# DAM: An Agent for Change in Organization to Cope with Disruptive Technology, Shifting Consumer Needs and Expectations

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*Abstract: This paper emphasizes that DAM would help organizations respond to external changes in a dynamic environment and would promote internal changes in the organization. Firstly, from the organization's response to external changes, I would analyze the success and failure cases of organizations using a series of incremental and radical innovations to respond to changes in the external environment. And I would put forward the point of view that organizations need DAM to participate in change management in the context of the dynamic digital world. Secondly, in terms of internal changes in the organization, I would explain how DAM helps companies introduce technology, rethink business models, develop new workflows and processes, adjust structural changes and organizational culture, and promote better organization development. Finally, the focus of the discussion part is that for organizations that use DAM, although DAM may have agent power, the importance of individual agent power to the organization could not be ignored. At the same time, organizations also need to pay attention to the impact of identity, organizational identity, technological transformation, and the costs and risks the organization has to bear when introducing DAM strategies or departments.*

*Keywords: Digital Asset Management, Digital Disruption, Radical Innovation*

## 1. Introduction

Digital asset management (DAM) is a business strategy to increase revenues while reducing workflow and process cycle times. We are in a changing digital world. In this world, digital innovation and digital disruption would not only bring convenience to people's lives but also provide opportunities and challenges for organizations. When most organizations respond to disruptive technologies and changing consumer needs and expectations, they seem to adopt radical or incremental innovation strategies. However, the organizational change could not be separated from formulating the correct organizational strategy (Todnem, 2005) [1]. Firstly, 'in an organization, DAM plays a role as both a change agent and a technology always requiring change' (Horodyski, 2014) [2], which may involve how an effective DAM system could change the organization by implementing software and hardware technology. Secondly, by using a series of DAM functions to produce, store, distribute and reuse digital assets, entrepreneurs seem to be thinking about new business ideas and business models, developing new workflows and processes. Finally, Morgan and Brightman (2001) define change management as 'the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal stakeholders'. It may imply some critical components of change management, including structural changes, organizational cultural change, and how the organization meets the changing needs of stakeholders.

## 2. Digital disruption and its implications for organizations

Nowadays, the arrival of the fourth industrial revolution has achieved a fundamental shift from analog technology to digital technology (Schwab, 2017) [3]. In the past three decades before the digital age, people have changed a series of ways of living, working, and connecting. Simultaneously, for some organizations that are good at discovering and using technology, actively and effectively achieving technological breakthroughs in emerging fields such as artificial intelligence, robotics, biotechnology and quantum computing may bring them unlimited opportunities (Schwab, 2020) [4].

However, the emergence of new technologies may sometimes destroy organizations and companies

