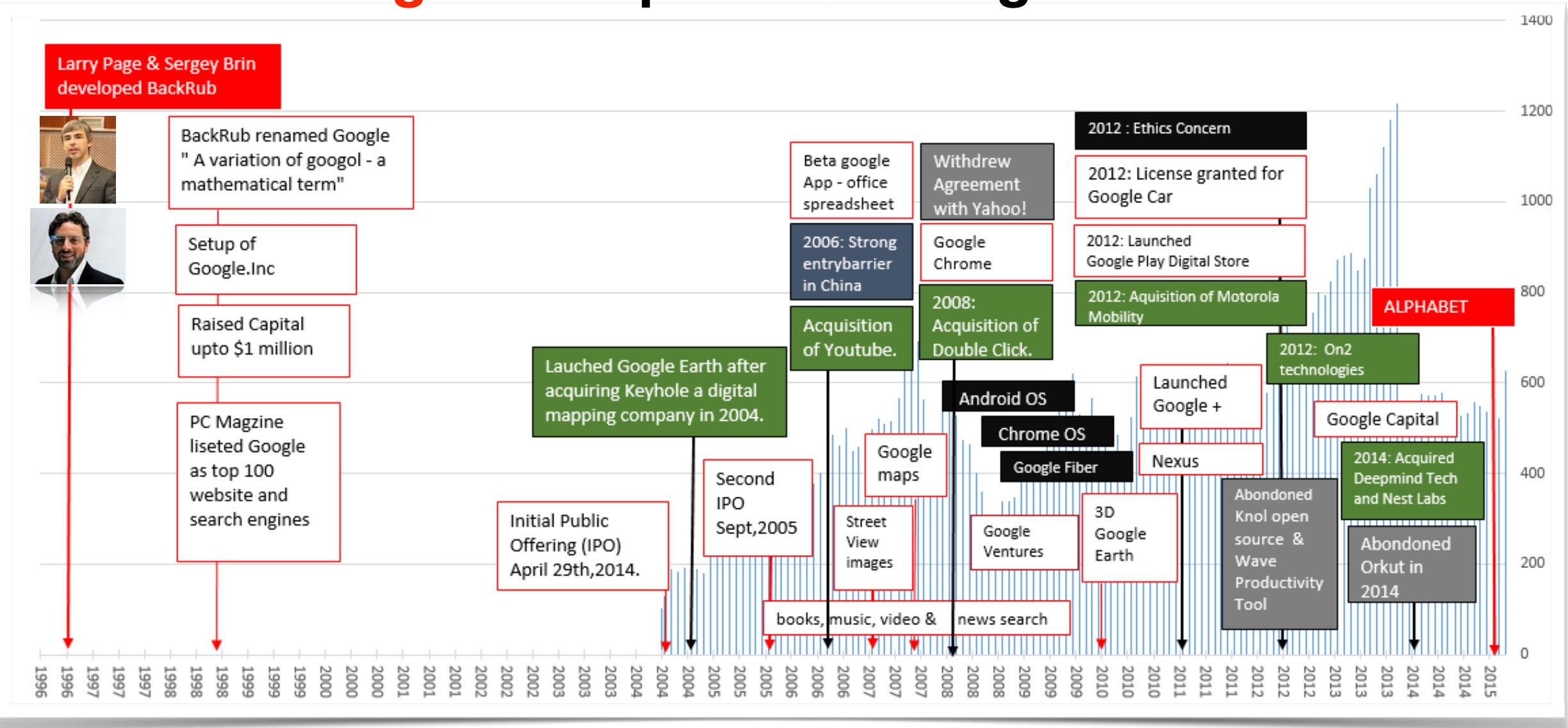
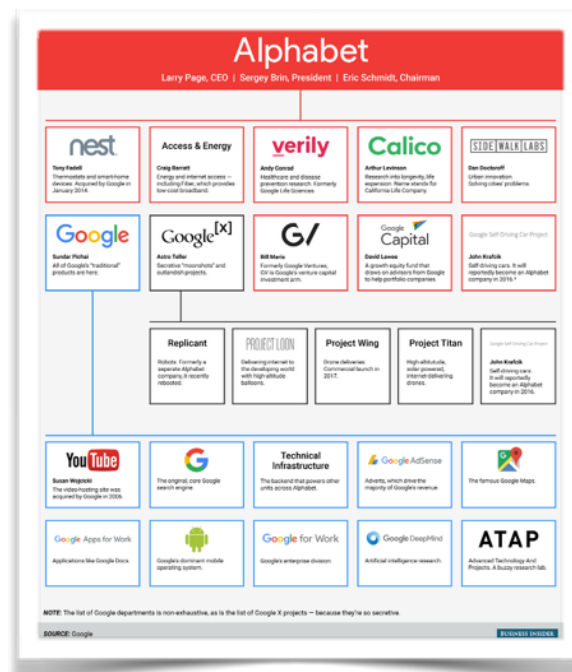


