



FEASIBILITY STUDY

Smart City Car Parking solutions

Adam Lloyd – R00117318

TABLE OF CONTENTS

1 Introduction	2
2 Primary Research	3
3 Target Market	5
3.1 Market segments.....	5
3.1.1 Organisational.....	5
3.1.2 Personal	5
3.2 Market Value	5
4 Market Trends.....	6
4.1 Recent Changes in the broader market	6
4.2 Future predictions in the broader market	6
4.3 Key drivers of trends in the market.....	6
5 Competitors	7
5.1 Park Magic.....	7
5.1.1 Profile.....	7
5.1.2 SWOT analysis.....	7
5.2 Q-Park.....	9
5.2.1 profile.....	9
5.2.2 Swot analysis.....	9
6.0 Competitive Advantage.....	11
7.0 Benefits to Client.....	12
7.1 Benefits to council	12
7.2 Benefits to customer	13
8 Marketing Strategy	14
9 Sales Strategy	16
9.1 Council.....	16
9.2 Personal.....	16
10 Marketing and Communications.....	17
Financial Feasibility	18

1 INTRODUCTION

Street parking in a city environment can be a stressful experience for the driver, having to either pay a large sum to park in a high-rise car park or roam the streets looking for an opening to park their car.

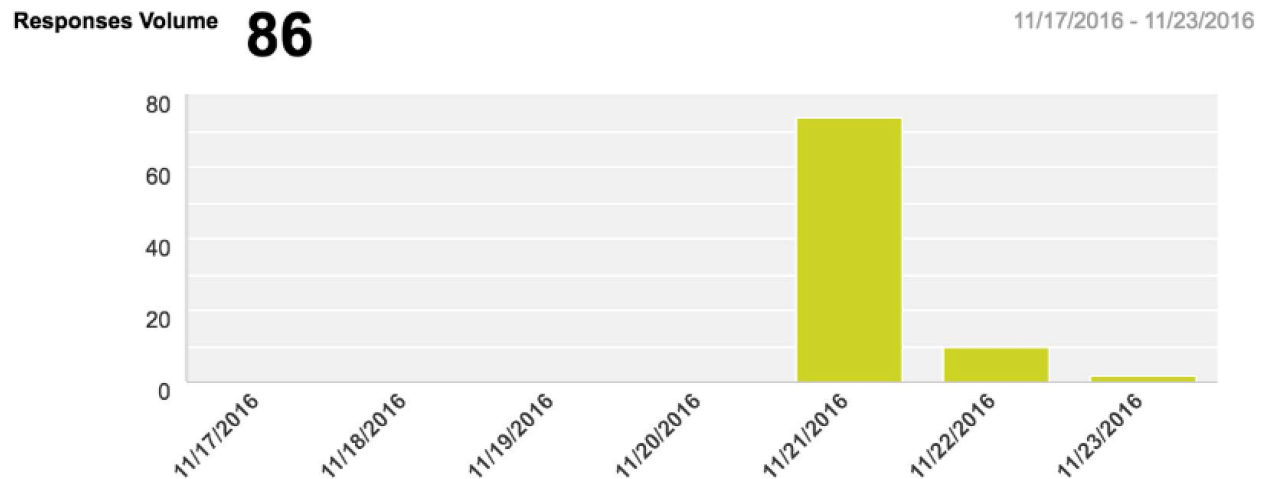
To bring car parking into the modern age, our smart car parking system will place sensors in designated parking zones which will indicate if the space is occupied by a vehicle or not. Drivers will use a mobile application to reserve their desired parking space on their way into the city making for a stress-free parking experience. This same application will be used by traffic wardens to identify illegal parking and increasing their efficiency.

Illegal parking in reserved spaces will result in the traffic warden being notified that someone is parked in a space even though no one has paid for the space. Allowing them to move to that location and issue a fine. If someone is parked in someone else's reserved space, they can report this to the traffic system and the warden will be notified and go to issue the fine. This will all be controlled by a networked system providing valuable metrics to council offices to improve city planning and traffic congestion.

With this system, it is projected that revenue from parking fines will increase with automated systems notifying traffic wardens and, due to this automation, freeing up some wardens to patrol suburban, usually unpatrolled, areas. Furthermore, environmental savings resulting from a reduction in traffic congestion and litter from a paperless system will reduce costs and potentially increase tourism revenue resulting from a more modern and clean city.

2 PRIMARY RESEARCH

The initial research task we undertook was to compile a list or survey questions which would be distributed to friends, family and associates via social media via Survey Monkey¹. The questions were designed to get a feel for the feasibility of this venture from the point of view of the commuter and city driver.



The insights gained from each of the questions were as follows:

- Over 70% of the respondents indicated that they used on street parking at one time or another, given that a portion of these may not drive at all, it is speculated that over 80% of city drivers would use on street parking.
- 38% indicated that they used on street parking between 1 and 5 days a week with 15% of these using it more than one day a week. This indicates that people use on street parking but perhaps not regularly enough showing that it is not the most appealing option so there are improvements to be made.
- The respondents were asked to indicate if they used multi story car parking and 74% indicated that they do, similarly to the first point, this number could be speculated to be considerably higher.
- As for regularity of use of multi-story car parks, the majority indicated that they use it 1 day a week showing, perhaps that this was only weekend use for shopping in the city. Considering earlier insights, many drivers opt to park at work instead of multi-story or on street, most likely due to the cost and convenience.

