Usage =

Images... Increasingly Relevant Way to Communicate

40K Years Ago =

Oldest Known Image... Painting, Indonesia



5K Years Ago =

Oldest Known Text... Cuneiform, Mesopotamia



131 Years Ago =

Oldest Known Moving Image... Video, United Kingdom



For Centuries...

People Have Learned to Write & Share Words...

Offline & One-to-One / Some...

Communication via Text (+ Numbers) = **Foundational**

Makes Ideas Transportable...

Martin Luther's 95 Theses (1500s)

- AMORE ET STVDIO ELVCIDANDAE ucritatis hac fubferipta difputabuné Vuittenberga; Præfidète R, P, Martino Luther, Artifi & S. Theologiæ Magiftro, eiuf-demgt hidem lectore Ordinatio. Quare petit ut qui non pol-funt ucrbis præfentes nobifcum difeeptare, agant til literis ab-fentes. In nomine domini noftri lefu Chrifti, Amen. Omínus & Magilter nofter lefus Chriffus, di cendo pœnitentiã agite & c. omnem uitam fi delium poenitentiam effe uoluit. Quod uerbii pornitentia de pornitentia facra/ mentali(.i. confellionis & fatiffactionis quæ facerdotum minifterio celebratur) non por Non tamen folă întédit interiore: immo interior nulla eft, nifi 111 foris operetur ttarias carnis mortificationes. Manet itacp poena donec manet odium fui(.i. poenitentia uera intus) feilicet ufg: ad introitum regni celorum. Papa non uult nec poteft, ullas poenas remittere; præter eas, quas arbitrio uel fuo uel canonum impofuit. Papa no potelt remittere ullam culpă, nifi declarădo & appro vi. bando remiffam a deo. Aut certe remittédo cafus referuatos fibi, quibus conteptis culpa proflus remaneret. Nulli prorfus remittit deus culpam, quin fimul eum fubijeiat humiliatum in omnibus facerdoti fuo uicario. vn Canones pernitentiales folu uiuentibus funt impoliti: nihiles vin morituris, fecunda eoldem debet imponi. Inde bene nobis facit fpirituffanctus in Papa: excipiedo in fu ix is decretis femper articulum mortis & necefficatis. Indocte & male faciút facerdotes ij, qui morituris poenitétias canonicas in purgatorium referuant. Zizania IIIa de mutanda poena Canonica in poenă purgato-rij, uidentur cette dormientibus Epifcopis feminata. Olim poenz canonicze no polt, fed ante abfolutionem impo-nebantur, tanĝi tentamenta uterz contridonis. xi

....Simplifies Concepts...

Robert Recorde's invention of '=' (1500s)

(mailede formes, beloze you procede any farther, Ann again, if gour endine be foche, that the greatering benautination Combe, be follow to any parts of a compounde nonfort, you thall courset fo, that the nomber of the greatetic figue alone, mate fante as conalle to the reffe.

And this is all that neadeth to be tangute , convernyng this wootke.

Boundeit, los eafic alteratio of equation. I will pas-pounde a felos eraples, bicaule the cetranion of their rootes, mate the more aprily bee wroughte. And to as uoibe the tentonte repetition of thele loosibes : is es qualle to : I will ferte as I doe often in wooshe ble, a paire of paralleles. 02 Ocurotae lines of one lengthe. thus:------, bicaule not. 2. thynges, can be moare equalle. And nain marke thefe nomberg.

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- 2.
- 1929-----I05---+-I089--19**%**,
- <u>+--24,9. → 8,7 +--2,2</u>, 5+
- 6
- In the first there appeareth. 2 . nombers , that is Ŀ 14.20.

... Enables Learning

Modern 'Public' **Primary Schools** (1800s – Present)





....For Two Decades...

People Ramping Image + Video Creation / Sharing...

Online & Often One-to-Many

Image Creation = Foundations Continue to Ramp



Smartphone / Camera Base...

...Smartphone Power...



...WiFi Reach



....Cellular Data Use...