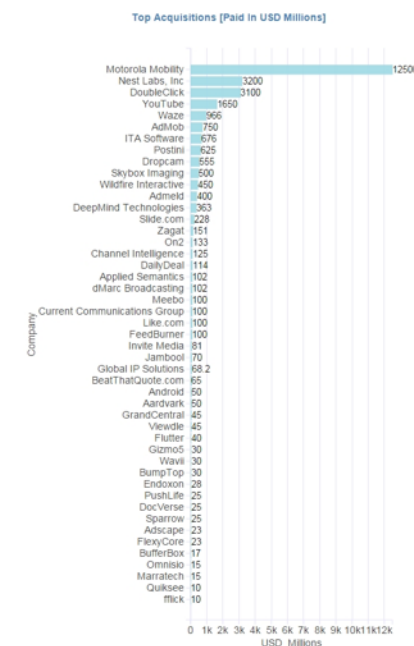
Google's Corporate Strategic Timeline



Alphabet's Business Segments



Alphabet's Top Acquisition



Alphabet's Portfolio

ALPHABET'S												
CORE		NON-CORE	CORE & NON-CORE	Shutdown	Sold or plan to sell							
A	B	C	D	E	F	G	H	I	J	K	L	M
Aardvark	Beat That Quote.com	Channel Intelligence	DailyDeal	eBook Technologies	FeedBurner	Gecko Design	Holomni	Ignite Logic	Jaiku	Kaltix	LabPixies	Makani Power
Admeld	bebop	Clever Sense	Dark Blue Labs	Emu	Firebase	Genius Labs		ImageAmerica	Jambool	Katango	Launchpad Toys	Marratech
AdMob	Behavio	Cold North Wind/Papero/freecord.com	Dealmap	Endoxon	FlexyCore	Gizmo5		Impermium	Jetpac	Keyhole, Inc	Lift Labs	mDialog
Adometry	Bitspin	Current Communications Group	DeepMind Technologies	Episodic	Flutter	Global IP Solutions		Incentive Targeting Inc.	Jibe Mobile		Like.com	Measure Map
Adscape	BlindType		Deja		Fly Labs	GrandCentral		Industrial Perception	JotSpot			Meebo
Agawi	Boston Dynamics		Digsfera		Fridge	Green Parrot Pictures		Instantiations				Meka Robotics
Agnilux	Bot & Dolly		Director			GreenBorder		Invite Media				Metaweb
Akwan Information Technologies	bruNET GmbH		Divide			GreenThrottle						Milk, Inc
allPAY GmbH	BufferBox		dMarc Broadcasting									Motorola Mobility
Alpental Technologies	Bump		DNNresearch Inc.									MyEnergy
Android	BumpTop		DocVerse									
Angstro			Dodgeball									
Appetas			DoubleClick									
AppJet			drawElements									
Applied Semantics			Dropcam									
Appurify												
Apture												
Autofuss												
@Last Software												
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Neotonic Software	Odysee	Panoramio	Quest Visual	Rangespan	SageTV	Talaria Technologies	Upstartle	Vidmaker	Wavii		YouTube	Zave Networks
Nest Labs, Inc	Omnisio	PeakStream	Quickoffice	reCAPTCHA	Say Now	TalkBin	Urchin Software Corporation	Viewdle	Waze		Zagat	Zenter
Neven Vision Germany GmbH	On2	Phatbits	Quiksee	Red Hot Labs	SCHAFT, Inc.	TeraCent		VirusTotal.com	Where2			Zetawire
Next New Networks	Orion	Phonetic Arts		Redwood Robotics	Simplify Media	Thrive Audio		Vision Factory	Widvine Technologies			Zingku
Nik Software, Inc.	Outride	Picasa		RelativeWave	Skia	Tilt Brush			Wildfire Interactive			ZipDash
		Picnik		reMail	Skybox Imaging	Timeful			WIMM Labs			Zynamics
		Pie		Reqwireless	SlickLogin	Titan Aerospace						Zync Render
		PittPatt		Revolv	Slide.com	TNC						
		Pixate		RightsFlow	SocialDeck, Inc.	Tonic Systems						
		Planrr		Ruba.com	SocialGrapple	Trendalyzer						
		PlinkArt			Softcard	TxVia						
		Polar			Songza	2Web Technologies						
		Postini			Sparkbuy							
		PostRank			Sparrow							
		Pulse.io			spider.io							
		Punchd			Sprinks							
		PushLife			Stackdriver							
		Pyra Labs										

Alphabet's M&A ViewPoint



- Alphabet's strategy is to acquire a target company that fits into Google's portfolio and its business strategy. Potential target company must deliver good resource and capability.
- GOOG must have sufficient internal capacity to integrate the target company.
- Employee Cultural mix is very important.
- Financially, Return on Invested Capital > Cost of Capital, Net Present Value > 0. Return on Invested Capital to be achieved in short or long term.
- Acquire target company to
 - shutdown target company as it was a threat to Google+ or other divisions.
 - run the target business model until profitable and or integrate multiple divisions
 - divert its resources or capabilities to its own division

Porter's Five Forces

Bargaining Power of Buyers (End users - individuals and businesses, interested in information or advertising) – Medium:

Strong: high price sensitivity on the buyers' side.