¹ <https://www.surveymonkey.com/>

- Many respondents indicate that they spend €1-5 per week on parking, with a significant minority indicating they spend upwards of €20
- With our closest competitor being ParkMagic, they were asked if they had ever used this service with most 73% indicating that they had not. This suggest that this is not a well-used platform perhaps due to its implementation or its marketing, either way it shows that there is room to improve in this market.
- When asking if they would avail of a pre-booking parking service 68% indicated that they would which suggests that the market is open to this idea.
- The clear majority of respondents indicated that they would send €2 per hour for on street parking which is in line with current cost of a parking disk. This suggest that, while drivers would like a more convenient solution, they are not willing to pay that much more for the service.
- As with indications given regarding high rise and on street parking in earlier points, the frequency that respondents indicated that they would use this service was in line with between 1 and 5 days per week. This may change though if the methods by which they use the services was made more convenient.
- 62% of the respondents indicated that they would use a pre-booking service for business needs which suggests that this would be a prime area of interest to exploit via targeted marketing.

Question1	Yes	No			
Do you use on street parking?	73.26%	26.74%			
Question 2	Never	1 day per week	1-5 days	Weekends	7 days a week
How often do you use on-street parking?	31.40%	26.74%	17.44%	20.93%	3.49%
Question 3	Yes	No			
Do you use multi-story car parks?	74.12%	25.88%			
Question 4	Never	1 day per week	1-5 days	Weekends	7 days a week
How often do you use multi-story car parks	27.91%	38.37%	10.47%	22.09%	1.16%
Question 5	€0	€1-€5	€5-€10	€10-€20	€20+
How much do you spend weekly on parking?	22.09%	43.02%	19.77%	9.30%	5.80%
Question 6	Yes	No			
Have you ever used ParkMagic(Cork City Park by Phone)	15.12%	84.88%			
Question 7	Yes	No			
Would you avail of a parking service that allows you to book ahead for on-street parking?	79.07%	20.93%			
Question 8	€2	€3	€4		
How much would you spend to park (on-street) for 1-hour?	81.93%	14.46%	3.61%		
Question 9	Never	1 day per week	1-5 days	Weekends	7 days a week
How often would you use this service?	16.28%	36.05%	22.09%	22.09%	3%
Question 10	Yes	No			
Would you use a pre-booking service for business needs e.g book a space for a meeting in the city?	72.09%	27.91%			

To gain some industry feedback an email was sent to George Bullman who advised us to contact John Paul Clifford. John advised that he would pass on the email to Claire Davis who was the person to speak to about this as she works in the Cork Smart Gateway. Sadly, she did not reply to the email before this report was due so any insight she may have has were out of reach.

3 TARGET MARKET

3.1 MARKET SEGMENTS

The two market segments our venture focuses on are the organisational and the personal.

3.1.1 ORGANISATIONAL

The organisational focuses on the city and country councils who this system will be sold to and who will implement the physical and technology infrastructure to support it. This segment was selected because they will have the man power and the existing infrastructure to support this system and enforce it.

3.1.2 PERSONAL

The personal segment focuses on the drivers who will part for work or when visiting for shopping, tourists who will drive to unfamiliar cities and would benefit from a system like this and local businesses who would benefit from having reserved parking near their place of business for clients.

3.2 MARKET VALUE

Based on secondary research into the national census, the total addressable market in Cork is 241,007² registered vehicles and, as such, drivers. Based on our primary research, the average driver will spend an average of €4 per day for an average of 2.5 days per week on city parking.

This equates to €125 million annually of total market value if every registered vehicle driver used the service as indicated. As the research indicates, 70% of surveyed drivers would be interested in using our service so the value can be adjusted to €87 million annually for the total serviceable market value. The implementation of our system would render the existing competing solution ParkMagic³ redundant so, as such, a reduction of market share based on competitors has not been applied.

If these numbers were applied country wide, we would be looking at a total addressable market of 1,950,080 registered drivers and using the above calculations would result in a total market value of €1 billion and a total serviceable market of €700 million.

	Cork	Ireland
Vehicle population	241,007	1,950,080
Average Daily Spend	€4	€4
Average days used	2.5	2.5
Total addressable market	€125 million	€1 billion
Serviceable addressable market (70%)	€87 million	€700 million

² <http://www.cso.ie>

³ <https://bookings.parkmagic.net/pmui/>

4 MARKET TRENDS

4.1 RECENT CHANGES IN THE BROADER MARKET

There has been an increase in number of cars on the road has increased by 30,000 annually since 2013⁴ which is increasing the parking market more and more over time. This, coupled with a move away from paper based systems in favor of faster and more convenient technology based systems such as contactless payment which has doubled in usage this year⁵ indicate that there are more people than ever in the target market and this market wants a more convenient way to manage their parking.

