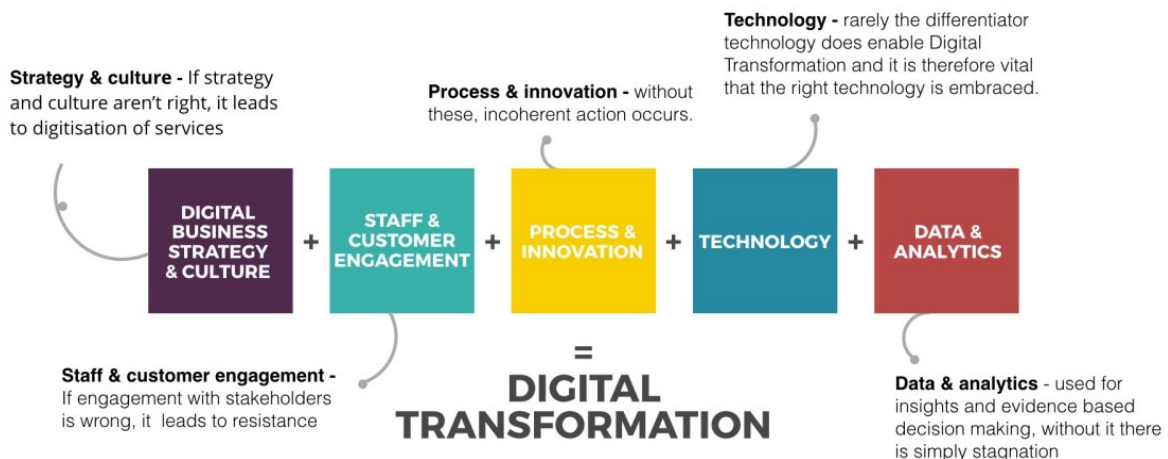# The Contemporary Digital Revolution

The Digital Revolution refers to the advancement of technology from analog electronic and mechanical devices to the digital technology available today. The era started to during the 1980s and is ongoing. The Digital Revolution also marks the beginning of the Information Era.

- The Digital Revolution is sometimes also called the Third Industrial Revolution.
- Also called the third industrial revolution, it is the era of digital electronic equipment that started around the 1980s and is still continuing.
- The widespread diffusion of telecommunications and computer technology that is creating entirely new ways of working and socializing as well as challenging, and even destroying, many others.
- It is the change from analog, mechanical, and electronic technology to digital technology. Learn more in: Creation of an Instrument to Measure Website Effectiveness Using the Analytic Hierarchy Process (AHP)
- An expression used to denote the extraordinary transition in media, communications, devices (and ultimately economics and society), from an analogue form (i.e., continuous, linear signals representing information) to a form expressed in discrete digits (actually: bits). This started in the early 1980s.

The development and advancement of digital technologies started with one fundamental idea: The Internet. Here is a brief timeline of how the Digital Revolution progressed:

- **1947-1979** – The transistor, which was introduced in 1947, paved the way for the development of advanced digital computers. The government, military and other organizations made use of computer systems during the 1950s and 1960s. This research eventually led to the creation of the World Wide Web.

- **1980s** – The computer became a familiar machine and by the end of the decade, being able to use one became a necessity for many jobs. The first cell phone was also introduced during this decade.
- **1990s – By 1992**, the World Wide Web had been introduced, and by 1996 the Internet became a normal part of most business operations. By the late 1990s, the Internet became a part of everyday life for almost half of the American population.
- **2000s** – By this decade, the Digital Revolution had begun to spread all over the developing world; mobile phones were commonly seen, the number of Internet users continued to grow, and the television started to transition from using analog to digital signals.
- **2010 and beyond** – By this decade, Internet makes up more than 25 percent of the world's population. Mobile communication has also become very important, as nearly 70 percent of the world's population owns a mobile phone. The connection between Internet websites and mobile gadgets has become a standard in communication. It is predicted that by 2015, the innovation of tablet computers will far surpass personal computers with the use of the Internet and the promise of cloud computing services. This will allow users to consume media and use business applications on their mobile devices, applications that would otherwise be too much for such devices to handle.