Strong: buyers' low switching costs (low time and loyalty involved when switching to competing products).

Medium: buyers have, in part, access to information on the quality and prices of Google and other focal firms.

Weak to Medium: user friendliness and easy interface of Google's suite of products (e.g. Google search engine, Gmail, Cloud computing solutions such as Google Doc and Spreadsheet).

Weak: buyers are small and in higher number, compared to the focal firms.

Weak: Google's network and advanced search engine algorithms give it power over the buyers.

Bargaining Power of Suppliers (Individuals & Businesses, whoever has a website or information on the Internet) – Weak:

Weak: suppliers are numerous and smaller in size, compared to Google.

Weak: focal firms such as Google are the suppliers' main customers.

Weak: diverse base of suppliers for the suite of products/services that Google offers. The firm can switch from one supplier to the other.

Threat of Substitution (white and yellow pages, books, libraries, travel agencies) – Weak:

Weak: substitutes to the suite of products and services that Google offers or aims to offer are readily available but not as convenient for the person conducting the search.

Medium: buyers' switching cost towards substitutes is low, but the lack of convenience makes it impractical.

Threat of New Entrants – Strong:

Medium: industry is highly profitable and attractive for enterprises and SMB's, yet requires substantial capital and infrastructure to steal market share across focal firms' breadth of product and services

Strong: growing efforts of the existing players to expand their market reach by establishing a presence in new product segments and by tapping into new markets to increase their customer base.

Strong: buyers manifest a strong demand, which in turn attracts outsiders.

Competitive Rivalry – Strong:

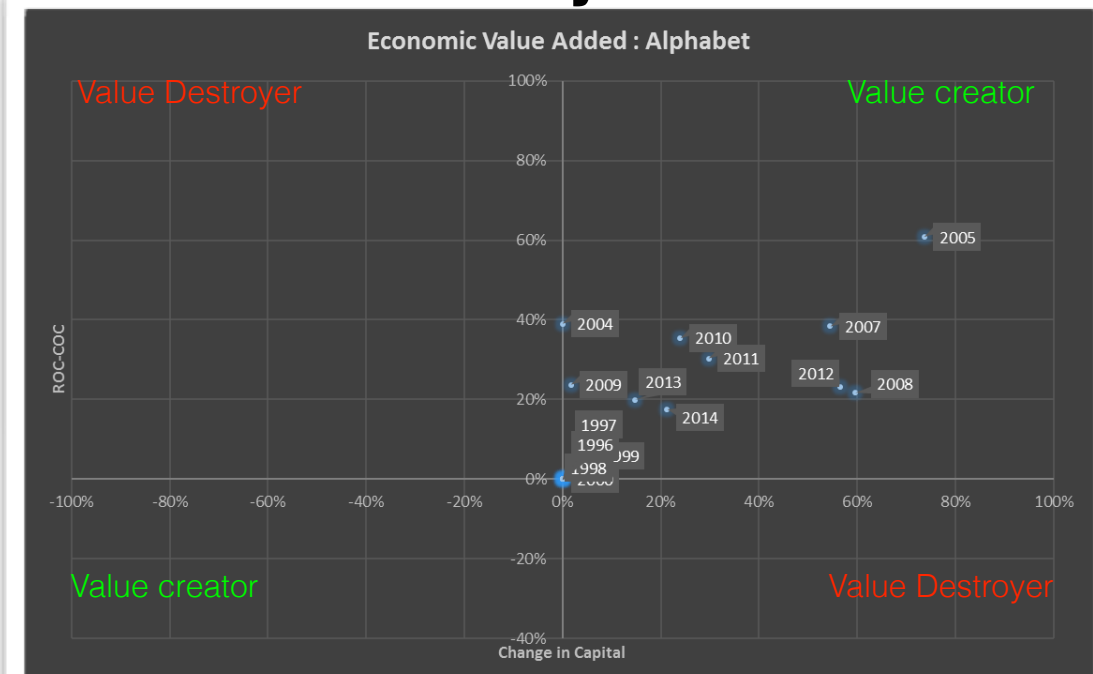
Strong: low switching costs for buyers to different providers

Medium to strong: focal firms have a fairly comparable strength and size.

Strong: low differentiation between products/services.

Strong: rapidly changing information technologies and innovations being introduced to the market by focal firms.

Alphabet's Economic Value Added Analysis



- On X-Axis we take %Change in Capital and on Y axis we take %Change in (ROIC-COC) which is EVA spread.
- As we see there are 4 quadrants. A company is said to be value creator if its % change in ROIC-COC > 0 and %Change in Capital > 0.
- Usually when a company restructures its Change in Capital becomes -negative because it invests heavily in R&D or CapEx. Google has always satisfied all the conditions to be a very strong value creator.