or even entire industry sectors, which may be caused mainly by digital disruption. Gans (2016) [5] defines 'disruption as what a firm faces when the choices that once drove a firm's success now become those that destroy its future,' which emphasizes that not all companies could successfully transition to the new technology system. It is worth mentioning that disruption events often occur when new product or new services opportunities appear on the market (Christensen, Michael and McDonald, 2013) [6]. Toys 'R' Us is likely to be an example of a large retail chain facing the catastrophic impact of introducing a new online retail business model represented by Amazon. It shows that after an organization has introduced fundamental technologies or some related fundamental innovations, this behavior would not only not solve its original problems, but the destructiveness of new technologies seems to become more apparent. The Austrian economist Peter Schumpeter (2000) [7] conceived this radical technological change's creativity and disruptive power as a wave of creative destruction. It shows that radical innovation may pose a real threat to the business model of existing organizations and have a significant impact on the market and the entire economy. On the other hand, whether it is product innovation or business model innovation, incremental innovation may pose more minor threat to the organization. As a leader in the digital camera industry, Fujifilm collects opinions from users and consumers and makes some changes in each iteration of the product accordingly, which reveals that Fujifilm seems to constantly respond to user needs to respond to changes in the external environment. Surprisingly, Fujifilm is also engaged in the drug development business. The drugs it develops have attracted many Chinese consumers during the COVID-19 pandemic. This action may be a practical incremental innovation because Fujifilm seems to meet the needs and expectations of its stakeholders. It is also trying to create various products to diversify the risks that the ever-changing external environment may bring to the organization. Additionally, some organizations seem to choose to keep walking on the original old technology road, but this would also make them blind to the objective evaluation of the new road (Dosi, 1983) [8], which may be ultimately abandoned by the market and users. For example, in 2000, Blockbuster eventually went bankrupt after rejecting the opportunity to acquire Netflix at a relatively low price of $50 million (Gans, 2016), which reveals that although technological change is unpredictable (Zuboff, 2019) [9], no matter how powerful an organization is, it could not ignore any potential competitor in the 'evolving digital world' (Greenfield, 2017) [10]. The failure of Blockbuster also seems to reflect that some organizations may rely on the existing huge market share and refuse to adopt innovations to resist possible digital disruption (Gans, 2016). Like the previous BlackBerry mobile devices, although they have accumulated a large group of 'niche markets' with trendy technologies (Gans, 2016), they were eventually replaced by the full-screen intelligent innovation technology by the iPhone (Gans, 2016). However, not all established companies are unable to transition to digital technology like Blockbuster. The British Broadcasting Corporation (BBC) provides a successful example of digital innovation. As one of the world's first traditional broadcasting organizations to develop a successful online video streaming platform, BBC has performed well in Doctor Who's innovative actions, such as using mobile phone mini-TV series and podcast commentary to adapt to technological change (Perryman, 2008) [11]. It may illustrate how established organizations could successfully adopt technological innovations early in their cycles to avoid the invasion of digital disruptive entrants as much as possible. Therefore, the impact of 'digital disruption' on the organization may be relative. Although unpredictable technological changes seem to deepen the damage to the organization's interests by digital destruction, the digital disruption would also promote organizations to take technological innovation actions to a certain extent. If the organization does not embrace digital disruption, it may be "disrupted" by new entrants in the industry; if the digital disruption is managed, the organization would have the ability to "disrupt" other entrants. However, I think it is worth mentioning that digitalization itself maybe just an opportunity. And only when the organizational culture, technology and business processes are willing to truly accept digitization and expect to take this opportunity to develop, an organization could indeed become an "iron man".

## 3. The need for DAM

The implicit meaning of disruptive technology may be to realize the transition from data scarcity to data richness or data accessibility, and this would require organizations to develop effective digital asset and media management strategies. Our lives are full of data, information, content and access rights, which is valid for organizations and even for us as individuals. User-generated content is increasingly vital in the data-driven ecosystem, and these enormous amounts of data need to be created, distributed, and used faster and faster. DAM may provide a method for it, which is defined as the 'management of digital media throughout its lifetime is the general domain of digital asset management' (Regli, 2016) [12]. DAM seems to be able to manage the digital assets formed by the data that many organizations now rely on to achieve their business or mission goals and could even survive

in the highly competitive and dynamic digital economy. However, if large organizations could not extract value from the data that generates nominal value, they would not run better. It may be essential in the context of digital asset and media management because the term digital asset refers to 'something represented in a digital form that has the intrinsic or acquired value' (Regli, 2016). Therefore, at some fundamental level, DAM could not only be seen as the implicit meaning or result of digital disruption but also could exist because of environmental requirements.