4.2 FUTURE PREDICTIONS IN THE BROADER MARKET

As we move to the future, more and more companies are focusing on the wearable market with a 60% increase in the wearables market in 2016⁶. This increase in popularity along with the maintaining popularity of mobile phones, will open the market for more and more contactless and convenient ways to manage your services form payment and parking to your health, we will be connected more than ever before and services which do not embrace this may well falter.

4.3 KEY DRIVERS OF TRENDS IN THE MARKET

The increase in mobile and wearable technology potentially stems from a younger, more wealthy generation driving market trends as they become the primary market for many industries.

⁴ <http://www.cso.ie>

⁵ <http://www.shelflife.ie/contactless-payment-usage-in-ireland-doubles-since-increase-to-e30-payment-threshold/>

⁶ <http://www.idc.com/getdoc.jsp?containerId=prUS41284516>

5 COMPETITORS

For this report, we compared 2 companies, ParkMagic and Q-Park, both of which operate in the parking space in Cork city meaning that they would be direct competitors to our venture and, through analysis of their strengths weaknesses, opportunities and threats, gain insight into the same factors for our venture.

5.1 PARK MAGIC

5.1.1 PROFILE

Company Name	ParkMagic
Company Size	Per LinkedIn the company side is 1-10 employees ⁷ .
Turnover	Unfortunately, all the financial information available on ParkMagic was inaccessible without paid subscription or one time fees so we were unable to view it.
Profitability	Similarly, to the above section we were unable to access any information relating to this, however, per an Irish Time article the company reported a loss of €2.7 million in 2010 ⁸ .
Market Share	Our research into competing services in the city indicated that only ParkMagic and Q-Park offered short term parking reservations. From this we can speculate that they both share the market in this space but with Q-Park having the majority due to their higher visibility having a physical space and advertising and the notable lack of visibility of ParkMagic.
Positioning	The company is positioned poorly in the parking space with their lack of visibility and aging technology
Products and Services	They offer pre-booking of parking spaces in the city, pay by phone and easy toll parking.
Pricing	ParkMagic is consistent with conventional on street parking schemes from €2 per hour.

5.1.2 SWOT ANALYSIS

- **Strengths**
 - Provides online and pay by phone convenience for the customer to book parking remotely saving them time.
 - The system is already in place and established meaning that their system would have to be massively outclassed to convince the council to move away from something they have already put time and money into.

⁷ <https://www.linkedin.com/company/parkmagic>

⁸ (<http://www.irishtimes.com/business/retail-and-services/parkmagic-reports-losses-of-2-7m-1.564071>)

- **Weaknesses**

- Per our primary research, over 70% of respondents did not use this service which can potentially be attributed to poor implementation resulting in reduced adoption and losing out on important word of mouth promotion.
- Furthermore, this could be attributed to a lack of marketing effort meaning that the drivers in cork had simply not heard of the service which is likely to be the case.
- Their website is problematic to use with many buttons refusing to work, this could turn away potential customers immediately and make it difficult for existing customers to find assistance and continue using the system.
- Their use of tags means that there is an extra barrier to entry for potential customers who do not wish to purchase a peripheral to use the service.
- The mobile app provided by the company to use their service is currently sitting on a 1.5-star rating on the Apple App store⁹ indicating that their mobile technology, as well as their web technology is of poor quality potentially resulting in loss of repeat custom.

- **Opportunities**

- A strong marketing campaign would educate the population and generate new customers who would use their service if they were aware of it.
- A quality control pass of their website would resolve navigation issues meaning that more customers could access the content.
- As most drivers have a mobile device with them always, moving to a system which uses phones away from the tag based system would make it more convenient.

- **Threats**

- They are very vulnerable to a better marketed and more user-friendly system.
- Their use of tags leaves room for a competitor to implement a system without the need for peripherals which would result in a more accessible and convenient service.

⁹ <https://itunes.apple.com/ie/app/parkmagic/id718149552?mt=8>

5.2 Q-PARK

5.2.1 PROFILE

Company Name	Q-Park																
Company Size	2,500 - 185 ¹⁰																
Turnover	€809.1 million (2015 - Global) - €35million (Ireland)																
Profitability	€90.9 million (2015 - Global).																
Market Share	Q-Park manage over 835,000 parking spaces in over 6,100 parking facilities, across ten Northwest European countries																
Positioning	Q-Park is positioned well in the city parking space as they are well established and known by residents and businesses.																
Products and Services	They offer pre-booking of parking spaces in the city, pay by phone and easy toll parking.																
Pricing	<table><tr><td>Duration:</td><td>Price</td></tr><tr><td colspan="2"><i>Grand Parade Cork</i></td></tr><tr><td>Day Rate Per Hour</td><td>€3.00</td></tr><tr><td>Evening (5pm-10am)</td><td>€5.00</td></tr><tr><td colspan="2"><i>Pre-book Online</i></td></tr><tr><td>Day (8am-6pm)</td><td>€13.00</td></tr><tr><td>24 Hour Parking</td><td>€15.00</td></tr><tr><td>4 Shopper Special</td><td>€9.00</td></tr></table>	Duration:	Price	<i>Grand Parade Cork</i>		Day Rate Per Hour	€3.00	Evening (5pm-10am)	€5.00	<i>Pre-book Online</i>		Day (8am-6pm)	€13.00	24 Hour Parking	€15.00	4 Shopper Special	€9.00
Duration:	Price																
<i>Grand Parade Cork</i>																	
Day Rate Per Hour	€3.00																
Evening (5pm-10am)	€5.00																
<i>Pre-book Online</i>																	
Day (8am-6pm)	€13.00																
24 Hour Parking	€15.00																
4 Shopper Special	€9.00																