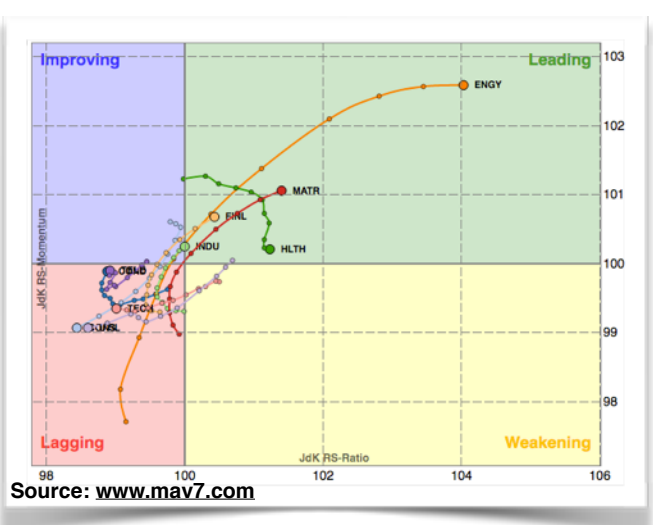
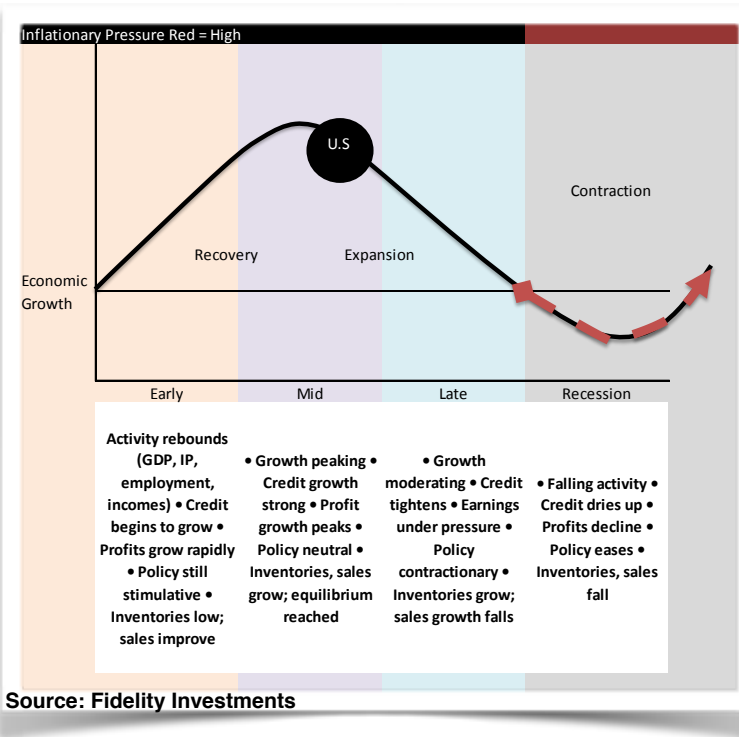
Alphabet's VRI analysis

VRI Analysis				
Resources	Value	Rare	Immitability	Result
Search Algorithms	Yes	Yes	Yes	Competitive Advantage
Ability to Integrate Internet with Intranet	Yes	Yes	Yes	Competitive Advantage
Research & Development	Yes	Yes	Yes and No	Competitive Advantage / Temporary
Android / Chromium Operating System	Yes	No	No	Competitive Parity
Branding	Yes	No	No	Competitive Parity
Relations with other companies	Yes	No	No	Competitive Parity

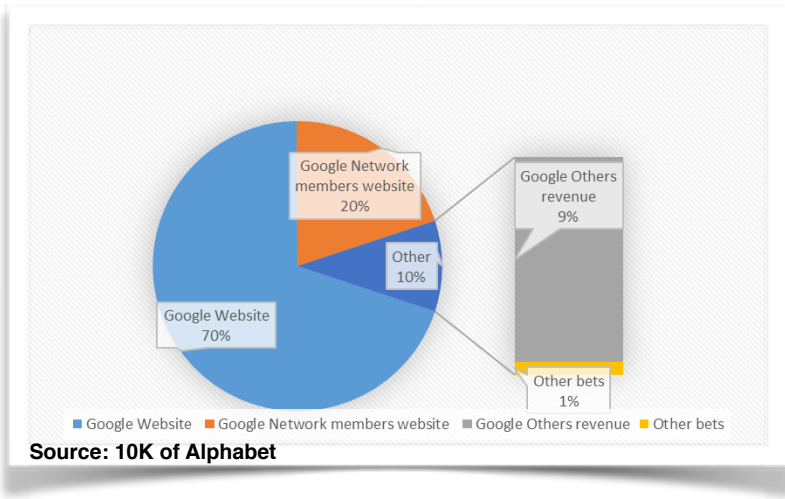
U.S. Business Cycle Phases

SPX 500 - Relative Rotation Graph

Alphabet's Revenue Segmentation



As US is progressing towards Late phase near future from RRG screen we see that all the sectors are lagging or improving except Energy, Materials and Finance which are leading. Once, US enters late phase Industries that were leading will start weakening. Weakening in Finance sector can be problem for GOOG to raise capital through debt. As per Factset, GOOG raised funds through debt financing in 2016. Borrowing costs would increase and this will impact its R&D department. CapEx may reduce marginally but GOOG will continue to expand globally and in US. If this is true, then GOOG will enjoy the sales from its retail or healthcare sector in the near run and continue to grow in IT sector.