## 4. Implementing the DAM technology

The idea of DAM would serve as a response to the disruptive output of technology. Regli (2016) has demonstrated the DAM system architecture, including hardware and software. As a DAM data center, the hardware and its storage requirements may depend on the capacity, scale, and reliability requirements of the protected system, as well as the supplier's overall software architecture. Simultaneously, understanding the vendor's software architecture could determine the organization's hardware requirements and affect costs. Therefore, in an effective DAM system, hardware and software would work together to provide DAM services, including 'uploading, presenting, processing, storing, indexing, managing, searching, converting, protecting and delivering assets and metadata' (Regli, 2016). Through DAM, incremental technological change or incremental innovation based on existing technologies may allow organizations to respond to the external environment and external mechanisms effectively. For example, the traditional Berlin Philharmonic Orchestra are using digital technology to create and distribute rich media to respond effectively to external changes (Kavanagh, 2018) [13]. Although the amount of rich media may be huge, DAM technology could improve the overall creativity, production, storage, and distribution efficiency of an organization in rich media workflow (Regli, 2016). It is worth mentioning that the need for metadata is also worth considering in using DAM because metadata may be a prerequisite for finding rich media. However, most non-profit organizations may have various resource commitments and constraints, so they could not effectively use technology to respond to changes. For example, as one of the world's top music record companies, EMI failed to adopt appropriate technologies to adapt to the emergence of online music streaming media (Kavanagh, 2018). Therefore, the decline of EMI may attribute to its lack of online service technology. According to technological determinism, technology would determine society's structure and cultural value and change the consumer behavior of consumers and the role of audiences (Feenberg, 2011) [14]. It seems that DAM technology could be designed as an agent and give it the power to take action (Slack and Wise, 2007) [15], which would lead to changes in the organization to a certain extent. Agency may be a person or thing through which power is exerted or an end is achieved. Firstly, DAM technology could create new business and revenue opportunities by allowing organizations to enter new markets by selling digital products because they could produce and sell digital products faster than previously used methods. For example, organizations could introduce cloud computing-based systems provided by DAM to expand or reduce the size of their assets quickly. Secondly, the DAM system could provide a centralized and secure repository for digital assets to reduce money and time costs. For example, the public API launched by the Metropolitan Museum of Art allows the sharing of knowledge databases, which also means that DAM technology with powerful API capabilities would better empower enterprises (Tallon, 2018). Finally, some marketing organizations could use DAM technology to improve their brand and market competitiveness, which would allow marketing teams to use consistent brand trademarks better. As Monahan (2018) claimed, the DAM system could enable everyone in the organization to follow brand standards, promote constant communication, and enforce brand compliance, thereby proving the value of digitalization to the organization. Therefore, DAM technology could participate in organizational reform to respond to changes in the external environment and act as an agent within the organization to promote better development of the organization through its series of technical functions.

## 5. Rethinking business models

However, Goldstein (2016, p.6) claimed that DAM is not just a technology. Organizations should consider DAM as a transition from technology to the business model, which may require organizations to consider the importance of the digital assets lifecycle and focus on how to optimize asset management. The task of DAM management is to strengthen the inventory, control and distribution of rich media such as images, logos, and video marketing collateral (Horodyski, 2014). When organizations adopt DAM, they could save many labor costs by using the same trademark in marketing activities, direct mail and applications. Especially for some creative agencies, they could think about

setting up a profit model that levies fees on organizations that reuse, recall, or copy these assets. Therefore, DAM seems to enable organizations to support workflows and processes in new ways to improve business efficiency while also supporting innovation and possibly developing new business models. For example, DAM could help organizations transition from traditional marketing strategies to digital marketing. Most companies may follow consumer comments by opening comments on social channels such as Amazon retail platforms or YouTube, which seems to help organizations shape users in social interactions. Social media marketing could use DAM functions like storage and reuse to collect digital assets formed by user reviews so that organizations could measure consumer engagement, deepen their understanding of consumer needs and begin to meet these needs. It would help organizations increase brand awareness, generate new sales leads, and promote relationships with consumers or competitors, which shows that stakeholders may sometimes bring new business opportunities to organizations. Additionally, online advertising would also be a key feature of social media marketing. Unlike traditional marketing, this kind of digital marketing may involve the rapid production and distribution of content, which an effective DAM strategy could achieve. Social media marketing advertising may provide a clear example, Goldstein (2016) [16] claimed that US marketers' spending on mobile advertising has tripled from US$4.4 billion in 2012 to US$31.1 billion, of which search advertising accounts for about half of the total cost. Moreover, with the development of content and the sharp shrinkage of print volume, the marketing department may use DAM to produce better and distribute assets to control budget expenditures and change their original commercial marketing model that invested too much in advertising. In the long run, when the DAM investment is optimized, the organization may avoid the expensive digital asset cost in the early stage and make the value of the digital content more excellent. Due to the high value of assets, it is worth mentioning that it may be necessary for managers of marketing platforms to take new responsibilities for content management such as advertising. Therefore, in a constantly changing environment, organizations would use DAM to provide them with data strategies, market strategies and organizational policies, which may encourage organizations to change their business models. Furthermore, DAM could help organizations rethink new business models with its ability to produce, store, and distribute content, understand consumer behavior and the digital economy, and thereby promote changes in the organization's business model to a certain extent.