5.2.2 SWOT ANALYSIS

- **Strengths**
 - Q-Park is a globally established company with over 835,00 spaces at the disposal.
 - Their services can be used on a national level as their business is not restricted to one county.
 - They offer price reductions to students which enables them to target alternative markets
 - Parking in high rise facilities remove the risk of parking fines on the street.
 - They offer several payment options including subscription based options.
- **Weaknesses**
 - Q-Park maintains a physical premise so rent is a considerable overhead.
 - With low ratings on their mobile application they need to consider making their application to a higher standard.
- **Opportunities**
 - The increase in mobile technology provides an opportunity to exploit this and the drivers desire for convenience by offering an option to pay remotely.

¹⁰ <https://www.q-park.com/>

- They could advertise their national parking rates online showing the savings customers could make by using their service.
- **Threats**
 - Expansion is difficult as new premises are required to increase parking space capacity.
 - If councils decide to only allow parking operations as a service by the state, parking operators such as Q-Park would no longer be able to offer their services.

6.0 COMPETITIVE ADVANTAGE

Our system will embrace the trend of convenience and mobile technology by allowing the customer to manage their parking remotely and quickly using mobile and web based applications. The value given to the drivers is in the form of convenience and cost by making it easier to use the cheaper alternative of on street parking.

One of the main advantages our system has over the ones mentioned above is the unique features that this service will offer and the advanced supporting software which controls and manages it. The sensors on the street will allow for extremely granular metrics which will be extremely valuable to the council over time.

7.0 BENEFITS TO CLIENT

7.1 BENEFITS TO COUNCIL

Optimisation	<p>The system will Improve traffic congestion and with $\frac{1}{3}$ of inner-city traffic being caused by drivers looking for parking this will be of major value to city planners and managers.</p> <p>The system will provide metrics which will give Insights into parking and traffic patterns which will be valuable to city planners increasing the efficiency of future solutions.</p>
Management	<p>This increased efficiency of inner city parking management will allow for easier management of areas without smart sensors as it will free up traffic wardens time for extra patrols due to the automated systems in place in areas with smart sensors.</p> <p>The ability to monitor parking spaces remotely from a central location will provide valuable metrics over time to allow for more efficient city planning and management.</p>
Automation	<p>Parking is managed automatically freeing up resources for other activities and potentially saving money on man hours due to the reduced need for foot patrols in automated areas.</p> <p>Illegal parking can be monitored and parking wardens can be automatically notified of violations to move to the areas and enforce parking laws.</p>
Revenue	<p>Increased revenue from high rate of reported parking violations both from automated reports and increased patrols in non-automated areas which were previously sparsely patrolled.</p> <p>Due to the cutting-edge system, the elevated profile of the city as a modern destination will potentially result in an increase in tourism and investment.</p> <p>The automated paperless system will reduce the need for refuse collection and disposal further saving money and man hours and raises the profile of the city for being progressive and environmentally friendly resulting in interest from businesses and developers.</p>
Environmental	<p>Paper parking disks are outdated and contribute to litter, with an automated system this will be removed and the environmental benefits resulting from this and the reduced traffic congestion will be beneficial to health.</p>

7.2 BENEFITS TO CUSTOMER

Convenience	<p>The ability to pay for parking remotely before or during the commute will make the parking experience much more convenient and result in less aggravation as spaces can be reserved beforehand with minimal risk of it being taken upon arrival.</p> <p>There would be no need to find a shop that sells parking disks as parking can be paid for remotely.</p> <p>The ability for businesses to reserve nearby parking for clients as needed to make arranging important meetings and events much easier without the need to worry about parking.</p>
Cost	<p>The ability to avail conveniently of on street parking would enable users to save money instead of using expensive high rise solutions.</p>
Environmental & Health	<p>Paper parking disks are outdated and contribute to litter, with an automated system this will be removed and the environmental benefits resulting from this and the reduced traffic congestion will be beneficial to health.</p>

8 MARKETING STRATEGY

8.1 MARKETING OBJECTIVES

- To develop brand awareness through steady, organic growth of new customers resulting from positive month to month advertising.
- Develop awareness of the new Smart City Parking system and increase user adoption of the service on a near total scale

8.2 FINANCIAL OBJECTIVES

- To reduce the variable costs through efficiency gains.
- Reach profitability within the first year with a view to expanding steadily over the coming fiscal years.