Digital Transformation Framework

The world is undergoing a digital transformation. For example, there will soon be over a billion smartphones, impacting all aspects of organizations' value chains, commerce, and customer and supplier engagement processes. This transformation will result in an explosion in digital data and more importantly, usable insight.

And the smartphone isn't the only digital technology driving business transformation. Other technologies like sensors, beacons, scanners, RFID (radio frequency identification), NFC (near field communications), GPS (global positioning systems), Bluetooth, web clicks, social media postings, digital newsfeeds, smart watches, fitness bands, video surveillance, drones, robotics, etc. are all contributing to the digitalization of our physical world.

Framing The Digital Business Transformation Discuss

Digital business transformation accelerates, communications, and improves coordination across an organization's value chain (design, procurement, inventory, manufacturing, shipping, marketing, sales, support) yielding massive amounts of detailed data about individual customer, product, and operational, usage, performance and current state data, that can be converted into new digital intellectual assets (curated data, analytic models, real-time scores, behavioral profiles, edge analytics).

However, the more important digital business transformation opportunities lie in the "make money" aspects of the business transformation. Here is where organizations can have a game-changing impact on their value creation processes through the superior insights gleaned about the organization's customers, products, operations, partners, channels and markets. These game-changing impacts manifest themselves in three ways:

1. **Optimize key value chain processes.** Exploit superior customer, product and operational insights to not just improve existing business processes but to actually change or re-tool the entire process.
2. **Uncover new monetization opportunities.** Leverage superior customer, product and operational insights to identify "white spaces" or under-served, un-served or un-met market that yield new monetization opportunities (e.g., new products, new services, new partners, new channels).
3. **Create a more compelling, more prescriptive customer experience.** Leverage an understanding of an individual customer's tendencies, preferences, behaviors, propensities, trends, interests, passions, associations and affiliations to provide a more rewarding customer and partner experience.

Security Issue with Digital Marketing

Digital marketing required an investment of time and also effort. To make the digital marketing success, various things have to be done such as conducting marketing research, identifying the target audience, etc. A good strategy is required for the success of digital marketing. How to reach the success strategy of Digital Marketing through Cyber Security Challenges?

Content marketing, email marketing, social media marketing extra are included in the comprehensive strategy. Apart from this, there is one more thing which is very important, and this is the **cybersecurity.** Neglecting **cybersecurity** can harm both for the business and the customers.

The digital world is ever growing, and there are many challenges that digital marketers have to face. To remain competitive businesses are entering the digital world.

There are numerous types of cybersecurity challenges they have suffered such as phishing attacks, malware, and identity theft. These can affect the growth of the business and the profits.

Businesses must understand the risks and security challenges of digital marketing because there is sensitive information such as customer data is involved in this.

Content marketing

- Content marketing is the most popular method of digital marketing for many businesses. This type of marketing helps in attracting and retaining the audiences. It delivers valuable information to the customers.
- This type of marketing is also vulnerable to cybers security challenges. Content Management Systems such as WordPress make managing the content marketing more comfortable, but hackers are familiar with the functions of the WordPress and easily hack the site to distribute malware.
- Integrating security features is thus crucial. A strong password must be used, and void is accessing the CMS from public networks.
- Whatever CMS platforms are used, integrate the security features and install plug-ins and another important thing required is to update them regularly to keep off vulnerabilities.

Email marketing

- Email marketing is one of the powerful and traditional methods of digital marketing. There is a risk of phishing attacks in email marketing.
- Phishing scams nowadays are more sophisticated, and small businesses are the main target as there are unaware of the web security challenges.

- Hackers can use the email accounts of the companies to send spam. These can be virus infected emails. If this continues to happen servers can black-list and bloc the site which will affect the email campaign.
- Customers might abandon the business to avoid any risks which will affect the reputation of the business.
- To avoid email security challenges, businesses must make sure that the ISPs are up to date.
- Use software to monitor the email marketing campaigns. This help ensures that the emails are encrypted, and there is no risk of attacks.
- Set up outbound filters to prevent emails with hidden malware. Train the employees to spot and deal with email issues.
- Include the email systems in network security audit.