## 6. Developing new workflows and processes

Modern DAM systems seem to provide new ideas for marketing platforms to develop better content management methods. DAM may help some organizations, including marketing platforms, simplify reviewing content and ensuring that content complies with legal requirements. DAM could first implement some basic workflows such as content extraction, approval, archiving and then move to an automated process. When enhancing the functionality and automation of the workflow, DAM would review and revise its assets. More importantly, an efficient DAM workflow may make the work of the organization's employees easier and meet the needs of stakeholders who exist outside the organization. Through DAM, the organization would take time to understand and collect user requirements related to the work process from the beginning of the plan (Mcgovern, 2013, p.238) [17], and set up the work process of IT personnel or other systems accordingly. As Monahan (2018) [18] mentioned, DAM puts customers at the core of business strategy and creates a synergy that could lead to a better customer experience. At the same time, DAM may also simplify the organizational content development process through workflow, connecting the marketing team with creative agencies (Monahan, 2018). The implementation of data sharing on the Semantic Web seems to be a good example. Using DAM has implemented a new workflow for sharing and reusing data across application, enterprise, and community boundaries (Horodyski, 2014), which would help organizations establish core shared service infrastructure and streamline content-centric business processes to improve process efficiency. As the broadcasting, media, and entertainment industries shift from analog and digital workflows to file-based workflows, Regli (2016, p.27) stated that DAM technology could improve the overall creative product storage and distribution efficiency of organizations in terms of rich media workflows. Moreover, the DAM system and its related document-based workflow could increase revenue by shortening the time to market for new products because it could shorten the creation time and the cycle of basic marketing materials, which seems to indicate that these organizations have seen DAM as a supporting workflow new methods to achieve the purpose of improving business efficiency. Therefore, it seems that DAM could automate and simplify the organization's workflows and processes and facilitate teamwork to establish new services such as data sharing, which would significantly improve the organization's business efficiency.

## 7. Structural change and organizational cultural change

It is worth mentioning that new workflows and processes may become a driving force for organizational change management. Horodyski (2014) believes that change management would transform or change employees, processes, and technologies to the desired future state within the organization. In this case, the organization may start by adjusting its structure, which means that the organization may need its internal personnel to create a new department dedicated to DAM or invite a professional DAM team to help it formulate a strategy that suits the organization's situation. Traditional cultural institutions with a large amount of material cultural heritage may be where an effective DAM strategy is most needed to manage them. Mcgovern (2013) described her experience in creating a comprehensive DAM program for the Corning Museum of Glass and stated that using digital assets could add value to the physical collections of cultural institutions. To this end, her team used DAM to create a public repository of assets in personal hard drives and shared folders. However, Horodyski (2014) claimed that most significant organizational changes would fail without taking the necessary holistic approach to change. For example, despite investing many digital technology resources, Kodak still failed (Lucas and Goh, 2009) [19]. It may not only because of the poor decisions made by its middle managers but also the rigid organizational culture and bureaucratic structure within the organization. The authentic organizational culture would be the way the organization behaves. It may not only be about the values they hold and the norms that exist within the organization, but it may also be about using the credibility provided by short-term victories to solve big problems. Horodyski (2014) continues to point out that DAM would change the way we understand the digital and physical nature of the organization. With such changes, contemporary organizations may be motivated by external factors such as competition and innovation, and they have to act faster than their competitors to avoid falling behind. As part of the change management plan, DAM needs to prove the rationality of investing in new technologies or technical systems within organizations, which may require DAM managers to first clearly understand the current media management methods of the entire organization. Therefore, the manager may ask some questions when evaluating the effectiveness of the strategy, which may involve unclear marketing messages, organization members unable to respond quickly to customers, and shared media for cross-project partner system platform content may already exist. Therefore, DAM may significantly promote the organization's structural change and organizational cultural changes. It is worth mentioning that DAM managers need to play an essential role in helping organizations review and evaluate the effectiveness of DAM strategies.