8.3 POSITIONING THE SERVICE IN THE MARKET

A focus on convenience and modern technology will position the business well with the young professional market who are looking for a cutting-edge solution to fit in with their modern day to day lives. Furthermore, it would be positioned well in the business space being the only service to allow them to book parking spaces close to their place of business.

8.4 DIFFERENTIATION FROM COMPETITORS

Our system will embrace the trend of convenience and mobile technology by allowing the customer to manage their parking remotely and quickly using mobile and web based applications. The value given to the drivers is in the form of convenience and cost by making it easier to use the cheaper alternative of on street parking.

One of the main advantages our system has over the ones mentioned above is the unique features that this service will offer and the advanced supporting software which controls and manages it. The sensors on the street will allow for extremely granular metrics which will be extremely valuable to the council over time.

8.5 SEGMENTS TO TARGET FIRST

The organisational, council, segment is the most important to target first as they will ultimately be responsible for adopting the system and implementing it across the city.

The personal segment will be targeted next and will ultimately be the responsibility of the Council once they have adopted the service.

8.6 KEY BENEFITS

The key benefits of the system have been outlined in the above sections but will primarily be the convenience and cost to the end users and the improvements to city management and value provided to the council.

8.7 CONTACTS FOR MARKETING AWARENESS

Local radio and TV stations would be an important contact and would be integral for raising community awareness of the new system being implemented. The City Council currently use a many of these channels to inform the community of local campaigns as well as ongoing environmental or social issues. It will be the responsibility of the Council to pursue these contacts as they best see fit.

9 SALES STRATEGY

Our sales strategy will focus on the 2 customer segments outlined above, the organizational and the personal. The organisational refers to the strategy for pitching and selling the system to the council and the personal refers to how the council would ultimately need to present it to the end user after they have adopted the system.

9.1 ORGANISATIONAL STRATEGY

As this system will need to be accepted and implemented by a large organisational body and will be extremely costly, the interactions with our client will need to be conducted with the upmost professionalism and referring to a business model canvas. Initial contact would be done over the phone or via email to garner initial interest but this should be kept to a minimum as the financials involved require a more delicate and complicated presentation.

The primary negotiation and ultimately sale of the system would be done face to face by an experienced sales executive to ensure that all the financial information and benefits are presented to the potential client in the best way possible. Prototypes and examples of smart parking that other cities have implemented will show how it would be beneficial for them.

Further contact following any agreements would potentially need to be completed by legal or governmental bodies to ensure all regulations are in keeping with county/city law.

9.2 PERSONAL STRATEGY

The end users of the system, the drivers, will be reached by an initiative that the adopting council will spearhead. This initiative should focus on educating the drivers about the new system via TV/Radio adverts along with social media coverage. Furthermore, on streets which once implemented parking disks, the existing information street signs should be replaced and updated with the new information.

10 MARKETING AND COMMUNICATIONS

As above communication and education of the end user would need to be done via TV/Radio advertisements along with a robust social media campaign throughout the development keeping them aware of the changes so there is not one large jarring change. Furthermore, an on-street initiative may be beneficial to educate and advertise the system face to face with the drivers as they are parking.

The street signs again would need to be clear and informative to allow unfamiliar users to understand and use the new system effectively.

10.1 THE 4 P'S OF MARKETING

Following the 4 Ps of marketing, product, price, promotion and place service. The product is Smart City Car Parking solutions and the price would be more affordable than existing convenient solutions. The promotion would be done via TV/Radio and social media and the place would be all over the city with an aim to have maximum effectiveness.

11 FINANCIAL FEASIBILITY

11.1 PRICING

11.1.1 COST PRICE

This will be the price that we pay for the sensors and any related components required.

Pricing sourced online via a product catalog from Libelium¹¹

Devices	Pack Contents	Cost per pack	Packs Required	Overall Cost
Sensor	10 sensors per kit	€2900	850	€2,465,000
Plug & Sense	1 per pack	€33	425	€14,025
Total				€2,479,025

Each kit comes with 10 Libelium-Metiora Smart Parking sensors¹² and comes with a magnet for contactless reset.

The Plug & Sense will work for 5 sensors so a total of 425 of these will be required to obtain live information to feed back to the main hub and application.

11.1.2 SELLING PRICE

The selling price to the Council will include a 30% mark up on the purchased product.

Devices	Pack Contents	Cost per pack	Packs Required	Overall Cost
Sensor	10 sensors per kit	€3770	850	€3,204,500
Plug & Sense	1 per pack	€43	425	€18,275
Programming of the plug & sense nodes.	€500 for the first 5 and €20/node thereafter			€8,900

¹¹ <http://www.libelium.com/>

¹² <https://www.the-iot-marketplace.com/libelium-metiora-parking-sigfox-kit/>

Software maintenance	Maintenance per kit (10 sensors)	€660	850	€561,000
Total				€3,792,675

Selling price on the sensors will be €3770/kit which will include 10 sensors and the magnet for contactless reset.

Recurring cost of €55.00 /month/kit (10 nodes) for the maintenance of the software.

11.3 SALES

We would aim to sell the complete package for a once of fee of approximately €3.8 million to initially convert all 8,500 on-street parking spaces to smart spaces. This cost will include the software development of the system and integration with the sensors and the maintenance of these for the first year. After this there will be a recurring charge of €561,000 per annum for the maintenance of each kit.

