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THE IMPACT OF ROBO-ADVICE ON FINANCIAL ADVISERS: A QUALITATIVE CASE STUDY

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Abstract

One of the most significant recent technological developments concerns the application of robotics and Artificial Intelligence (AI) to skill-intensive, knowledge-based jobs. The financial adviser is a role that has been identified as being under threat from automated robo-advice services. However, there are conflicting views on the future of human financial advisers. It has been argued that human financial advisers will soon become obsolete because robo-advisers are lower cost and make fewer mistakes. Conversely, it has been argued that financial investment is an emotional process that requires empathy and reassurance that cannot be provided by automated robo-advisers. In this exploratory study we use service encounter theory to explore the key elements of the financial adviser job role, identifying where human interaction with the client was considered to be valuable. Our findings suggest that robo-advisers are likely to augment rather than substitute human financial advisers.

Keywords: Robo-Adviser, Financial Advice, Automation, Augmentation, Qualitative, United Kingdom.

Introduction

One of the most significant recent technological developments concerns the application of robotics and Artificial Intelligence (AI) to jobs that up to now have been considered safe from automation. Described as the second machine age, analysts and commentators have forecast mass unemployment from the robotisation of a wide range of predictable, repetitive job roles (Brynjolfsson & McAfee 2016). What sets this change apart from previous technological revolutions, such as the automation of factory work in the 19th century, is the potential of robotisation to affect dramatic changes to the demand for skill-intensive, knowledge-based workers (Loebbecke & Picot 2015). The role of the financial adviser is one such role that has been identified as being under threat from automated robo-advice services (Davenport & Kirby 2016).

Professional financial advisers gather detailed information about a client's circumstances, goals and attitudes to risk. Based on this information the adviser will then identify and recommend different financial product portfolios that are suitable for

the client. By contrast, robo-adviser services provide financial advice with minimal human intervention. In general, robo-adviser services use simple surveys, often of only 10-15 questions, to profile clients and to assess their needs. This data is used to create a range of proposed asset allocation portfolio's that vary in their volatility. The client's chosen asset allocation portfolio is adjusted and implemented and portfolios are monitored, rebalanced and reported for the duration of the relationship. Randy Cass, founder of Net Wealth, a digital wealth platform, suggested at the European Investment Conference 2017 that financial advisers would become obsolete unless value can be added beyond simply providing portfolio maintenance. Cass (2017) describes a vision of the future where it could be impossible to determine if a client was working with a machine or a human due to the level of personalisation a robo-advice system could provide. However, several commentators have argued that there will still be a need for human financial advisers. For example, in a market downturn, robo-advice will offer no reassurance or human comfort (Economist, 2015). This sentiment is shared by Scott Smith from Cerlulli (Beilfuss 2017), who says the ongoing service provided by human advisers and what clients appear to want is simple human interaction.

The interaction between a financial adviser and their client can be considered as a series of service encounters. Larivière et al. (2017) argue that technology has transformed many service encounters and may either augment the role of service employees, or provide a substitute for service employees. Voorhees et al.'s (2017) conceptual model of service encounters provides a useful structure to frame the client service experience without prescribing how the service encounter interactions may occur. Therefore, guided by service research theory, the research question this study addressed was *how might robo-advisers impact on the role of human financial advisers?*

The paper is organised in five sections. The following section reviews the relevant literature regarding the nature of the automation debate, the recent developments in robo-adviser services and the theoretical foundation of the study. The method adopted for this study is then explained. The findings of the study are presented in four parts: initial contact and first meeting; establishing client needs and servicing; implementing investment decisions and; financial adviser views on robo-advice. These findings are

then discussed in the following section. In the final section of the paper, the main conclusions from the study are presented as well as the limitations and avenues for future research.

Literature Review

In this section, we review and synthesize (1) the current debates regarding the automation of service work (2) robo-advice and the future of financial advisers and (3) how service research provides the theoretical foundation of the study.

Automation of service work

Throughout history there have been many warnings of developments in technology wiping out ordinary jobs, for example, the Luddites in the early 19th century. A more recent example is the 'automation jobless', a trend towards bigger production with a smaller workforce (TIME 1961). Brynjolfsson and McAfee (2016) claim rapid digitisation is likely to lead to a loss of jobs in the first instance as it leads to economic disruption. There will be less need for some types of workers as technology progresses and can replicate these jobs. Autor (2015) argues in the future improved computing power and artificial intelligence will increase the chance of replacing labour on a scale and in a way that has not been seen before.

