Application of AR Technology in children's Publishing Optimization Strategy

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Abstract: ArWith the rapid development of technology in recent years, it has been gradually applied to military, medical, positioning, entertainment and many other fields and achieved remarkable results. Under this background, children's publishing is the core of the publishing field."ArPublication"Discovery,ArChildren's Book Publishing has been greatly improved in quantity and quality.ArChildren's books have the advantages of rich form, strong interaction and dynamic update of book content. They also face problems such as uneven product quality, serious homogenization, and inconsistent technical standards. Article with examples of the currentArThe advantages and disadvantages of children's books are analyzed.ArThe Optimization Strategy for the healthy development of children's books.

Keywords: ArTechnology; Children's publishing; Optimization Strategy

1. The definition and development of Ar

1.1 Definition of Ar

Ar (Augmented Reality), augmented reality technology, is a new technology developed on the basis of virtual reality, also known as mixed reality. Ar technology will be a certain space-time range can not perceive the physical information, through Computer Technology Simulation superimposed on the space-time, so that the user perception, in order to achieve a more rich experience. For example, the visual augmented reality technology uses Real-Time Calculation of camera motion position and angle, superimposed on the photographic image by encoding the image, forming the experience of the real world and virtual image fusion, so as to realize the enhancement of reality in the vision.

1.2 The development of AR Technology

AR Technology in 1990s appeared but because technology has always been the no get popularity until hand-held equipment (intelligent mobile phone, tablet computer and) of application more and more widely, AR Technology in birth 30 years later usher in the IT of rapid development period. In recent years AR Technology Application Scope expanding including but not limited in military, medical, positioning, manufacturing and maintenance, news, entertainment and many other field. Past few years industry for AR of development prospects once is very optimistic about Digi-capital 2015 launched AR/VR industry report the Augmented/Virtual Reality Report 2015 of had prediction to 2020 when, AR market scale will up to 1 20 billion beauty yuan. Even though the actual data display this few years AR industry of development not such as prediction as optimistic Digi-capital also in 2018 the latest release of report in adjustment. The prediction data. But and same for emerging technology of VR (Virtual Reality virtual quasi-Reality

Technology) compared due to the hardware equipment requirements low AR of development still more industry

In good report prediction future five years global AR (mobile AR and intelligent glasses) installation will reach 3.5 billion income total to 85 billion ~ 90 billion beauty yuan.

2. AR technology applied to children's publishing of implementation scene

This background under publishing industry in also positive expand on AR published of explore. In the current practice in children's publishing become AR published the important of position which and to album for typical. In specific operation on current AR fusion in children's publishing fusion show form still to visualization of augmented reality based. With installation the specified application mobile terminal of mobile equipment on children's publications in the specified content the scanning both interaction after readers can experience unprecedented of interactive reading experience.

2.1 Visualization AR Children's publishing implementation scene

AR Children's publishing Visualization Enhanced implementation scene simulation are as follows. 1) readers by intelligent mobile phone or tablet computer and mobile terminal

Download specific of application software.

2) Open Mobile Terminal media of camera on children's publications in the specified content the recognition.

3) Recognition success after mobile terminal media screen on the present system design good two-dimensional or three-dimensional image.

4) readers and screen in the image the interaction.

At present AR in children's publishing in common of show form main have the following several type.

1) the AR content the zoom, rotation, mobile or dismantling.

2) Click AR content make its voice.

3) the AR content, and take photos or video.

2.2 AR Children's publishing instance show

As early as 2015 Disney had the will AR technology and books on the hue combined with the research project when children in blank books on to image color when by camera capture, intelligent equipment will according to color of shape and color create a corresponding of 3D model. Children can be in intelligent equipment in real-time observe the model.

World of in by AR technology readers not only can see move of "three-dimensional small locust shrimp" also can and surreal biological the "Battle" interactive game, get into sense more of immersed-experience.

