

Case Study: Golisano Children's Hospital



Ricoh helps the hospital enhance patient care with augmented reality zoo book

About our customer

Golisano Children's Hospital (GCH), located in Rochester, NY, employs over 200 pediatric specialists and provides care that spans more than 40 specialty areas, serving over 85,000 children and their families each year.

GCH, in collaboration with Ricoh and the Seneca Park Zoo in Rochester has pioneered an innovative initiative to enhance the hospital experience for its young patients. Through the utilization of QR code technology, they have introduced an augmented reality zoo book, enabling children receiving care at the hospital to embark on virtual journeys into the Seneca Park Zoo, experiencing life-like virtual images and sounds of animals from their phone or tablet screens. This unique endeavor, showcasing augmented reality in print media, aims to provide an engaging and educational escape for young patients, allowing them to learn about various Zoo animals in an immersive and interactive manner while providing a welcome distraction and source of joy during their hospital stay.

This augmented reality use case in healthcare not only highlights the potential of technology to transform the way we approach pediatric care and well-being but also enriches the hospital experience for young patients and their families.

Challenge

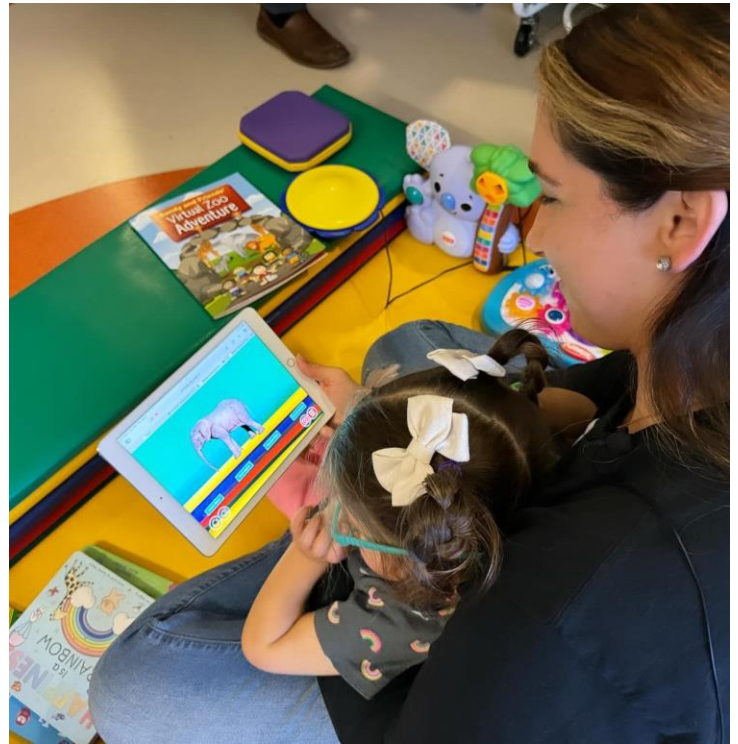
- Seeking innovative methods to enhance patient care and experience
- Adapting Zoo experiences for children unable to physically visit



In healthcare, enhancing the patient experience means going beyond medical procedures to improve communication, patient comfort, and post-op engagement. Healthcare institutions like GCH, are continuously seeking innovative methods to elevate and enhance their patients' experience.

In line with this approach, Ricoh's Graphic Communications team was exploring the use of augmented reality (AR) and QR code technology to create an interactive book. This idea was inspired by the team's vision to offer an alternative experience for Zoo visitors, especially children, by bringing animals to life through AR, when they are unavailable or not easily visible. Subsequently, the team identified the opportunity to extend this experience to children who were unable to physically visit the Zoo, such as those in the hospital or facing other challenges that made a Zoo visit unsuitable.

Many of the 7,000 children admitted to Rochester's children's hospital each year suffer from chronic illnesses, causing them to be bedridden for weeks or even months. Eager to boost their spirits and bring some joy to their days, the team connected with Seneca Park Zoo and GCH to propose the project.



“This project epitomizes the spirit of co-innovation as well as Ricoh’s ongoing commitment to accessibility and making an impact in our local communities. It has been a delight working hand-in-hand with GCH, as well as local printer ImageNow, to expand access for children and their families to experience the sights and sounds of the Seneca Park Zoo from the hospital.”