Autor (2015) discusses why labour has not been wiped out. Autor argues that automation is a substitute for certain types of labour but also a complement to others and raises output in a way that leads to a higher demand for labour. For example, the introduction of ATM machines replaced Bank Tellers in branches during 1990s in America. The number of ATM machines grew from 100,000 to 400,000 from 1995 to 2010. During this time period the number of Bank Tellers employed also increased. The falling costs created by using ATMs allowed more branches to open and the time saved allowed Bank Tellers to undertake different tasks and become involved in 'relationship banking'. Autor concludes that though automation reduces the labour requirements per unit of output, automation does not necessarily reduce aggregate employment levels.

Autor (2015) identfied three main factors that can influence the impact of process automation on employment: 1) is the job a substitute or a complement to automation? If it is a substitute it is more likely that employment will fall for that job; 2) the elasticity and supply of labour can mitigate wage gains. For example, as demand increases for a job that is a complement to automation, if the labour supply is greater than the demand, wage gains will be reduced; 3) the output elasticity of demand combined with income elasticity of demand can either dampen or amplify the gains from automation.

Historically, computerisation has been restricted to manual and cognitive routines that followed explicitly defined rules (Autor & Dorn 2013; Goos et al., 2009). As a result, the jobs most susceptible to computerisation were those that followed well-defined routine tasks that could easily be performed by sophisticated algorithms (Frey & Osborne 2017). Frey and Osbourne claim that recent technological breakthroughs are, in large part, due to efforts to turn non-routine tasks into well-defined problems. Defining such problems is helped by the provision of relevant data. i.e. Big Data. As predicted by Autor & Dorn (2013) and Goos et al. (2009), more tasks that are non-routine are becoming automated. One example of a job that has been previously considered non-routine and safe from automation is the financial adviser.

Robo-Advice and the Future of Financial Advisers

Robo-advisers are defined as automated computer systems that provide financial planning services with little or no human intervention and typically at a lower cost compared to traditional financial advisers (Blenman, 2017). Cass (2017) argues that what robo-advisers offer is not new or different than wealth managers but it is delivered in a more convenient format.

In a report by on robo-advice, Accenture (2015) claim robo-advisers currently only control a small share of assets under management (AUM) but can offer cost savings of up to 70%, resulting in rapid and accelerating growth. Accenture claims most interest in robo-advice comes from the mass-affluent, delegator market segment, which is essentially wealthy people who want someone else to manage their money, a segment which has traditionally been underserved. Full service advisers are looking at robo-advice to serve smaller accounts and increase adviser productivity.

Robo-advice sits between traditional investment advice and discretionary management. Jane Warren (2016), chief executive of Investec's online arm, says robots will give people with less money the chance to invest, providing them with *'lower costs, more convenience and lower minimum investment values'*. Robo-advice may also reduce the mistakes made by human investors when dealing with money (Economist, 2015). Lisa Kramer (Professor of Finance at the University of Toronto and a member of the board of advisers for Justwealth, a newly launched robo-advisery firm in Canada) suggests robo-advisers are likely to outperform humans because they are less susceptible to making mistakes (WSJ 2016). Scott Smith from Cerlulli adds that human advisers may also provide the wrong advice, but that this may also be evident in robo-advisers as they are designed by humans and therefore susceptible to poor design (Beilfuss 2017).

However, there are also strong arguments to suggest that the human aspect of financial advice will remain an important factor. The emotional element to financial planning is highlighted by Carla Dearing, CEO of SUM180, an online financial planning service who said *'money is emotional and there are always intangibles to consider in deciding what to do next, which cannot be captured by robots'* (Metinko 2017). Individual client needs vary considerably so while new or simple needs may be met with robo-advice, more complex financial planning may best sit with human financial advisers (Economist 2015). Thus, robo-advice may be a complement to add to existing wealth management services (Accenture 2015). For example, Cicero Research (2016) investigated how technology could be used to support parts of the financial advice process and found the first point of contact and initial engagement with a client required human interaction to establish the client's needs. However, once this rapport and understanding had been achieved the execution of the business and ongoing servicing required less human input and could be led by technology. Similarly, Scott Smith (WSJ 2017) found in his research clients most often cited the reasons for using a human adviser was *'their willingness to take the time to understand my needs and goals'* and *'to look at my entire financial picture'*. He also states that investors begin by using online tools to get a basic understanding of their needs but then look to talk to a human to discuss them.