APPENDIX

This section contains all the results of our primary research.

LETTER TO THE COUNCIL

Questions for the Council:

John Paul Clifford

Cork City Council

021 4924686

Johnpaul_clifford@corkcity.ie

Dear John Paul Clifford,

I am a final year student studying Web Development at Cork Institute of Technology. I am contacting you on behalf of my college group who are carrying out a feasibility study on smart parking services in the city. After presenting our idea to George Bulman (Rubicon) he provided us with your contact details to help us further our research.

The concept of our assignment was to create an idea for a business model canvas on a product/service in the technology industry. Our group decided to focus on bringing car parking into the modern age. Our smart parking system would work by placing sensors in designated parking zones which would indicate if the space is occupied by a vehicle or not. Drivers would use a mobile application to reserve their desired parking space on their way into the city making for a stress-free parking experience. This same application would be used by traffic wardens to identify illegal parking and increase their efficiency.

Illegal parking in reserved spaces would result in the traffic warden being notified that someone is parked in a space even though no one has paid for the space. This would allow them to move to that location and issue a fine. If someone is parked in someone else's reserved space, they could report this to the traffic system and the warden would be notified and could go to issue the fine.

This would all be controlled by a networked system providing valuable metrics to council offices to improve city planning and traffic congestion.

The system would allow revenue from parking fines to be increased with automated systems notifying traffic wardens. The automation would free up wardens to patrol suburban areas which would be usually unpatrolled. Furthermore, environmental savings could be created from reduced traffic congestion. There would be a reduction in litter with the use of a paperless system. It could potentially increase tourism revenue which would create a more modern and clean city.

Our group carried out a survey asking our potential target market would they be interested in such a service and we received a positive response. We would be grateful if you could assist us in answering some questions for our feasibility section of our study:

- Have the Cork City Council ever considered remodeling Cork into a smart city by incorporating a similar system to what we propose?
- Would the council envisage positive benefits in creating a smart city parking solution e.g. environmental, tourism, return on investment?
- Do you believe the council have the budget through private investments, grants and the government to back this idea?
- How much annually does the council make on parking discs?
- How much annual revenue is lost from illegal parking?
- How many on-street parking spaces are available in the city that require parking discs?
- How many traffic wardens patrol the city daily?

- Do traffic wardens operate during the hours outlined on the parking signs e.g. 08:30-18:30?
- Are there any plans to provide parking facilities for the Capitol and Beamish (Cork Event Centre) buildings?
- What methods of marketing do you use to promote city parking?

Any additional feedback would be greatly appreciated to help us with this study. We look forward to hearing from you.

Kind Regards,
Louise Jennings

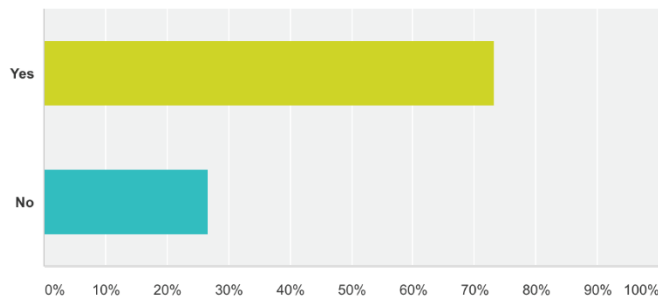
SURVEY

Original Survey:

1. Do you use on-street parking?

Do you use on-street parking?

Answered: 86 Skipped: 0

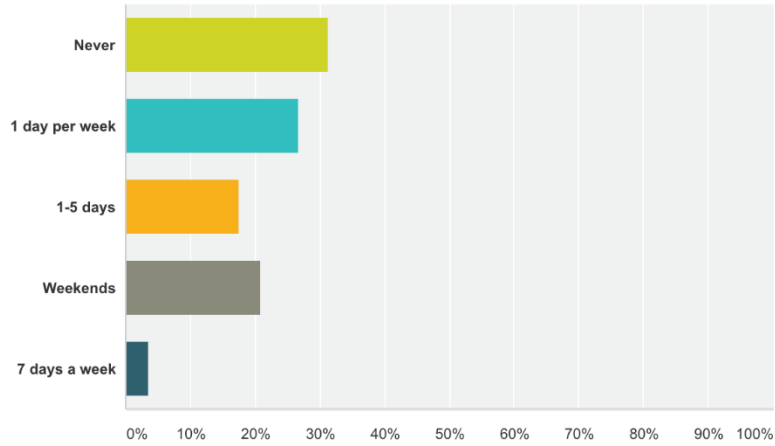


Answer Choices	Responses
Yes	73.26% 63
No	26.74% 23
Total	86

2. How often do you use on-street parking?

How often do use use on-street parking in the city?