E-commerce

- The risk of security challenges is high in e-commerce for digital marketers. This can limit the conversions and affect the digital growth. Consumers fear the financial frauds and security flaws when using online shopping sites.
- For any marketing strategy, customer acquisition and retention are essential. Thus security strategy approaches to handle the fears of customers regarding the transactional process are very important for the businesses online.
- Online businesses must use security Sockets Layer protocols and two-factor authentication process. Take all the precautions to provide a safe and secure payment method for the customers.
- Make sure that hackers cannot steal the bank and card details of the customers. A single instance of fraud on the site can affect the brand reputation of the brand.

Social Media Marketing

- Social Media is another area that requires vigilance. Most data breaches occur here due to poor passwords, unauthorized downloads, etc. Businesses should not share information carelessly on social media as this can invite hackers.
- The hackers can spread malicious posts or spam messages if they hijack the social media accounts of the businesses. This can spoil the reputation of the business.
- Marketing teams must ensure that very strong passwords are used, and strict privacy settings are implemented. It is essential to monitor the social media activity continuously.
- They must understand the security risks with the usage of social platforms and take the necessary steps to lower the security challenges. Cybersecurity issues can be prevented if strong passwords with at least 12 characters that include symbols, numbers and capital letter are used.
- Be aware of brandjacking, which means accessing the media accounts of brands and post content that harms the brand images. Use social media monitor tools to track brand mentions and spot suspicious behavior.
- Apart from these, a customer also can cheat the businesses. Detection should be the first step to prevent fraud.

- Have first validation script in the site to check whether the phone number, zip code and other information provided by the customers are matching or not.
- Review the login activity of the customers. Check from where leads are coming. If they are from the same IP address, it could be fraud.

Conclusion

Sophisticated software to crawl internet is available with the hackers which they use for stealing information and create problems for the business as well as the customers. Businesses must take care that their payment systems, platforms, and their social media pages are safeguarded. Continuous monitoring of the sites is a must. Security measures need to be integrated for all the digital marketing campaigns. Not just monitoring the activity, the security systems must not ensure data protection.

Privatization issues in digital marketing

Privatization issues in digital marketing arise when private companies and organizations gain control over user data and online platforms, creating concerns around privacy, competition, and accountability. Here are some common privatization issues in digital marketing:

1. Monopolization of user data: Large tech companies that control online platforms and user data can dominate the digital advertising market, limiting competition and reducing choices for advertisers and consumers.

2. Limited user privacy: Digital marketing relies heavily on user data to target advertising, but there are concerns around how user data is collected, used, and shared by private companies, especially in the absence of clear privacy regulations.

3. Unequal access to advertising tools: Privatization can lead to unequal access to digital advertising tools and platforms, as smaller businesses may not have the resources to compete with larger companies that can afford to invest in sophisticated ad tech.

4. Misleading advertising practices: Digital marketing makes it easy for advertisers to manipulate and deceive consumers with misleading ads, often disguised as native content, which raises questions about accountability and transparency.

5. Negative impact on local media: Privatization of digital advertising can have a negative impact on local media outlets, which rely on advertising revenue to stay afloat. As more ad dollars flow to digital platforms, local media may struggle to compete, leading to reduced coverage of local news and events.

To address these issues, there is a need for regulatory frameworks that protect user privacy, promote competition, and ensure accountability in digital advertising. Businesses should also be transparent about how they use and protect user data, and invest in ethical digital marketing practices that prioritize user trust and engagement.

Trends in Digital Marketing Indian Context

Digital Marketing is a part of a Digital Economy. India is a fast moving nation towards digital economy and this movement has been accelerated with the demonetization of the Indian Currency in the last quarter of year 2016.With it various government digital payment promotion schemes has been launched.

Digital market requires digital promotion and marketing strategies. The telecom sector is also playing an important role in the digitalization movement. Recent launch of reliance telecom Jio with the free & unlimited internet facilities has played a revolutionary roll. The other prominent companies like Airtel, Idea, Vodaphone & BSNL are also offering attractive internet plans. Indian banks are also providing more customers friendly & secure money transaction services.