— Joe Ferrara, Director, Customer Innovation Services,
Commercial & Industrial Printing, Ricoh

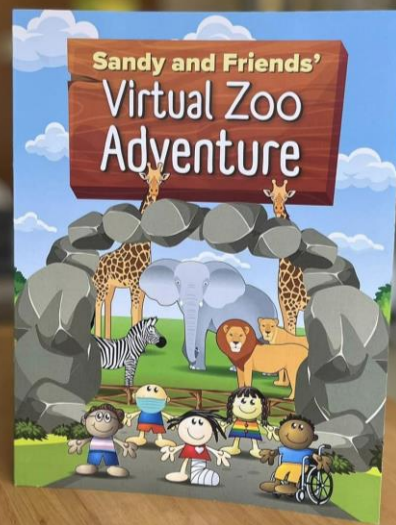
Solution

- Work collaboratively with GCH and Seneca Park Zoo to roll out the project
- Partner with a local printer to utilize Ricoh's Pro C7210 with a Plockmatic 500 device to print the AR zoo book

Ricoh's Graphic Communications team successfully developed a proof of concept for the AR zoo book and quickly garnered the support of Seneca Park Zoo's President and CEO and GCH's Chief Nursing Officer and Senior VP of Hospital Advancement. To help fund the project, GCH secured the support of the Fairport Music Festival, a two-day event held annually in the village of Fairport, NY.

To produce the AR zoo book, the team partnered with ImageNow, a local printer, utilizing Ricoh's Pro C7210 with a Plockmatic 500 device. This innovative device offers exceptional printing capabilities, providing a modular inline booklet-making solution for high-quality booklet production. Additionally, the system's colour graphical interface and heavy-duty trimming capabilities ensure the creation of professional-looking booklets, making it an ideal choice for producing unique media like the AR zoo book. This partnership not only allows Ricoh to bring the community together to help the children but also bring economic benefit to the local business.

The initial plan is to print 7,000 books, catering to GCH's anticipated annual intake of patients aged 2-3 years and older. Approximately 250 books were printed and delivered before the 2023 holiday season to accommodate the existing patient load. The remaining books have been printed by ImageNow and are currently stored in a warehouse for the hospital's on-demand access. Additionally, ImageNow offers a convenient online portal for GCH to request additional book prints as required.



Results

- Developed the first of its kind AR zoo book, "Sandy and Friends' Virtual Zoo Adventure"
- Received positive feedback from patients, offering a welcomed distraction from medical challenges
- Exploring potential impact of AR within GCH and potential wider distribution to other children's hospitals

Through a collaborative effort and co-innovation between Ricoh's Graphic Communication team, GCH and the Seneca Park Zoo, the AR zoo book titled, "Sandy and Friends' Virtual Zoo Adventure, has become the first of its kind to be produced.

The book features life-like virtual images and sounds of animals that reside in the Seneca Park Zoo, accessible from a phone or tablet screen via QR code technology — enabling the children to embark on a virtual excursion from their own hospital room. It also includes engaging activities such as animal-themed crosswords and mazes, as well as detailed descriptions and fun facts of the animals to provide an interactive and enriching experience for the children.

"We are thrilled to partner with Ricoh, Golisano Children's Hospital, and the Fairport Music Festival to bring the Zoo's animals to children who may not be able to visit. We believe we are the first Zoo to provide this kind of augmented reality experience, and we hope our virtual animals provide as much joy to children who may be in the hospital as their counterparts at the Zoo do for all guests," said Pamela Reed Sanchez, President and CEO of the Seneca Park Zoo Society.

For Golisano Children's Hospital, the zoo book has become an innovative approach to holistic patient care extending beyond medical procedures. Copies of the book are provided for every child staying in the hospital's inpatient units.

"The books are a hit with our patients," said Wendy Lane, Director of Child Life at GCH. "They provide a perfect opportunity to transport them to another world which helps take their minds off of the challenges associated with receiving care."

Ricoh's Graphic Communication team is actively engaging with GCH to explore the potential impact of AR within the hospital and potentially in other areas of medicine. Additionally, there are plans for a wider distribution of the books to other children's hospitals in the near future.

"Staying at the hospital is never an easy time for families, so we're excited that Ricoh USA and the Seneca Park Zoo have worked together to provide GCH early access to this fun, interactive reading experience that provides extra joy and education to our children while they are receiving long-term treatment."

— Wendy Lane, Director of Child Life, Golisano Children's Hospital

For more information on Ricoh's Graphic Communication services, visit us at [ricoh.ca](https://www.ricoh.ca).