Answered: 86 Skipped: 0

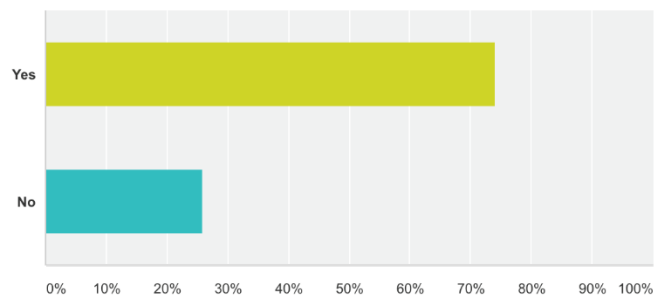


Answer Choices	Responses	
▼ Never	31.40%	27
▼ 1 day per week	26.74%	23
▼ 1-5 days	17.44%	15
▼ Weekends	20.93%	18
▼ 7 days a week	3.49%	3
Total	86	

3. Do you use multi-storey carpark?

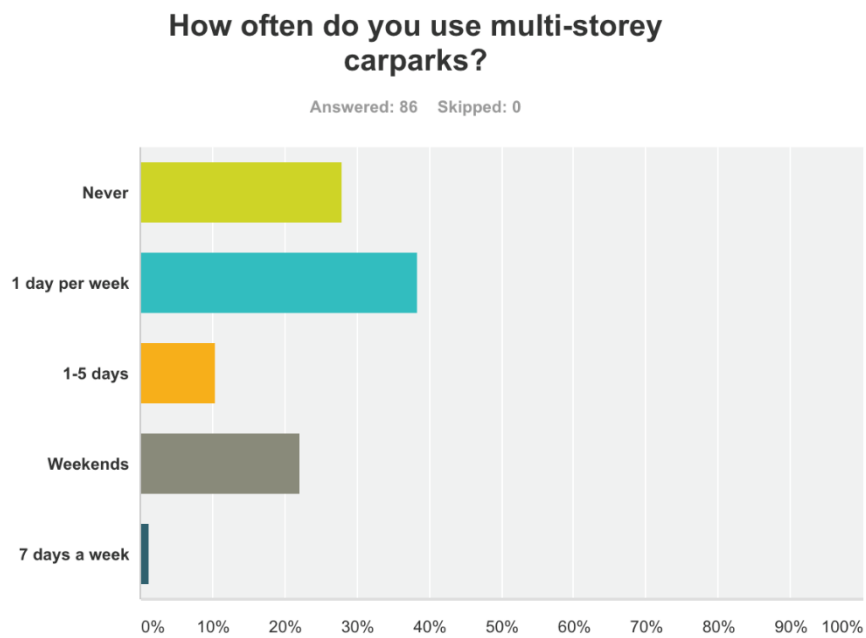
Do you use multi-storey carpark?

Answered: 85 Skipped: 1



Answer Choices	Responses	
▼ Yes	74.12%	63
▼ No	25.88%	22
Total	85	

4. How often do you use multi-storey car parks?

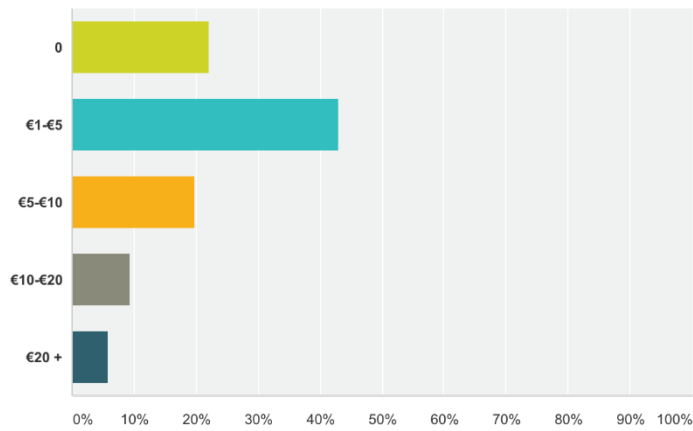


Answer Choices	Responses	
Never	27.91%	24
1 day per week	38.37%	33
1-5 days	10.47%	9
Weekends	22.09%	19
7 days a week	1.16%	1
Total		86

5. How much do you spend weekly on parking?

How much do you spend weekly on parking?

Answered: 86 Skipped: 0

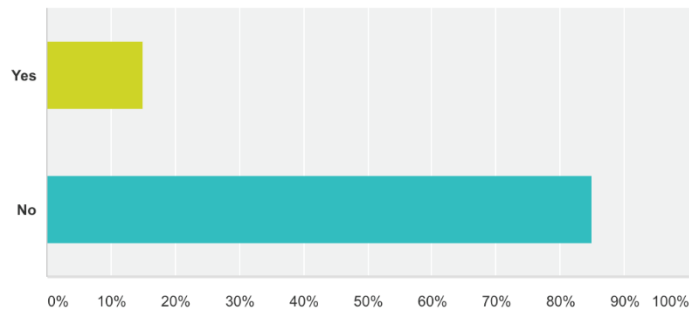


Answer Choices	Responses
▼ 0	22.09% 19
▼ €1-€5	43.02% 37
▼ €5-€10	19.77% 17
▼ €10-€20	9.30% 8
▼ €20 +	5.81% 5
Total	86

6. Have you ever used ParkMagic (Cork City Park by Phone)?

Have you ever used ParkMagic (Cork City Park by Phone)?