Now Indian consumer is spending more time on social media and internet surfing. Thus the visibility of any product is more through digital medium than traditional marketing techniques. Digital marketing techniques includes **Content Marketing, Marketing Automation, AdWords, SEO, Social Media, Email Marketing and Website Design.** The key players role players and infrastructure providers in Digitization of an Economy are government, banking system, Shopping Portal in India, Internet Service Providers and Software Service Providers.

Digital Marketing is the term most frequently used today, so that is the term we focus on. In simple words we define digital marketing is "Achieving marketing objectives through applying digital technologies and media". So, digital marketing is about utilising digital technology to achieve marketing objectives. There is no essential need for digital marketing to always be separate from the marketing department as a whole, as the objectives of both are the same. However for now it remains a useful term because digital marketing requires a certain skill set to utilise the digital technology effectively. As the recent Developing Digital Skills 2015 report showed, many marketers are now spending > 50% of their time on digital marketing activities and two of the three top job roles in marketing are digital, so clearly digital skills are needed for the marketers & managers.

Effective Ways of Digital Marketing In order to achieve success one suppose to move in the following manner   Plan – Create a structured plan and roadmap by reviewing your current weaknesses and the opportunities to boost online leads and sales.   Manage – Review your marketing activities, so that you know where to focus to get the Quick Wins which will make the biggest difference   Optimise – Learn the best practices and success factors to help you compete to get better results

It is no exaggeration that you live in a digital world and from that perspective it is imperative that your business has an impressive presence in the digital space.In essence, digital marketing is the future of marketing in the world with the added advantages that it

is cheaper than traditional marketing and is measurable. Let"s list the different ways you can use the digital medium to popularize and drive conversions for any startup or business.

EMERGING TRENDS IN DIGITAL MARKETING IN INDIA

(a) Search Engine Optimization (SEO)

In layman"s terms, Search Engine Optimization or SEO is essentially tweaking your website so that it comes up naturally or organically for search results in Google, Yahoo Bing or any other search engine. Google updates its algorithms regularly so that only the relevant results come up. From that perspective, many experts say that SEO is dead and the effort is futile.

(b) Search Engine Marketing (SEM)

Search Engine Marketing or SEM is the comprehensive strategy to drive traffic to your business, primarily through paid efforts. Hence it is also called Paid Search Marketing. The universe of SEM is diverse and complicated. Based on your business structure, you may choose PPC (pay-per-click) or CPC (cost-per-click) model, or CPM (cost-per-thousand impressions) model. There are different platforms for SEM. By far, Google AdWords (on Google Network) and Bing Ads (on Yahoo Bing Network) are the most popular.

(c) Content Creation

Content can be presented in different formats, including blogs, white papers, e-books, case studies, how-to guides, question and answer articles, forums, news and updates, images, banners, infographics, podcasts, webinars, videos, or content for microblogging and social media sites. All recent changes to Google"s algorithm – be it Panda, Penguin or Hummingbird – point to the fact that content is the most important metric while filtering search results.

(d) Social Media Marketing (SMM)

Social Media Marketing or SMM is an offshoot of your SEM efforts. It involves driving traffic to your sites or business through social sites like Facebook, Instagram, Twitter, Pinterest, Google+, Linkedin, etc. As we mentioned above, good content is shared and liked.So create and customize content for different social media platforms. Remember to be prolific and original; you need to engage with users on a daily basis, at least four to five times a day. Your SMM efforts can be especially helpful for branding and driving sales.

(e) Digital Display Advertising

This again is a subset of your SEM efforts. You may use a variety of display advertising formats to target potential audience – be it text, image, banner, rich-media, interactive or video ads. You can customize your message based on interests, content topics, or the

position of the customer in the buying cycle.

(f) Retargeting and Remarketing

Essentially, Retargeting or Remarketing is a strategy to target customers who have already visited your website. It is based on cookie technology. Retargeting has emerged as a preferred strategy as you target customers who have already shown interest in your business; and hence the conversion rate is high.

(g) Mobile Marketing

The website, apps and content is being customized for mobile devices. The mobile users are growing day by day and it is the most effective way of marketing.

