

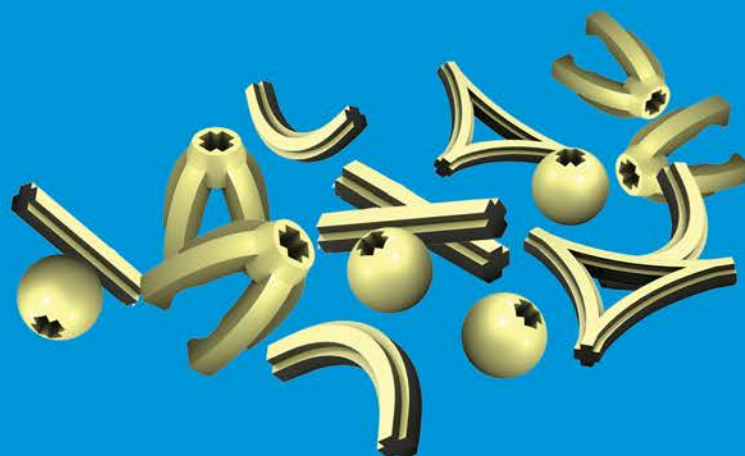
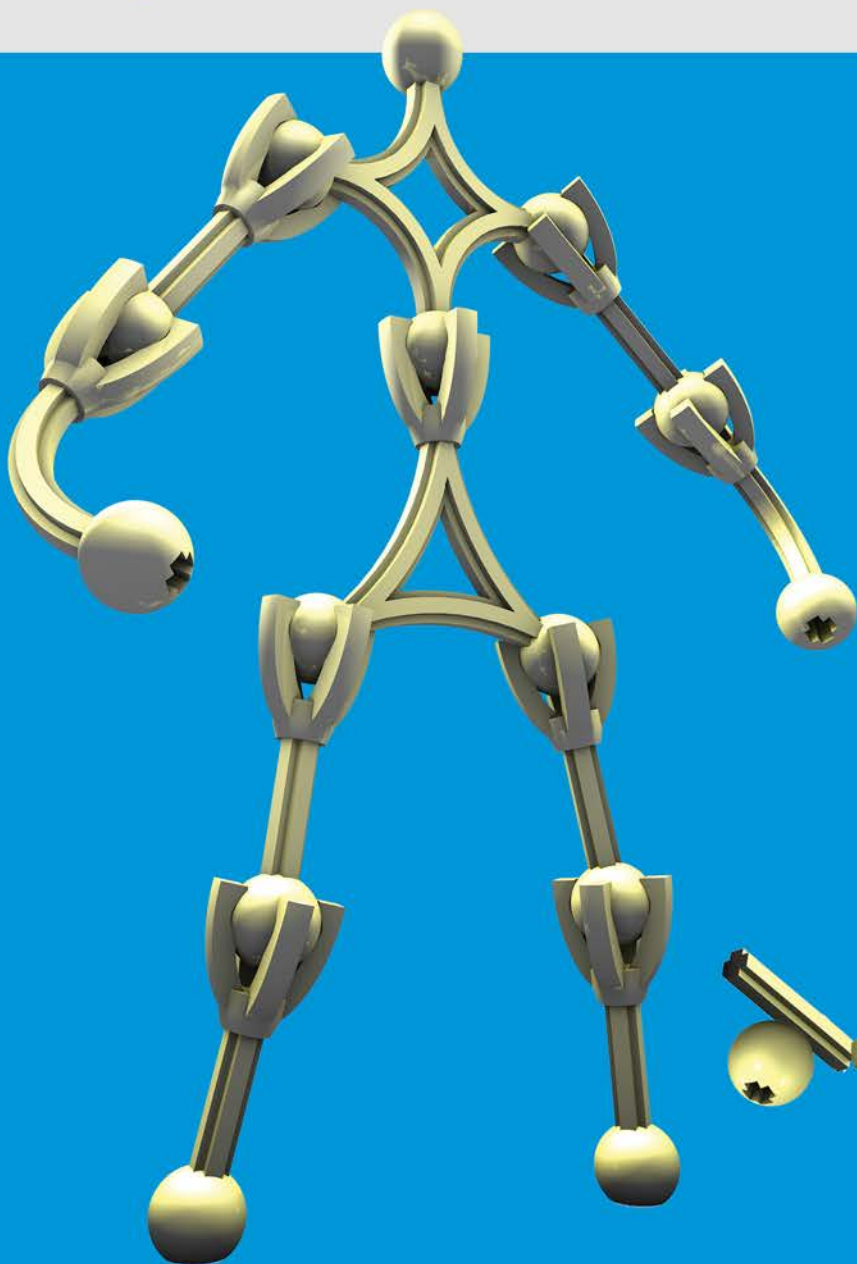
MorphlinX