## 8. Discussion

For DAM, the agency seems to be a dynamic process. DAM may not be immune to this dynamic, and some of these elements seem to have the right to take action at any given time. For example, in the lifecycle of digital assets, DAM would adapt to the often broader and rapidly changing digital ecosystem. Therefore, it is necessary for organizations using DAM to think about who owns agents in the dynamic digital ecosystem, which may mean that organizations need to consider the changing needs and expectations of stakeholders. Additionally, in the dynamic ecosystem, although technological changes could provide enormous opportunities for the company's growth and renewal, the challenge of taking advantage of these opportunities may be huge. It would be the existing capabilities, resource commitments, behavioral conventions and cognitive frameworks, which may limit the company's actions in response to external changes. Therefore, organizations may need to develop a brand new organizational identity. All internal members of the organization, external members, and stakeholders may need to change an unsuspecting assumption and belief, which may be that even small organizational, technical changes would bring significant challenges. However, despite the potential importance of organizational identity related to technological transformation, its field may be relatively unexplored. Tripsas (2009) [20] mentioned that companies might need to change their core identity. They may have to change their business model in essential ways, and they may have to focus on entirely different audiences to attract them, which would show how individuals are playing a high-level agency role in the process of influencing organizational change. For example, the large amount of user comment data from Facebook may prove that ordinary people, even those who are cruelly oppressed, could have a certain degree of agency and specific power of assembly (Brown and Nicholas, 2012) [21]. These forces could even lead to a significant change in the political system of society through heroic behavior. Therefore, although DAM could be used as an agent of organizational change, the influence of individual agents on organizational change would also be significant. In addition to implementing DAM strategies, organizational change management may also have many other creative and agile management methods. Levy et al. (2015) [22] proposed agile software development, it could not only

allow organizations to interact with consumer partners in neighboring industries and acquire new skills, but also may involve retraining existing employees and introducing new employees. However, It may cause some existing employees to be laid off and lost work, so how to give employees a vision to implement change management has become a very tricky situation. I think that not only for agile software, organizations that adopt DAM may also face this problem, which may be reflected in introducing a new digital asset management department. Such changes in the organizational structure mean that the organization may have to bear the cost of providing training for employees and purchasing DAM software and hardware, which would largely increase the risk of the organization's adoption of DAM reform. Therefore, although DAM may have agency power, we need to consider the challenges it faces in the ever-changing digital ecosystem. We could neither ignore the power of individual agents to the organization but also make the organization pay attention to the costs and risks that it has to bear when introducing DAM strategies, departments and staff.

## 9. Conclusion

This essay emphasizes that DAM maybe technology and strategy for organizations to respond to changes in the external environment and have the agency power to promote effective organizational changes. It is because DAM may not only meet the changing expectations of stakeholders but also promote the organization to implement an effective system, rethink business models, develop new workflows and processes, and carry out structural and cultural changes. Due to the paper's word limit, I look forward to studying some other potential and interesting discussion points in the future. For example, are there any effective strategies other than DAM that are conducive to organizational change management? Additionally, how DAM can provide new ideas for organizations in the unique dynamic environment of the current COVID-19 pandemic.

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