(h) Interactive Marketing

Make sure your advertising strategy engages the potential customer in a conversation. According to a survey by ExpoTV.com, 55 percent respondents preferred to have ongoing communications with the companies they buy from; and 89 percent felt more loyal to the companies if they were invited to provide feedback.

(i) Viral Marketing

Viral Marketing is a strategy where a unique content spreads exponentially online, because the content is appreciated, shared and liked immensely. This is a great way to brand and drive traffic to your website. The content can take any format; all you need is to be creative.

(j) Email Marketing

When you send a commercial message through email to a list of potential customers, the strategy is called Email Marketing. With an effective email marketing software, you can maintain email lists that are segregated based on several factors, including customers" likes and dislikes, and spending habits. Remember to send personalized emails; this helps to develop trust.

(k) Digital Media Planning and Buying

When a media agency researches and makes a comprehensive strategy framework, we call it Digital Media Planning. Be it in driving sales or conversions, launching a new brand or promoting an established brand, or changing customer behaviour, the media agency plans different platforms and formats to reach the desired audience. It studies reach and frequency of different web-based and mobile applications. The agency works with different partners and buys relevant space and ideas. This is called Media Buying. In essence, Media Buying and Planning entails all the strategies that we have discussed above.

Trends in Digital Marketing: Global Context

2018 may be the year your company finally goes global—or takes your activities to new markets. While global expansion has the potential to dramatically boost your profits, it also puts pressure on your marketing team to perform. Luckily, a host of products, services, and best practices are making it easier to win market share in new markets everywhere.

1. **Data privacy is here to stay**

It is clear consumers are well aware of their rights when it comes to proper data collection and usage. What's also clear is the arrival of GDPR in Europe in May 2018, as well as other data privacy acts being implemented and overhauled around the world, are just the beginning of further consumer data crackdown.

In fact, in its recent report, the ACCC flagged changed to the Privacy Act, which could end up looking like a local GDPR.

As a result, Australian businesses are going to have to get a lot more agile and transparent in the way they collect, store and use customer data. Even if data is used for consumer benefit, a privacy breach will see consumers move elsewhere. As Facebook and Cambridge Analytical demonstrated this year, a company is only one data breach away from disaster, and no company, no matter how big, can afford this in a consumer-driven environment.

2. **Customer capital is the new currency**

Marketers have known for a while now that the customer must be central to every decision made within a business, meaning brands have been working for consumers. In, 2019, industry pundits expect to see the consumer working for brands as well.

For Calvert, customer capital is the new currency. "2019 will be the year brands leverage their social capital with consumers to help drive sales, answer questions, and act on the brand's behalf in times of crisis," she said.

"Digital social capital is a way for a brand to understand the value of its online social networks. Just as greater amounts of economic capital can lead to more opportunities, higher amounts of social capital can lead to a more significant impact on a brand's audience.

3. **Inclusive creative and design**

Rising concerns around inequality, unconscious bias, and stereotyping in society, and the perpetuation of all three via marketing and creative, has never been more apparent. According to J. Walter Thompson Intelligence, inclusive design is the resulting trend, and

an essential step to ensuring creative is designed without insidious bias against groups of consumers.

4. The rise of voice

Recent reports show the local adoption of voice activated devices and smart speakers, like Google Home and Amazon Alexa, is outstripping the US and the UK. In fact, four million local consumers are predicted to use their smart speakers for shopping in 2019, according to Versa's The Voice Report 2019.

Brands not incorporating voice into their digital strategies will find themselves behind the pack in 2019.

"In light of launches such as Google Home and the Amazon Echo, which continue to grow over the festive season I'm sure, it's only a matter of time before voice will disrupt the digital marketing ecosystem as we know it," Quantcast head of marketing for Asia-Pacific, Rachael Townsley, said.

"With voice search on the up, I expect 2019 will see brands build this in to their media mix and address voice as part of their user experience. And for those in ecommerce, especially with Amazon entering the market, I expect voice ordering will push brands to focus on owning the customer in their homes.".

5. Marketing teams shift from specialism to consumerism

From content to creative, to customer experience, care, service and data analysis, the role of the CMO has undergone significant change in the last five years.

