**Abstract**

*Bump Application is super easy and super faster software for sharing information between two Smart phones. Was created to assist developers in maximizing application performance on new Intel® graphics technologies, primarily focused on the new Intel® micro-architecture codenamed Ivy Bridge. The document will introduce the new architecture and detail best practices with a focus on the DirectX 9, 10 and 11 APIs. Following the guidelines laid out in this document will help the developer’s game reach optimal performance on Intel processor graphics while providing a great gaming experience to the largest possible market.*

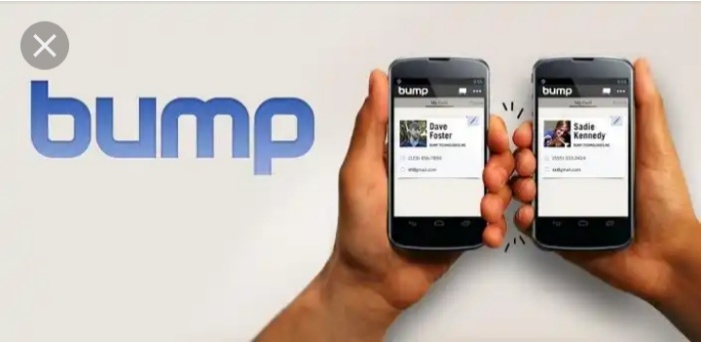
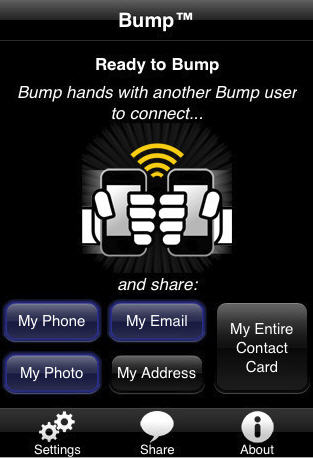
**1.0 INTRODUCTION**

Bump is a discontinued iOS and Android mobile app that enables smartphone users to transfer contact information, photos and files between devices. In 2011, it was born on Apple's list of all-time most popular free iPhone apps, (Bump Technology, 2011) and by February 2013 it had been downloaded 125 million times ( Perez, Sarah ,2013).

Its developer, Bump Technologies, shut down the service and discontinued the app on January 31, 2014, after being acquired by Google for Google Photos and Android Camera (David Lieb, 2013).

The underlying idea of a synchronous gesture like bumping two devices for content transfer or pairing them was first conceived by Ken Hinkley of Microsoft Research in 2003.

This idea was presented at a user interface and technology conference that same year. The paper proposed the use of accelerometers and a bumping gesture of two devices to enable communication, screen sharing and content transfer between them. Similar to this original concept, the idea for Bump app was conceived by David Lieb, a former employee of [Texas Instruments](https://en.m.wikipedia.org/wiki/Texas_Instruments), while he was attending the [University of Chicago Booth School of Business](https://en.m.wikipedia.org/wiki/University_of_Chicago_Booth_School_of_Business) for his [MBA](https://en.m.wikipedia.org/wiki/MBA) (David Lieb, 2013).



**Figure 1 Bump Display**

Amazing as the concept sounds, Bump allowed users to send contact information, photos, and other objects between phones. With version 3.0 however, only contact information and photos can be sent (David Lieb, 2013).

Before bumping phones, each user confirms what he or she wants to send to the other user. To use the application, two people bump their phones together, and within about five to ten seconds, a screen appears on both users’ screens allowing them to confirm what they want to send to each other (Dalrymple, 2009)*.*

A big part of Bump is sending and receiving contact information, so Bump obviously accesses contacts you choose to bump to someone and also adds contacts you receive to the Contacts app on your phone. Also, each time you bump with someone new, the app uses the contacts in your phone’s Contacts / Address Book to show you what friends you both have in common (Benderoff, 2009).

It works only in Android Application which is a Linux-based operating system for mobile devices such as Smartphone’s and tablet computers.

When two users bump their phones, the data is automatically sent through a separate internet server to the other user, which is able to detect when any two phones using the application bump each other. A newer aspect of the application allows two people to bump in order to become friends (Andrew, 2013).

Bump was born as a simple iPhone app for swapping contact information created by our three founders, but as our user base grew, so did our vision. We now have more than 75 million downloads, and a vision of changing the way people use their mobile devices (Foresman, 2012).

