



Firm X – Potential Targets

November 2015



Potential Targets for Image Processing / Enhancement

Executive Summary

#	Company	Technology	Management	Size*	Attractiveness
1	Firm A	●	●	◐	●
2	Firm B	●	●	◐	●
3	Firm C	◐	●	●	●
4	Firm XXX	◐	●	◐	◐
5	Firm XXX	●	●	○	◐
6	Firm XXX	◐	●	○	◐
7	Firm XXX	●	◐	○	◐
8	Firm XXX	◐	◐	◐	◐
9	Firm XXX	◐	◐	◐	◐
10	Firm XXX	◐	◐	●	◐
11	Firm XXX	◐	◐	◐	◐
12	Firm XXX	◐	◐	◐	◐
13	Firm XXX	◐	○	◐	◐
14	Firm XXX	◐	◐	◐	◐
15	Firm XXX	◐	◐	◐	◐
16	Firm XXX	◐	◐	◐	◐
17	Firm XXX	○	◐	◐	○
18	Firm XXX	○	○	◐	○

Note: 100% filled Harvey Balls represent the highest rank while the empty ones represent the lowest rank

** Companies founded in the last five years have a higher rank and/or the companies with lowest funding have the highest rank*

Firm A

Computational Imaging

Company Logo

Overview

- Founded in 2013, Firm A specializes in computational imaging - the intersection of photography, image processing, computer vision and graphics
- Based in XXX and has XX employees
- Closed USD XX mn Series A financing led by XXX in March 2015
 - The company had previously closed a round of seed funding of USD XXk by XXX in September 2013

Technology

- **Product A** - A software system that is optimized for final image quality; minimizes errors and changes can be implemented on the fly
- **Product B** - Corrects optical aberrations. This enables sharper, more detailed photos. This approach can also be used to improve camera production yield
- **Product C** - Provides image stabilization by correcting motion blur and shutter shake, two common problems that arise when taking pictures in low-light conditions

Key People

- Mr. ABC – President & CEO
 - Over 25 years of experience in the ICT industry, including 15 years in mobile media with startups and blue chips
 - Served as President and CEO of XXX between 2008-2012
 - Holds an MBA from John Molson School of Business
- Mr. PQR – Co-founder & CTO
 - Earned his PhD from MIT in 2009, studying computational photography and imaging with Professor Frédo Durand
 - Doctoral thesis entitled “Multiplexed Photography: Single-Exposure Capture of Multiple Camera Settings” paved the path to setting the primary vision behind Firm A
- Mr. DEF – VP, Research & Development
 - Executive in software research and development with an academic background in signal processing
 - At XXX, beginning in 2007, he headed North American and Asian teams software development of mobile device applications and highly available-scalable cloud services
- Mr. XYZ – Head of XXX & Member of Founding Team
- Mr. NOP – Software Architect & Member of Founding Team

Firm A’s computational imaging technology can aid to optimize Firm X’s hardware performance as well as enhance the software to produce higher quality images

Firm A

Computational Imaging

Company Logo

Product A

- A software system that is optimized holistically for final image quality means that errors are minimized and changes can be implemented on the fly
- Instead of working linearly and compounding the errors at each step, Product A dynamically optimizes for final image quality and balances all the different functions

Product B

- Product B corrects optical aberrations. This enables sharper, more detailed photos
- Additionally, Product B empowers flexibility in lens design that can be used to reduce the cost and/or the number of lenses. This approach can also be used to improve camera production yield

Product C

- Product C provides image stabilization by correcting motion blur and shutter shake, two common problems that arise when taking pictures in low-light conditions
- Product C uses a secondary camera (for example, the front-facing camera on a smartphone) to track the micro-movements causing the blur. It then uses this information to deblur the image. The resulting low-light pictures are sharp and blur-free

Target Segment

- Firm A technology can be implemented in essentially any type of digital camera. It can be used in a wide variety of industries namely mobile, wearable, automotive etc.
- Firm A framework aims to bridge the conventional camera ecosystem with the emerging world of computational cameras

Firm B

Reality Imaging Systems

Company Logo

Overview

- Firm B designs and manufactures leading 360 degree rapid imaging systems that streamlines the workflow of image documentation and can be used repeatedly, accurately, consistently by anyone and anywhere
- Founded in 2010, the company is headquartered in London and employs XX people
- Successfully raised USD XXmn in November 2012 from XXX

Technology

- Developed fastest and first fully automatic, 50 megapixel, XXX
- Has developed softwares which are specialized for processing images which are captured using the XXX
- Developed cloud based distribution platform of content of iSTAR, a panoramic camera that precisely captures full spherical immersive images and high resolution panoramic data streams for efficient visual documentation of an environment