Alphabet's Industry Attractiveness

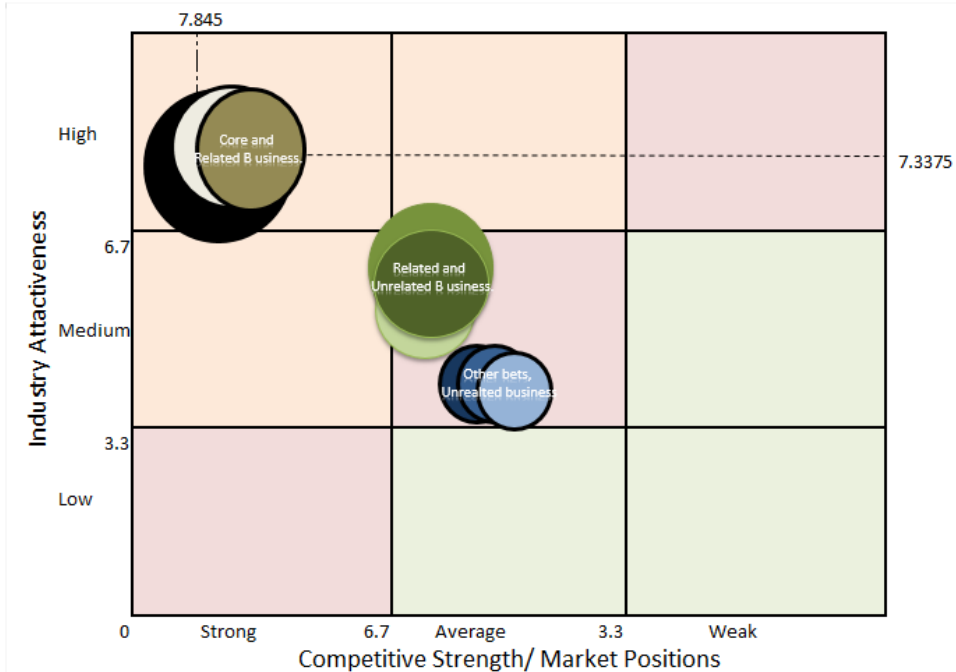
Alphabet generates 99.4% revenue from Google Segments and 0.6% of revenue from other bets.									
Please note that if we do Industry attractiveness by sub-sector, then attractiveness ratings might change according to the assumptions									
Facts: In few years time US might enter into MID stage and during that duration Alphabet's earnings and sales will fall. Alphabet's portfolio has entered into various industries as listed in the Industry Attractiveness table. We will focus more on A) technology industries such as Software, Hardware & IT Services. B) Business & Public service such as Marketing Communication and advertisements as they bring more revenue to GOOG.									
Alphabet's primary industries are Technology Services and Internet Software/Services. It has also diversified its portfolio into retail, healthcare and gaming industries.									
2015-2016	Mkt Size & growth	Intensity of Competition	Emerging Opp & Threats	Cross Industry Strategic Fit	Resource Requirements	Seasonal and Cyclical Influences	PEST factors	Industry Probability	Industry Uncertainty and Risk
A) Technology Services --> 1) IT Services --> Internet/ Online Services, Hosting Services 2) Software --> Industry Specific, Home-Office, Content Management, Design/ Engineering 3) Hardware --> Communication Wireless Equipments, Computer Hardwares, Consumer Electronics --> Electronic Security, Test & Measurements.									
IT industry consistently underperforms when it enters Late section of Business Cycle. (source: Fidelity) As we see that US will be transitioning from MID to LATE near future. We believe that this industry will not perform good. However, Since GOOG has competitive advantage over its competitors we believe they will outperform the industry growth rate. If we consider globally markets 50% of Alphabet's revenue comes from global market. We still arrive at the same conclusion that GOOG will be able to maintain its position for atleast 8 to 10 years given the resources and capabilities it has acquired over time. Overall, the GOOG is a strong value creator even if overall industry slows down.									
Importance Weight	10%	25%	10%	20%	10%	5%	5%	10%	5%
Attractiveness Rating	8	8	6	8	7	4.75	8	6	8
Weighted Score	0.8	2	0.6	1.6	0.7	0.2375	0.4	0.6	0.4
B) Advertising and Market Communications.									
Majority of the revenue of GOOG comes from its Advertising and other market communications. (source: 10K filings) These includes paid per clicks and cost per click.									
Importance Weight	10%	25%	10%	20%	10%	5%	5%	10%	5%
Attractiveness Rating	6	8	6	8	5.5	4	8	5	6.5
Weighted Score	0.6	2	0.6	1.6	0.55	0.2	0.4	0.5	0.325
C) Gaming, Retail and Healthcare --> Healthcare equipments, Technology, Lifesciences tools and services.									
For Healthcare industry we do not see any clear pattern when in LATE zone. As per the data from PwC we see that consumer expenditure for gaming industry will increase substantially. It is very attractive to enter this market given the resources and capabilities they have at present. Retail industry that falls under Consumer discretionary shows no fix pattern during and in LATE Zone. As per 10K filings Management anticipates that this segment will start contributing more revenue only after 5 to 6 years time. We have taken a conservative approach and we anticipate that GOOG will continue to do well in these industries within 10 to 13 years time frame.									
Importance Weight	10%	25%	10%	20%	10%	5%	5%	10%	5%
Attractiveness Rating	6	8	9	7	9	9	7	6	6
Weighted Score	0.6	2	0.9	1.4	0.9	0.45	0.35	0.6	0.3
Sum of Importance Weights	1.00								
Weighted Overall Industry Attractive Score	A) Technology Services 7.3375								
Weighted Overall Industry Attractive Score	B) Marketing and Advertising Industry 6.775								
Weighted Overall Industry Attractive Score	7.5								
Weighted Overall Industry Attractive Score	C) Gaming, Retail and Healthcare Industry - Long run - MID phase								