Theoretical Foundation

Service research provides a useful lens to conceptualise the interaction between financial advisers and clients. Voorhees et al. (2017) argues that the relationship between a customer and a firm is based on a series of encounters, and it is these encounters that determine the customers' perception of the quality of the firm and the likelihood of continuing the relationship. Voorhees et al. argue that a service experience can be considered as three distinct periods: (1) pre-core service encounter, (2) core service encounter, and (3) post-core service encounter (see Figure 1). The pre-core service encounter is the time period that customers begin reviewing information about the firm and make initial contact. The core service encounter is the period when the primary service is delivered to the customer for example, receiving advice and recommendations for a client's investment portfolio. The post-core service encounter is the period when the customer reflects on and assesses their experiences in the previous two time periods. These assessments may involve providing feedback through surveys or completing reviews and includes any actions by the firm to maintain the relationship, such as scheduling future investment portfolio reviews. Voorhees et al. argue that if these actions are effective then they are likely to trigger future pre-core service encounters for a further iteration of the service experience loop.

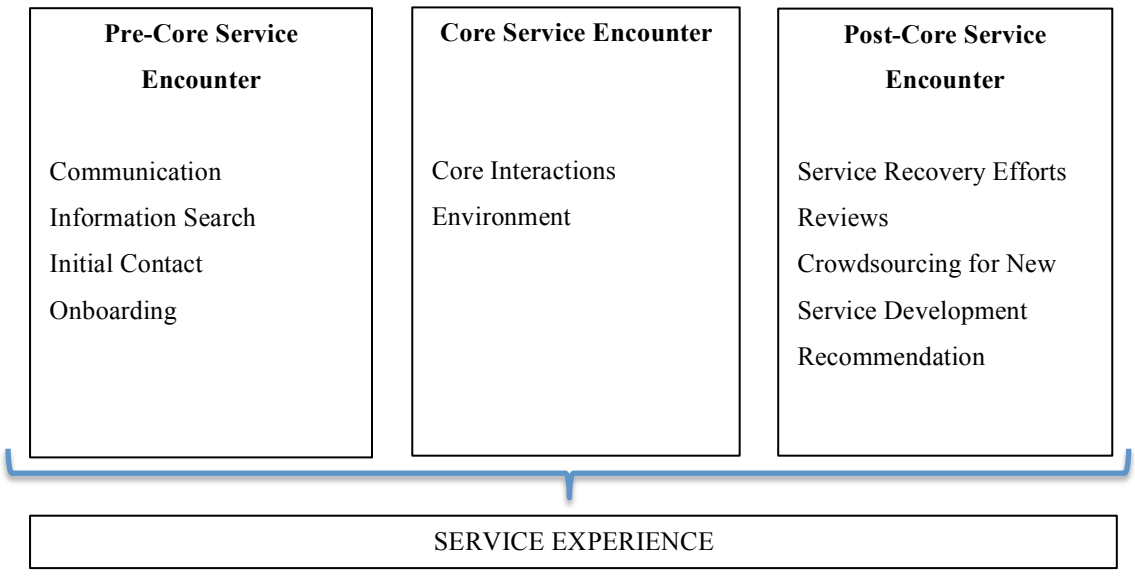


Figure 1. **Voorhees et al. (2017) Conceptual model of service encounters through the service experience**

Larivière et al. (2017) observe that the service encounter is fundamentally changing due to advances in technology. For example, pre-core service encounters such as information searches are often undertaken via the internet, the customer drawing on online recommendations and initiating contact via email or online forms. Core interactions may often be supported through email exchange and investment decisions monitored through software dashboards provided by financial investment firms such as Fidelity. Post-core encounters may involve online reviews or social media contact. Larivière et al. add that the service interface is also evolving becoming increasingly dominated by technology, in some cases the human being removed from the interaction. For example, a smartwatch interacting automatically with a service provider (e.g. Fitbit) for further data analysis. This growth in the role of technology may lead to either the augmentation of service employees with technology complementing and assisting employees, or the substitution of service employees (e.g. Amazon Go retail stores).

There are limited academic papers regarding technology in wealth management. There are many trade papers on technology and robo-advice that are useful in explaining theoretic capabilities of robo-advice but limited examples of actual use in businesses. Many sources agree that robo-advice will provide investment guidance at a lower cost compared to traditional financial advisers and that it can be more successful as it removes the emotional element from finances (WSJ 2016; Metinko 2017). Counter to this, many sources state the emotional element is important in understanding a client's needs. Humans are much more adept at building a relationship and offering real advice to support clients. Robo-advice was seen as less able in identifying and understanding client's wants and needs (WSJ 2017; Dearing 2017). This study investigates how human face-to-face interaction between financial advisers and their clients' influences the financial planning process. Our research uses Voorhees et al.'s (2017) Conceptual Model of Service Encounters to interpret and understand how the financial adviser-client relationship may change through technology and robo-advice. It was envisaged that in so doing the study would provide greater understanding regarding how robo-advice may be appropriated in the wealth management sector.