Key People

- Mr. ABC – CEO & Co-founder
 - Has worked within the panoramic industry for over 15 years and pioneered the use of 360 imaging across multiple sectors
- Mr. PQR – CTO & Co-founder
 - A serial entrepreneur in technology innovation with over 18 years experience in 360 imaging, 22 years of business experience
 - Also the founder of XXX
 - Has worked for larger companies such as Apple, Adobe and Macromedia
- Mr. DEF – Chairman
 - A Chartered Accountant and has held a number of directorships and management positions at UK companies
 - Spent 25 years at XXX, holding a variety of management positions
 - Was the Chief Executive of listed company XXX
- Mr. XYZ – Head of Engineering
 - A Chartered Engineer and member of Institute of Engineering and Technology
 - Was the Senior Developer at XXX and XXX

Firm B has developed futuristic camera 360 degree technologies which can be inculcated in Firm X's camera technology to add another dimension to the imaging capabilities

Firm B

Reality Imaging Systems

Company Logo

Product A

- The new Product A is the world's highest resolution, fully automatic, XXX that's designed to streamline the capture and upload of 360 degree images to Street View
- Support the Open Spherical Camera interface which allows users to control the camera from a mobile device running the latest apps including the new Street View app

Product B

- A 360 degree processing system which can process, export and share iSTAR content
- Delivers incredible speed, without the help of a GPU (Graphics Card) even on any 64bit PC, and portable tablet PC's

Product C

- Product C pioneers a technique which allows for an iSTAR capture to be used as an extremely accurate and HDR full colour overlay for a laser scan

Product D

- Cloud based distribution platform of iSTAR content
- Enables the user to build an entire iSTAR project with images, maps, floorplans, text, narration, music and more

Target Segment

- The XXX and its softwares are targeted towards common users
- The camera can also be of great use to cartographers

Firm C

Image Platforms

Company Logo

Overview

- Founded in 2008, Firm C is an Image Recognition Platform-as-a-Service (PaaS) providing Image Tagging Application Program Interface (APIs) for developers & businesses to build scalable, image intensive cloud apps
- Headquartered in XXX, XXX
- Total funding of USD XXk received in two tranches
 - First tranche of seed funding of USD XXk was received in January 2010 by Open Hub
 - Second tranche of seed funding of USD XXk was received in July 2013 by XXX

Technology

- Offers a set of APIs for automated image categorization and meta-data extraction, intended for business customers
- The following are the Image Tagging APIs provided by Firm C
 - Colour Extraction
 - Categorization
 - Auto - Tagging
 - Auto - Cropping
 - Visual Similarity

Key People

- Mr. ABC– Co-Founder, CEO & CTO
 - His first project, XXX, was dedicated to image transformations and morphing, winning many national student awards in Bulgaria from 2001 to 2003
 - He is also a Lecturer in technology entrepreneurship in XXX and volunteer as a start-up scout at XXX
- Mr. PQR – Co-Founder & Head of XXX
 - Responsible for all visual ideas and the flawless user experience of XXX and all other projects of Firm C and is actively involved in web business development
 - He is also the co-founder of XXX and serves as its CEO
- Mr. DEF – Co-Founder & Research Director
 - Founding Director of the XXX, a living lab in the field of new digital media technologies, location-based services (LBS) and smart cities. He is also the founder and Head of Research at XXX Ltd.
 - He was also a Senior Scientist in XXX and XXX from 2009 to 2011 at the XXX
- Mr. XYZ– Co-Founder & Marketing Director

Collaboration with Firm C's platform will help Firm X offer advanced services to its customers while also expanding its services for the business customers

Firm C

Image Platforms

Company Logo

Auto Tagging

- Using Firm C's Auto-Tagging API, the user can assign relevant tags to all the images in an automated fashion. The images are parsed through the Auto-Tagging API, it analyses them and suggests the tags they should be associated with

Image Categorization

- Automatically categorizes the user's image content

Personal Photo Organization

- The API's visual recognition technology will recognize and suggest the categories the photos belong to

Smart Cropping

- Analyzes the composition of the image and how 'interesting' the different parts of it are and automatically suggests what is the best region to crop, in order to preserve the most relevant part of the image.

Color Extraction & Search

- Is capable of performing multiple functions such as Automated Colour Extraction, Background Removal and Multi-Color Search

Target Segment

- The company targets software developers and imaging platforms to integrate the API's in their softwares / platforms