And sight to domestic in recent years domestic press in Ar technology and children's publishing phase combined with the endless exploration. 2014 Foreign Language Teaching and Research Press of the Journey to the West story of is domestic first of AR Children Books application. Same of user by "with installation the specified program of intelligent equipment the book specified content the scanning after can be in set good interactive content cartoon image will move, young Readers also can the puzzle game and. After years of development domestic AR Children's Books of show form more rich have more diverse of Interaction Effect in interactive content also production also more fine. March 2018 Electronic Industrial Publishing of the future mechanical

3. AR Children's Books of advantage

3.1 Rich children's books of show form

AR technology break the traditional books of show limitations make reading no longer limited to plane of text and pictures content by combined with audio, video, game and many kinds of interaction style, AR technology greatly rich the children's books content of show form make children's book "Move" more fit readers of demand. AR Children's Books by 3D simulation technology can concrete to the some difficult to through text or pictures (of content the explain

for some original can only readers rely on imagine of content, such as dinosaurs of calls, the future of the world sci-fi biological image and AR not only can through audio and video content the all-round, three-dimensional show better present a kind of dynamic change of Effect, make readers in reading when get more concrete of perception get rich intuitive of reading feel effective enhance readers of children's books content of understanding and memory.

3.2 Enhance children's books of interactive

AR Children's Books make readers of reading behavior from static single

Reading change for participatory, interactive of dynamic reading. Readers in reading books of process in readers and books by AR implementation interaction get immersion of reading experience. Because children's books of readers age common small attention concentration limited for single of text information intake easy to produce fatigue and AR Children's Books to its rich of Interaction Effect, let books content of interesting get enhanced books content become visualization, three-dimensional readers no longer is passive to accept a single information of book content of understand stay in Plane, but in a kind of similar viewing, game of process in active learn knowledge in diverse of interaction experience in get growth.

3.3 Can dynamic update children's book content

Paper books consider its portability of characteristics in format and pages certain degree on there limit can bearing of Information Limited and Traditional Books of content once printing the not change, only by constantly second edition to supplement update AR Technology in certain degree on the make up for the this a lack not only in content of present form break the paper of Constraint, great expand the books the amount of information in the upper limit. At the same time by use AR technology publishers can in paper content the same of situation under by background iterative make to ar implementation of interaction content to constantly update to give books dynamic of vitality. In paper publishing situation difficult of current situation under Children's class paper book of development still thriving paper published in children's publishing occupy quite big of share and so, the advantage for children's books for is particularly important.

3.4 Effective reduce book piracy situation in

Long-term since book piracy has been is domestic publishers of serious problem paper books of pirated lots of, reproduced technology difficulty small cost low new book once published after market will be a large number of the emergence of piracy content, book the best-selling piracy of situation the rampant this greatly harm the publishers of interests. And AR books to its recognition symbol of uniqueness piracy difficulty relative is high even if pirated lots of the text content in copy other of Interaction Effect on the relative difficult to achieve powerful protection the publishers of interests, reduce industry piracy rampant of current situation promote the publication of industry orderly development.

4. AR Children's Books of Problem

4.1 R & D cost high products quality uneve

Simple of Image Recognition no implementation real of AR function to lead to readers of loss damage AR Children's Books in industry of Large-scale promotion.

4.2 Content homogenization obvious

Although ar Children's books is a relatively young product in the publishing industry, there is still a lot of space for exploration and development, but there has been serious homogenization phenomenon on the market. In the aspect of topic selection, ar Children's Books mainly focus on picture books, but also to the popular picture books as the core. For example, the dinosaur theme, there are "Ar interactive parent-child encyclopedia series: Dinosaur haunt! "Dinosaur World" "AR World exploration: century dinosaur" "Dinosaur ran out" and other similar books, the content of the book is

the same, the difference of AR effect is small.

4.3 Ar content and the overall separation of books

At present, most ar Children's Books still show the paper content as the core, ar content as a supplement. The ar content carried by children's books has more auxiliary functions, such as attracting readers' attention with the help of novel ar forms, and promoting Readers' understanding with the help of multimedia content, ar's own unique value does not reflect. In the AR content research and development, due to the limited interactive effect of AR books, ar books on the market are simple in structure and in a single form, the ar content in most children's books is only a simple supplement and extension of the paper content. There is a clear separation between the two. However, due to the large investment in R & D of AR content, some publishers with weak independent R & D ability are above the surface in the design of AR content, and the combination of AR content and book content is not enough.