BOND Internet Trend 2019

urce: Smartphone Installed Base Per Morgan Stanley (3/19). iPhone Power / Storage Per. GeekBench Browser, Apple. Note: Geekbench is a multi-platform benchmarking tool intended compare the power of computer processors across generation, platform & workload. Maximum storage refers to largest storage capacity offered, as advertised. WiFi Data = WiGLE.net of 5/29/18. Note: WiGLE.net is a submission-based catalog of wireless networks that has collected >6B data points since launch in 2001. Submissions are not paired with actual people, rather name / password identities which people use to associate their data. Ericsson Q4:18 Mobility Report.

Image Sharing = Foundations Continue to Ramp

Image Creation



Image Sharing





Image Creation + Sharing = Engagement Continues to Ramp...

Twitter (2006) = Text-Only

Lwitter Jack					
We're making things bette	er.				
about 9 hours ago from web					
	With Friends (24h)	Previous			
Google Maps on my blackberry has complete s about 13 hours ago from im	treet maps for Venice, I	italy; wow.			

Twitter (2019) = Text + Images + Video



>50% of Tweet Impressions = Images / Video / Other Media

...Image Creation + Sharing = Platform Functionality + Usage Continues to Ramp...

Instagram Image Sharing Enhancement Evolution



...Image Creation + Sharing = Platform Functionality + Usage Continues to Ramp

Pinterest Image Sharing Enhancement Evolution



Image-Based Communication = Enabled by Computer Vision + Artificial Intelligence

Google Lens + AR Image Analysis / Communication Evolution



People =

Increasingly Telling Stories via Edited Images / Videos

Edited Images = Growing Rapidly

Snap Lens Studio

User Generated / Custom Augmented Reality



Snap Community Lens Views



Image-Based Design Fluency + Story-Telling =

Increasingly Self-Taught + Collaborative... Still Early Innings

Design Fluency + Story-Telling (Canva) = Simple / Collaborative / Feedback-Driven Design

Choose Template

Publish Anywhere

	Share	¢	Present	^
Q	How would you lik	e to pi	ublish?	
¢	Presentation		SUGGES	TED
$\underline{\downarrow}$	Download			
0	Website			
•	Microsoft PowerP	oint		
	Email			
	Embed			
€0	Animation			
C	Profile			
#	Slack			
-	Linkadla profile			



Collaborate in Teams



Customize Design



People have always been visual – our brains are wired for images. Writing was a hack, a detour. Pictorial languages are how we all started to communicate – we are coming full circle.

We are reverting to what is most natural. Instagram has always been a communication platform, not an image sharing tool.

Instagram challenges the notion that beauty comes in a traditional, artsy form... it's not about beauty, it's about the story you tell.

Instagram's inherent feedback systems help users continuously improve communication skills.

Kevin Systrom – Instagram Co-Founder, 5/19

Picture or 1,000 Words?



Mallard Duckling making a running leap into the water from the rock ledge at Argyle Lake, Babylon, Long Island. Mallard ducks are the most common & recognizable wild ducks in the Northern Hemisphere. They spend most of their time near natural bodies of water (ponds, marshes, streams, & lakes) where they feed on plants, invertebrates, fish, and insects. Mallards are dabbling, or surface-feeding, ducks because they eat by tipping underwater for food-head down, feet and tail in the air-rather than diving. Mallards also forage and graze for food on land. The male mallard duck, called a drake, sports a glossy green head, a white ring around its neck and a rich, chestnut-brown breast. The mallard duck's outer feathers are waterproof, because of an oil that's secreted from a gland near the tail. Soon after birth, baby ducks, called ducklings, open their eyes. A little more than a day after hatching, ducklings can run, swim, and forage for food on their own. They stay in the nest for less than a month. A group of ducklings is called a brood. Outside the nest, the brood sticks close by the mother for safety, often following behind her in a neat, single-file line. Mallard Duckling making a running leap into the water from the rock ledge at Argyle Lake, Babylon, Long Island. Mallard ducks are the most common & recognizable wild ducks in the Northern Hemisphere. They spend most of their time near natural bodies of water (ponds, marshes, streams, & lakes) where they feed on plants, invertebrates, fish, and insects. Mallards are dabbling, or surface-feeding, ducks because they eat by tipping underwater for food-head down, feet and tail in the airrather than diving. Mallards also forage and graze for food on land. The male mallard duck, called a drake, sports a glossy green head, a white ring around its neck and a rich, chestnut-brown breast. 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