A modular kit for modelling and creative play



where business meets innovation

New Technology from DIT



A novel modelling toy that creates custom made fully pose-able characters

MorphlinX is a new type of creative modelling toy that develops fine motor skills, creativity and problem solving by changing the way plasticine is currently played with. It is comprised of six parts that can be assembled through either an interference fit or a ball and socket style snap-fit allowing assemblies of

various combinations to form fully pose-able armatures which can be covered with plasticine (or a similar material).

The object of *MorphlinX* is to allow unfettered creative control by providing rigidity to the form and allowing the user to create characters, ideas and toys otherwise impossible without internal support. It increases the scope for creativity and learning during play while allowing the child to actively use and play with their new creation.

MorphlinX is based on the concept of an armature, a system which

is common place in the area of animation as a tool around which animators can build their characters. *MorphlinX* takes a new angle on this concept with a child friendly design which allows children to bring their imaginations to life.

With *MorphlinX*, playtime becomes an imaginative creative process while the toy is assembled and sculpted. The completed toy provides a fun experience as it is used to act out storylines with the custom made characters.

Applications

MorphlinX is a unique creative and learning based toy for the children's market, typically 5-12 year olds. In some respects it could compete with Lego® and other types of creative / engineering orientated toys.

MorphlinX has been inspired by the realities of children's playtime. With existing toys, the most creative elements of play, and those elements with the greatest learning benefit, are removed from the child.

For example, characters are defined or based on existing stories - the look, feel and colour of the characters are already set. Even with Lego® and Meccano® there is a limit on the variety of the design.

While with clay, playdough or plasticine, huge creativity is possible, but they don't provide a very practical end product – with the inevitable outcome of play being a smushed or crushed character!

Opportunity

The idea of an armature - a framework around which to build - has been around for many years in the area of animation. However, *MorphlinX* develops this concept for the high potential consumer market of toys.

The global toy market is worth in excess of USD \$84 billion, with the US market alone accounting for over 20%. Lego®, as the most popular form of "construction toy" aimed at the 5-12 age group, accounted for sales of over \$4 billion in 2013.

MorphlinX has a unique opportunity to be positioned as a niche brand within the "construction toy" segment. The central concept of a framework around which children can create and build their own designs transcends geographic or linguistic boundaries, giving the product true global potential.

In July 2014, *MorphlinX* won a Highly Commended prize at the prestigious Design Innovation in Plastics Awards, having been selected from over 150 entries from universities across the UK and Ireland.

Advantages

- *MorphlinX* is a unique, transformative, inspirational product, offering an entertaining creative outlet for children while providing the useful learning benefits sought by parents.
- It offers a dual combination which is not found in existing toys – the ability to create and invent in a completely unfettered way, yet producing a toy which is practical and usable. A pre-made plastic character is not inspiring and does not build creativity, while a sculpted model quickly loses shape and structure rendering the end product impractical.
- With *MorphlinX*, the child gains a more durable yet customisable character with which to act out storylines while simultaneously learning about material properties.
- *MorphlinX* components are essentially theme-less, allowing each child to adapt their play style as they grow. This creates increasingly complex forms, with possible applications in stop motion animation.

“MorphlinX is a unique creative and learning based toy for the children's market, typically 5-12 year olds.”

Stage of Development

MorphlinX was developed as a student led project, emerging from the Product Design team in the School of Mechanical & Design Engineering at DIT Bolton Street.

DIT is currently seeking expressions of interest from potential business partners interested in licensing and developing the product.

Design Rights have been registered on the novel ball and socket armature design - EU number 002481044.

Initial prototyping using 3D printing has been carried out.

Further development work by a business partner will likely be required on the branding, packaging, character concept design, scalable production and go-to-market partnerships.



1. Pieces are connected to create a frame.



2. Plasticine is applied to Creator frame.



3. Model is complete and ready for play!

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