Answered: 86 Skipped: 0

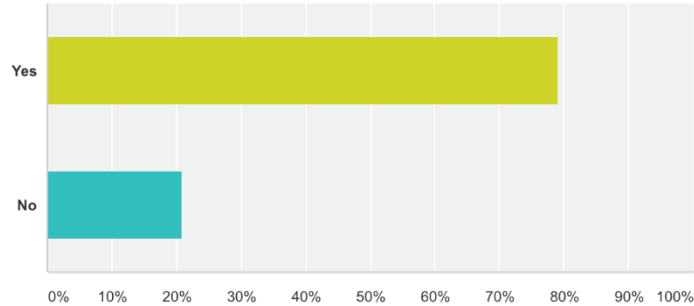


Answer Choices	Responses
▼ Yes	15.12% 13
▼ No	84.88% 73
Total	86

7. Would you avail of a parking service that allows you to book ahead an on-street parking space?

Would you avail of a parking service that allows you to book ahead an on-street parking space?

Answered: 86 Skipped: 0

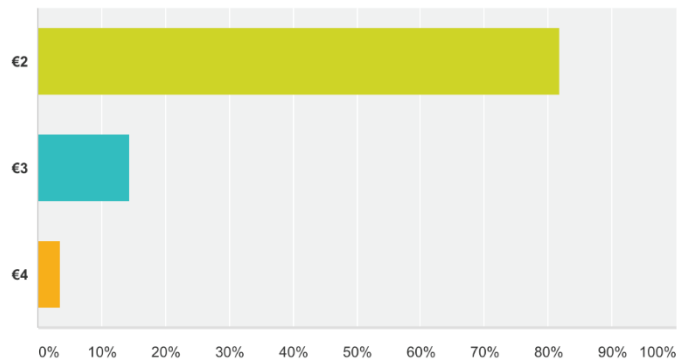


Answer Choices	Responses
Yes	79.07% 68
No	20.93% 18
Total	86

8. How much would you spend to park (on-street) for 1 hour?

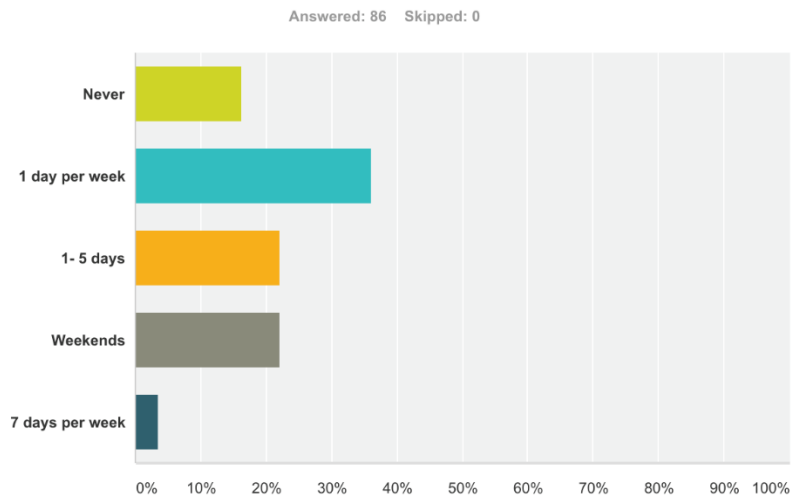
How much would you spend to park (on-street) for 1 hour?

Answered: 83 Skipped: 3



Answer Choices	Responses
€2	81.93% 68
€3	14.46% 12
€4	3.61% 3
Total	83

9. How often would you use this service?
How often would you use this service?

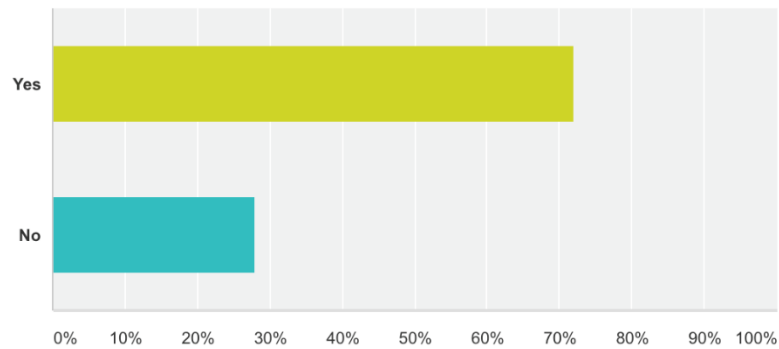


Answer Choices	Responses	
Never	16.28%	14
1 day per week	36.05%	31
1- 5 days	22.09%	19
Weekends	22.09%	19
7 days per week	3.49%	3
Total	86	

10. Would you use a pre-booking service for business needs e.g. book a space for a meeting in the city?

Would you use a pre-booking service for business needs e.g. book a space for a meeting in the city?

Answered: 86 Skipped: 0



Answer Choices	Responses	
Yes	72.09%	62
No	27.91%	24
Total	86	