"The modern CMO understands the fundamental goal of marketing is to establish and grow authentic connections with your respective audiences," Infogroup CMO, Tony Marlow, said. "Data is a critical first step to understanding your audience and this has already given rise to the data-literate marketer.

6. Creative content is king

The consumer is demanding more bespoke content, when they want it, and on the channel of their choice. Gone are the days when the same content could be served across multiple channels without thought.

When it comes to the types of creative in-demand in 2019, video is a must-have.

"We live in a world of user generated content, there's more video content that ever before," Townsley said.

"Consumer attention has to be fought for and brands that use video that encourages engagement and excites their audience will win. With this in mind I expect we'll see higher emergence of short-form video. Video is a powerful medium that works. Hubspot

reported adding video to an email can boost click-throughs by 200-300 per cent and increase conversion rates by 80 per cent.

Online communities and co-creation

An online community, also called an internet community, is a virtual community whose members interact with each other primarily via the Internet. For many, online communities may feel like home, consisting of a "**family of invisible friends**". Those who wish to be a part of an online community usually have to become a member via a specific site and necessarily need an internet connection.

An online community can act as an information system where members can post, comment on discussions, give advice or collaborate. Commonly, people communicate through social networking sites, chat rooms, forums, e-mail lists and discussion boards. People may also join online communities through video games, blogs and virtual worlds.

4 types of online communities and the top benefits of each

In The Enterprise Guide to Online Communities, Tyler Douglas, chief sales and marketing officer at Vision Critical, identifies four different types of communities:

1. **Social communities** include public social networks like Facebook, Twitter and Instagram. Brands use social communities mostly for marketing purposes, broadcasting information, building brand awareness and reaching greater audiences for campaigns and messaging. Social communities are useful for tracking what your competitors are up to and identifying broad consumer trends. Ninety-three percent of large companies use Facebook, according to a 2015 Social Media Examiner report.
2. **Support communities** enable members to offer product tips to other customers, helping companies reduce customer support costs. Compared to social communities, this category provides a more structured way of gathering innovative ideas because support communities allow brands to track product- and service-related conversations. According to a 2015 Forrester Research report, 81 percent of companies have a support community of some kind.
3. **Advocate communities** allow brands to mobilize their most passionate, loyal customers. Also known as advocate marketing software, this community type often rewards members for writing a testimonial, posting about the company on social media and doing other similar activities. According to Laura Ramos, principal analyst at Forrester Research, branded customer communities of this type can help boost positive word of mouth.
4. **Insight communities** are made up of carefully selected groups of customers who maintain a long-term relationship with brands. These communities allow companies to gather continuous, high-quality feedback from engaged stakeholders like customers, partners or employees. Already a mainstream market research tool, this category is quickly finding its way in marketing, customer experience and innovation.

CO-CREATION

Co-creation is a management initiative, or form of economic strategy, that brings different parties together (for instance, a company and a group of customers), in order to jointly produce a mutually valued outcome. Co-creation brings a blend of ideas from direct customers or viewers (who are not the direct users of the product) which in turn creates new ideas to the organization.

Co-created value arises in the form of personalized, unique experiences for the customer (value-in-use) and ongoing revenue, learning and enhanced market performance drivers for the firm (loyalty, relationships, customer word of mouth). Value is co-created with customers if and when a customer is able to personalize his or her experience using a firm's product-service proposition – in the lifetime of its use – to a level that is best suited to get his or her job(s) or tasks done and which allows the firm to derive greater value from its product-service investment in the form of new knowledge, higher revenues/profitability and/or superior brand value/loyalty.

The process of Co-creation

The process of co-creation essentially involves 2 core steps:

- **Contribution:** Submission of contributions by the public to the firm
- **Selection:** Selection of the most promising and appealing contributions/submissions

Types of Co-creation

Depending on the degree of control exercised by the firm/public over the contribution and selection activities, co-creation may be broadly classified into 4 categories:

- **Tinkering:** Public exercises control over the contribution activity while the firm exercises control over the selection activity
- **Submitting:** Firm exercises complete control over both the activities
- **Co-designing:** Firm exercises control over the contribution activity while the public exercises control over the selection activity
- **Collaborating:** Public exercises complete control over both the activities