Business Units Competitive Strength

		Core		Related				Unrelated						Both					
		Google Search		Google Tools & Web Applications		Google Mobile Applications		Calico & Verily		Google Fiber		Nest		Google X		Venture Capitalist		Google Capital	
Competitive Measures	Importance Weight	Strength Rating	Weighted Score	Strength Rating	Weighted Score	Strength Rating	Weighted Score	Strength Rating	Weighted Score	Strength Rating	Weighted Score	Strength Rating	Weighted Score	Strength Rating	Weighted Score	Strength Rating	Weighted Score	Strength Rating	Weighted Score
Relative Mkt Share	0.15	1	0.15	1	0.15	1	0.15	0.2	0.03	0.2	0.03	0.2	0.03	1.5	0.225	1.5	0.225	1.5	0.225
Cost relative to Competitors Costs	0.20	8	1.6	5	1	5	1	9	1.8	5	1	5	1	6	1.2	5	1	5	1
Ability to Match or beat rivals on key products	0.05	9	0.45	9	0.45	9.5	0.475	4	0.2	9	0.45	6	0.3	6	0.3	6	0.3	6	0.3
Ability to benefit from strategic fit with sister business	0.20	10	2	10	2	10	2	3	0.6	5	1	5	1	9	1.8	8	1.6	9	1.8
Bargaining Leverage with Suppliers and Customers	0.05	8	0.4	9	0.45	10	0.5	5	0.25	5	0.25	6	0.3	6	0.3	6	0.3	6	0.3
Brand Image & reputation	0.10	9.9	0.99	10	1	10	1	9	0.9	9	0.9	9	0.9	9	0.9	9	0.9	9	0.9
Competitively Valuable Capability	0.15	9	1.35	10	1.5	10	1.5	6	0.9	6	0.9	7	1.05	9	1.35	8	1.2	8	1.2
Profitability relative to competitors	0.10	9	0.9	9	0.9	9	0.9	1	0.1	1	0.1	1	0.1	5	0.5	5	0.5	5	0.5
Overall Competitive Score for Business Units	1.00	7.84		7.45		7.525		4.78		4.63		4.68		6.575		6.025		6.225	
Conclusion		Strong market presence in long run. As discussed before, even if the Industry performance decreases, GOOG missing few earning call is not a surprise. It will continue to be one of the market leaders atleast for next 10 years.						Weak competitive strength- short run. In long run as per industry analysis and business phase cycle this can change once US enters LATE phase of the business cycle. We will have to see the sector RRG screens from Bloomberg to predict where GOOG is moving ahead.						Moderate strength - Since, Google X took lots of incorrect decision in the beginning and now facing challenges in non-business environment.					