4.4 Online and offline marketing difficult

Ar children's books need the help of recognition equipment when they are reading, so it is a dynamic reading scene, which poses challenges to the marketing work of marketing personnel, the conventional marketing form cannot satisfy the marketing demand of AR children's books. Offline marketing, ar books in the display and highlights of the promotion is difficult, readers can not immediately understand the particularity of AR children's books and interesting. Online Marketing, subject to the limitations of time and space, the marketing effect is greatly reduced. Now, relying on the vigorous development of live and short video platforms, many publishers have begun to show the AR effect of books on the network with live and short video content, and cooperate with the publishing house direct online shop, cooperate with marketing, but due to the lack of content explosion point, suction eye degree is limited, it is often difficult to achieve the desired effect.

5. Optimization Strategy of ar Children's publishing

5.1 Build a professional R & D team to refine ar content

Technology is the core of development. Only by mastering the core technology of AR, the publishing house can continuously and stably produce ar content. Therefore, it is very important for the publishing house to establish its own professional ar R & D team.

At present, nearly a hundred domestic publishing enterprises have started to get involved in the publishing of AR books, but few publishing houses really master the core technology. Some publishing houses use outsourcing or cooperation with related technology companies.

Ar books research and development, although the cost and difficulty may be lower than independent research and development, but at the same time increased the problem of cooperation and communication, project promotion.

The emergence of AR technology has brought new vitality and life to children's books, but its high development costs have made many publishers only focus on it as a gimmick, lack of solid content creation. Many publishers did not integrate ar content with book content, and reduced costs by reducing ar content and simplifying the interactive effect. Although it may attract some readers in a short period of time, but this part of the reader will certainly lose soon. Therefore, from the perspective of long-term development, if you want to make ar Children's Books become a Growth Point of the publishing house business, create your own ar technical team, ar content intensive is imminent.

5.2 grasp the content quality, combined with long selling books for IP Incubation

Book Publishing is always the "content King" industry, and the core competitiveness of children's books is the book content that can withstand the test of market and time, ultimately, they serve the content. With excellent content as the basis of books, ar content can play a icing on the cake effect, and those ar books planned to follow the trend, chasing hot spots, they do not have excellent native content, soon it will be recognized by consumers, eliminated by the market, and even damaged the brand image of the Publishing House, bringing the opposite effect.

From the content perspective, long-selling books are books that have withstood many rounds of market tests. Their content quality and mass basis are more guaranteed than new books, in the existing content combined with AR to re-creation, and even IP incubation, expand the liquidity channels.

5.3 Improving the discrimination and combination between AR and book content

In the design of AR content, publishers should pay attention to the discrimination between ar content and paper content. Ar content is not only the "Additional Information" of the book content, but also the superficial fancy form. It should bear the responsibility that its paper content cannot bear, the Difference and irsubstitutability between ar content and book content are emphasized.

At the same time, due to the limited AR effect types that ar Children's Books can achieve, there is a problem that the combination of AR content and book content in some books is relatively stiff, we should try our best to choose the content with high degree of fit and avoid moving mechanically. Lee

Publishing House can dynamically update ar content based on the actual situation, often looking new and extending the life cycle of AR books.

5.4 improve the standard system

The Application of AR publications in the industry is not uncommon, but there are still many obstacles in large-scale promotion, one of the important reasons is the lack of related standards system construction, the construction of AR content

However, the incompatibility of various versions hinders its popularization.

Therefore, Publishing House should actively promote the formulation and implementation of AR publications related technical standards system, make clear the implementation subject, implementation scope and application effect of each standard, and reduce the development cost of AR content, in order to promote the healthy and orderly development of AR publications, the compatibility of different versions can be improved.

6. Closing remarks

Nowadays, ar technology has brought new development opportunities to the publishing industry, especially children's publishing, which has brought new vitality to the traditional books, we also realized the sensory, interactive and immersive reading experience brought by technology. Whether this technology can become an innovation and Breakthrough Point of the declining traditional book industry, or is it a transient product with the same and rough content of the publishing house? The industry should always focus on the needs of readers, and only grasp the real demands of readers, focus on fine farming, and publish ar Children's Books that stand the test of the market and the times, only in this way can ar make publishing resources really alive.

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