Method

As the study was exploratory in nature a qualitative case study approach was adopted. Case studies are particularly suitable when attempting to answer the "how" and "why" questions of a research phenomenon (Yin 2009). The study was interpretive as it sought to gather in-depth understanding of the views of participants on the financial adviser-client relationship and how robo-advice may impact on that interaction. Consequently, semi-structured interviews were the most appropriate research method for data collection. Semi-structured interviews provided the best balance between structure and freedom for the participant to answer. It allowed the interviewer to ask specific questions whilst allowing the conversation to flow, probing for more detail and examples as required (Saunders et al. 2016).

Site selection

Our research focus guided the selection of the case study site. We chose an organization that was reviewing the use of new technologies to support and improve the financial adviser-client relationship. This provided an opportunity to study the aspects of human interaction that were considered most important by advisers when interacting with clients. The single-case study enabled us to make sense of our data without the risk of oversimplifying and to provide a rich description of the investigated phenomenon (Sigglekow 2007).

The organization studied is a wealth management firm (WealthCo) located in the United Kingdom (UK). WealthCo provides a network of financial advisers to provide financial advice to individuals and businesses across the UK. WealthCo advisers will support their clients for a range of services including insurance, mortgages as advising on more complicated areas such as inheritance tax, retirement planning or investment for growth.

Data collection

The profile of financial advisers varied at WealthCo with some operating as sole traders, some comprising of medium size businesses and a small number of large businesses. Therefore, we targeted all three groups when selecting participants for the interviews. Data collection took place between April 2017 and June 2017. An email

was sent to participants in advance to explain the interview process. The interviews were arranged at the convenience of the participant and the majority of interviews were undertaken in a private meeting room to ensure confidentiality.

Five interviews were conducted with a financial adviser from a range of different business sizes (see Table 1). The rationale for interviewing a range of advisers was twofold. First, it provided representativeness in the advisers' descriptions of their experiences interacting with clients. Second, it allowed triangulation of data through comparisons of the views of advisers.

Participant	**Role**	**Scale of Business**
Participant A	Financial Adviser	Single Person
Participant B	Financial Adviser	Single Person
Participant C	Financial Adviser	Medium
Participant D	Financial Adviser	Medium
Participant E	Financial Adviser	Large

Table 1. Summary of interviews and participants (April 2017–June 2017).

The interview questions centred on each adviser's background and his/her experiences of engaging and working with clients. The interview questions addressed how the advisers perceived the process of initial contact and attracting new clients, servicing and maintaining the relationship with the client and understanding routine information gathering tasks. All interviews were recorded and transcribed. Handwritten notes were also taken to record additional details not captured in the audio recording, such as body language and non-verbal communication. All participants were informed that they had the right to withdraw at any time, to request a copy of the transcript and to withdraw their data. A summary of the interview guide is provided in Table 2.

The interview transcripts were coded using a combination of a priori and in vivo codes. The frequency of the application of the codes was then used to develop a series of matrix displays to create a thematic analysis. The following section presents a summary of the findings from the thematic analysis.

Interview Schedule
How do the first interactions with a client occur?
In what format does you usually communicate with clients?
When is the first face-to-face meeting?
Does any contact occur leading up to the meeting? What format? How frequent? From who?
What follow up communication to the client is there?
How do you build a relationship with your clients?
What are the most important actions in building this relationship?
Are there any points where this relationship is essential to doing business?
Are your meetings and questions structured or is there an informal or varied format?
Is there a repetitive element to the meetings or a topic that is covered in every meeting?
How do you capture the information from a client meeting and what is done with it?
What part of you interacting with the client could be improved?
Are there any dull or repetitive tasks that you or your support staff have to do?
What do you think of the current technology available to support you in your role?
Have you heard of and what are your thoughts on robo-advice?
Do you think robo-advice would ever be adopted by WealthCo?
If there was a platform to assist partners in providing advice – how would that make you feel?

Table 2. Interview Guide for Financial Adviser Semi-Structured Interviews

Findings

In this section, we describe the interaction between financial advisers and clients and the aspects that financial advisers perceived to be the most important for creating a successful client service experience.