Alphabet's Nine Cell Matrix for Business Segments



Alphabet's Diversified Business

Related Business Score = 7.5 to 7.8

Unrelated Business Score = 4.6 to 4.8

Related and Unrelated Business = 6.0 to 6.5

Alphabet's Strategic Fit

	Value Chain Activities						
	Research & Development	Suppliers	Branding	Customer Service	Technology	Marketing, Sales and Advertising	Talented Human Resource and Intellectual Property
	Core Business						
Google Search	✓	✓	✓	✓	✓	✓	✓
	Diversified - Related Business						
Google Tools & Web Applications	✓	✓	✓	✓	✓	✓	✓
Google Mobile Applications	✓	✓	✓	✓	✓	✓	✓
	Diversified- Unrelated Business						
Calico & Verily	✓	✓	✓	✓	✓	✓	✓
Google Fiber	✓	✓	✓	✓	✓	✓	✓
Nest	✓	✓	✓	✓	✓	✓	✓
	Diversified- Related & Unreal Business						
Google X	✓	✓	✓	✓	✓	✓	✓
Venture Capitalist	✓	✓	✓	✓	✓	✓	✓
Google Capital	✓	✓	✓	✓	✓	✓	✓
Results	Strategic Fit to Economies of Scope	Strategic Fit to Economies of Scope	Strategic Fit to Competitive Advantage	Strategic Fit to Economies of Scope	Strategic Fit to Competitive Advantage	Strategic Fit to Economies of Scope	Strategic Fit to Competitive Advantage
	Since GOOG has very strong R&D we believe that X's R&D acts as a primary support to all the divisions. Especially other bets. It is a right strategic fit and since the R&D capability can be transferred to other business at lower cost we conclude it as Economies of Scope	GOOG has overall 117 suppliers and 32 of the suppliers are in IT services and Internet software service. The break down of the suppliers are taken from Facset. There are other group of suppliers that we believe overlap across the company. Especially the suppliers from other bets are being supported from Diversified suppliers who fall under both category.	Branding of GOOG has a strong presence. Alphabet's portfolio has a strong brand awareness and Google's brand name acts as a Goodwill and we believe that this again is a right Strategic Fit to Competitive Advantage.	Customer Service department of GOOG although has to deal with different technical problems. We assume that Google X, venture Capital and Capital customer services who specialize in raising capital and acquiring various companies searching for right fit supports other departments from time to time. More inside information about GOOG can change the analysis.	Technology remains one of the core competency of GOOG. GOOG dominated technology industry since its inception because of its ability to transfer the information and release various tools and products to enhance its business models. Google Fiber is a prime example of it. We see that GOOG has ability to transfer Technological innovative products or tools across Multiple divisions. A very strong Competitive Advantage.	Mkt, Sales and Advertising. Although these are different activities in supply chain. We believe that these activities increase brand awareness, loyalty and increase the brand equity of the GOOG. A very strong economies of Scope. We have seen that Alphabets Core business, related and unrelated or both uses similar platform to increase sales. Either they use internet or tie-ups with other brands. There is a perfect sync between these employees across the business segments.	Google has acquired almost 169 companies in past 15 years and we see that majority of them has to do with internet, blogs or advertising companies. They acquire it because it poses threat to the presence of Google+ They acquired many small start up firms so as to fill the knowledge gap. They used those talented employees across all the departments because they would either find a new trend or find out emerging markets or found a way to increase sales for the GOOG.

Benefits and Drawbacks of Alphabet's Diversified Business

Benefits of Diversified Businesses of Alphabet.		Drawback of Diversified Businesses of Alphabet.	
Related Diversified Business	Related diversified business of GOOG helps not only to transfer the tangible resources and capabilities, but also intangible ones. We see that there is a perfect synergies between the core competence of the Google with the Related businesses such as Google tools & Web application and Google Mobile Applications. Their resources and capabilities are shared across the value chain. They have a common brand name and even engage in creating emergent ideas when they face new threat in the business as well as non business environment.	Related Diversified Business	At present, even if we see that related business is a perfect strategic fit and it achieves economies of scope with the help of the resources and capabilities mentioned in VRI analysis. We believe that Related diversified business has many overlap in the value chain. Whenever there is more overlaps in in value chain managers is bound to confuse amongst generic resources and idiosyncratic resources. This will create complexity in decision making process. For example: Google Intranet and Internet both generate substantial revenue for Google segment. If care is not taken management can conclude that Google Intranet is solely responsible for generating revenue whereas we know it is not the case. Companies prefer to choose Intranet Services because it has an ability to Integrate with the Internet and use the search function for a particular company. Likewise, management can believe that Google X can handle all the R&D because it has done it in the past.
Unrelated Diversified Business	Unrelated diversified business of Google segemnt helps to achieve the targets of the Alphabet. Alphabet may have serveral long term goals and short term goals. We see that if not all, majority of its resources and capabilities are shared across the value chain. Under big brand name of Alphabet these small divisions such as Google Fiber, Calico, Verily, Nest have started to gain a momentum. As per the latest newsGoogle Fiber was able to contribute more than 108% more revenue that last quarter to other bets segments. Other bets segements also known as Unrelated diversified buisnesses is small relative to market size but with the R&D capabilities things can change within 10 years time. They have a common brand name and collabrative efforts helps Alphabet to acheive its overall goal to sustain its Competitive Advantage in Technology Services.	Unrelated Diversified Business	Unrelated diversified business of Google segemnt might possess lack of knowledge about their firm's business. Although Calico and Verily are both into different lines of business they both fall under Healthcare. In long run these demarcations can fade and this can be a challenge to GOOG and its management. Investors prefer to invest in a company that has less diversification in unrelated business. Companies can easily hide the losses from one segment and transfer to another. For example: GOOG advertising expense and R&D expenses can be moved from one department to another and investors may not be able to understand these malpractices.
Releated and Unrelated Div Business	we categorize these divisions Google X, Venture Capital and Google Capital as Related and Unrelated Diversified business because these divisions act as a new source of Income, R&D capabilities or acquire new business if a new emerging target company is idetified. Apart from common value chain, sharing ideas, R&D and brand name, these divisions adds value to Alphabets by advising how to perform maximum utilization of its assets and create efficient functional unit and in turn generate profits for the GOOG. Google X has the capability and resources to bring unheard idea into reality but they do this by analyzing the right strategic fit. In the begining of this year Googel X announced mutiple projects such as driverless cars, new farming projects to remove undernourishments and it seemed to be practical at that time, however in 2016, it dropped 100's of its projects because its marginal costs exceeded its marginal benefits. They have no other option but to think in terms of delivering value to its investors and a company overall. They do enter new markets with the help of Google Capital and Venture Capitalists while bringing in new resources and capabilities but if they cannot sustain that new business they make a right decision to drop that completely from its portfolio.	Releated and Unrelated Diversified Business	Major drawbacks of being in both the business segment is that causal relation between demand and supply for one business unit can be confused with another business units. Confused demand and supply leads to confuse in resource allocation. Interelated resources and capabilities adds fire to the fuel in decision making. Investors will stay away from investing in this kind of companies because they are unable to understand complex relationships amongst various divisions.