Our team includes some of the smartest and most talented developers and designers in Silicon Valley, and we all share a common goal: to build something people want and have fun doing it, (Benderoff Eric, 2009)

**1.1 LITERATURE REVIEW**

Bump Technologies launched in 2008 and is located in Mountain View (Mager Andrew, 2010).

 Early funding for the project was provided by startup incubator Y Combinatory, Sequoia Capital and other [angel investors](https://en.m.wikipedia.org/wiki/Angel_investor) (Carr Austin , 2012).  It gained attention at the [CTIA](https://en.m.wikipedia.org/wiki/CTIA_%E2%80%93_The_Wireless_Association) international wireless conference, due to its accessibility and novelty factor (Webster Scott, 2012).

 In October 2009, Bump received $3.4m in Series A funding (Foresman, 2012) followed in January 2011 with a $16m series B financing round led by Andreessen Horowitz.

[Silicon Valley](https://en.m.wikipedia.org/wiki/Silicon_Valley) [venture capitalist](https://en.m.wikipedia.org/wiki/Venture_capitalist) [Marc Andreessen](https://en.m.wikipedia.org/wiki/Marc_Andreessen) sits on the company's board. (Paul Ian, 2012).

The Bump app debuted in the [Apple](https://en.m.wikipedia.org/wiki/Apple_Inc.) [iOS](https://en.m.wikipedia.org/wiki/IOS) App Store in March 2009 and was “one of the apps that helped to define the iPhone” [Harry McCracken](https://en.m.wikipedia.org/wiki/Harry_McCracken), Technologies

(LeClair Dave, 2012).

It soon became the billionth download on Apple's App Store (Dalrymple, 2009).  An [Android](https://en.m.wikipedia.org/wiki/Android_(operating_system)) version launched in November 2009 (Schramm Mike, 2013).

By the time Bump 3.0 for iOS was released in February 2012, the app had been installed 77 million times, with users sharing more than 2 million photos daily.(Jared Newman,2013  )As of February 2013, there had been 125 million Bump app downloads.(Bump Technology , 2013).

While going through the orientation and meeting process of business school, he became frustrated by constantly entering contact information into his [iPhone](https://en.m.wikipedia.org/wiki/IPhone) and felt that the process could be improved (Dalrymple, 2009).

His fellow Texas Instruments employees Andy Huibers and Jake Mintz, who was a classmate of Lieb’s at the University of Chicago's MBA program joined Lieb to form Bump Technologies (David Lieb, 2013).

Bump was part of  Y Combination’s summer 2009 batch, and our growth has been fueled by some of the Valley's top investors and VCs, like Ron Conway, Ram Shriram, Sequoia Capital, and Andreessen Horowitz. We're based in downtown Mountain View, the epicenter of Silicon Valley, mere steps from Caltrain to San Francisco.

**1.2 ADVANTAGES OFBUMP APPLICATION**

1. Exchange information, messages, images, photos and other content by

"Bumping" their cell phones or other wireless devices together.

1. Bump Application is super easy and super faster way to share information between two Smart phones.
2. Otherwise send information, messages, images, photos and other content to other users of the Bump Application without the necessity of "bumping" cell phones or other wireless devices together.
3. Perform other functions or features which may be added to the Bump Application from time to time.

**1.3 DISADVANTAGES OFBUMP APPLICATION**

1. Native application don’t help with SEO.
2. It is hind to filter active mode FTP traffic on client side when firewall is in place.
3. It’s difficult to monitor activities.
4. Workflow is improved.
5. Difficult to use if you do not have an IT background.
6. Virus scanning isn’t easy, which is especially risky with the increase in ransom-ware viruses.

**RECOMENTATION**

The applications and possibilities for bump are enormous. Bump was born as a simple iPhone app for swapping contact information created by our three founders, but as our user base grew, so did our vision. Bump now have plenty ofdownloader, and a vision of changing the way people use their mobile devices. Our team includes some of the smartest and most talented developers and designers in Silicon Valley, and we all share a common goal: to build something people want and have fun doing it.

**CONCLUSION**

Bump Technology has definitely gotten a lot of attention, mostly due to the gimmicky feel of the service, which allows users to swap a wide range of data–contacts, photos and soon, much more–when they tap two phones together. There have been lots of versions of this kind of thing over the years, of course, using a variety of technologies. But the surge in smartphone popularity and app use has made digitally enabled physical transactions a whole lot easier.

These days, even competing operating systems, like those for the Apple iPhone and Google Android devices, can “bump” in a much nicer way than they are currently doing as companies.

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