Alphabet's Present Scenario

- At present, GOOG is a very strong value creator for its shareholders. Economic value added proves that GOOG has been a value creator for its shareholder since FY 2008 (refer EVA for GOOG on slide C.)
- GOOG diversification score of 7.8, 4.8, and 6.5 in related, unrelated and both business is considered good when plotted against industry attractiveness score (9 Cell Matrix). It is to be noted that Information technology Industry will not performing good when US enters Late phase of the business cycle. However, based on the value chain, business unit strengths we believe that GOOG will do better than its competitors and will sustain its Competitive Advantages in this segment. Some of the industries are cyclical and some are non- cyclical. GOOG main industry falls under non-cyclical. Based on the RRG graphs we predict that IT services will be improving when US is in the Late Phase. We see some downward pressure but GOOG will be able to outperform its competitors based on its resource and capabilities. Overall, healthcare industry has been the best in United states. United states alone spends approximately 17% of its Gross Domestic Product (GDP) in healthcare Industry and it is expected to spend 17.8% of it GDP by FY2018.(Source: Deloitte 2015 healthcare outlook). As R&D capability of Calico and Verily is increasing at steady pace, we believe that other bets will contribute more towards overall Alphabets revenue segment by 2019. Google Shopping and Wallet business has been not performing well because it faces stiff competition from Amazon, eBay and other commerce stores. Although, the retail segment is not performing well as expected GOOG has not released any data so we are unable to predict this segment appropriately. Retail segment is cyclical in nature. Google will have to take benefit of seasonal opportunities and come up with some marketing strategies to attract and retain customers in its e-commerce segment.
- GOOGL has acquired almost 169 companies since FY2006. Google relies on Equity as well as Debt to finance its deals and we have seen that GOOG has consistently borrowed money since FY 2006 (source:10K)
- Google segment stands out a clear winner in Technology sector. But it makes sense to diversify into emerging markets because the core business has been relatively risky. Google tried to enter Chinese market and faced stiff competition. This could happen in other segments too if they stop adding services. Google has taken a proactive approach to increase its services every year. For example, google is planning to release 360 degree video streaming on Youtube. As quoted on Google site “ our goal is to make it as easy as possible for you to find the information you need and get the things you need to do done.”

Recommendations

- Prioritize short-term goals and long-term goals at each phase of business cycle. Have a dynamic strategic plan and exit strategy ready.
- Long-run: Invest more towards a business that is stable. Investing in Healthcare industry looks a right fit in the long run. Alphabet is too much dependent on IT service and Advertising. Other bets especially Verily and Calico seems to to have a very high potential to be a cash cow (refer 9 Cell Matrix). We suggest that GOOG should acquire few more talents if required in HCO industry, check for the synergies as mentioned in Slide B (M&A viewpoints). A potential target company would be companies like PacificBio sciences who is a startup but has resources that might be a strategic fit. Leverage its strong brand name and have tie-ups with major research centers such as Mayo Clinic. Building an ecosystem with the help of Google Fiber is a good strategy that GOOG is working upon. These effective and proactive steps and decision making will help GOOG to sustain its Competitive Advantage and establish Comparative Parity in Other bets in 10 years time.
- Short-run continue to add new features for Google segments and add some surprise elements for consumers during christmas on Google Wallet and Google Shopping has some potential to generate more sales during festival seasons.