Initial contact and first meeting (Pre-Core Service Encounter)

Several advisers commented that during the early stages of initial contact with a customer they believed face-to-face interaction to be the most influential form of communicating. The advisers explained that the face-to face interaction allowed them to build a relationship with the client by establishing rapport and responding to social

cues. It also provided an effective way for the advisers to judge customer attitudes and preferences allowing them to physically see and comprehend how their words and body language were being perceived by the client. The advisers believed that face-to-face contact was more effective because alternative forms of communication such as email or telephone conversations provided fewer opportunities to judge customer responses. The advisers explained:

'My perception is that they can see me, look at me, interact with me… it's about the soft issues of how that person comes over and whether you can trust that person [the adviser].'

'It's all about trust and relationship and that's easiest to generate face-to-face.'

'We could send as a letter but actually speaking to somebody [face-to-face] is by far the best way of first communicating.'

In particular, the advisers felt that this personal interaction was valuable as it enabled them to demonstrate empathy with the client, in terms of understanding and appreciating the client's personal situation and their corresponding needs. The most common method to gain this understanding was through identifying common ground between the client and the adviser, such as identifying shared views, interests or preferences. Demonstrating this empathy and understanding was considered to be critical for establishing sufficient trust from the client in the adviser's advice and recommendations. The advisers explained that trust was a significant part in identifying a client's needs. The adviser needs to build up a sufficient level of trust for the client to be willing to share their personal financial details with the adviser. These personal financial details are necessary to ensure that the adviser is providing the appropriate advice to the client. Advisers made the following comments:

'One of the main things is empathy. If you can find something in common with them or something are really interested in it doesn't take much to build rapport. And once you've got rapport you've got trust.'

'I think that relationships build upon time spent and share stories and finding things that are commonalities of interest.'

'Adding in all those elements build up that trust also if you can have some empathy and engagement, it gives you a connection.'

In summary, the main pre-service encounter activities described by the advisers were to arrange a face-to-face meeting and to demonstrate empathy and establish trust with the client. All the advisers recognised this to be a critical stage in the service experience as it normally the first point of contact between the two parties and first impressions were considered very important in setting expectations. In some respects the primary aim of the initial meeting was not to do business but to provide the foundation to build a long lasting relationship to enable repeat business with the client. The on boarding client experience was considered to be a key stage in building a relationship between the adviser and the client, a relationship that the advisers valued.

Establishing client needs and servicing (Core Service Encounter)

Having completed an initial meeting and establishing an agreement to undertake a more structured follow up meeting, normally also face-to-face, the advisers explained the next stage was to establish the client's needs. The advisers described particular questioning styles that they employed to elicit key information about the client's attitudes to risk, preferences for particular types of investment, and general knowledge and understanding of finance. A key feature of this activity described by the advisers was the ability to probe and respond to client answers so the adviser could gain a deep understanding of the client. The advisers felt this was more effective than the clients simply answering without any prompts or clarifications, such as through an online form. The adviser could also help the client reflect on their own situation before answering, to give a more accurate representation of their views. However, the advisers acknowledged that this required skilful questioning to avoid leading the client to particular answers. For example, advisers frequently mentioned using 'triggers' or clients needing triggers to uncover their true needs. The advisers explained:

'The question will take [the client] back into that state when they were interested [in receiving financial advice].'

'Questioning identifies other needs they [the client] didn't know they had previously.'

'The majority of people are apathetic [towards financial decision making] and won't do it for themselves, they need someone to ask and prompt them.'

Having established the client's needs the advisers explained that they aimed to provide an ongoing service throughout the time the client holds funds with the adviser. This ongoing advice is important as there are frequent changes in legislation or interest rates that may influence investment decisions as well as changing client circumstances. Consequently, the advice needs of the client are likely to evolve. Having an ongoing relationship with an adviser can provide a qualified expert with which to discuss these changing circumstances, and also to reflect on whether the most appropriate decisions are being or have been made. The advisers explained that they often provided reassurance and advice to clients, built on their strong understanding and empathy with the client's needs and circumstances, adding value to the relationship that they believed would be difficult to achieve through a robo-adviser service.

'Clients need that reassurance and human contact and robo-advice won't give you that!'

'Computers lack context or emption and that is so important when dealing with people's money.'

'If we're charging a fee then we have to be giving advice. We can't ask the client what do you want to choose, we have to give advice.'

'Anything could come up and [clients] are free to contact me. This emphasizes and reinforces the service element of WealthCo.'

Several advisers added that they felt the action of setting up a face to face meeting was important to act as a catalyst for the client to focus on addressing their investment needs, as otherwise the activity was easy to continually defer. As client circumstances change so frequently financial arrangements need to be reviewed to make sure they are still suitable. The majority of advisers felt that for many of their clients, although aware of the need for advice, were unlikely to pursue that need and obtain advice. They added that many clients were even less motivated to research the advice for themselves. For example, an adviser stated:

'A lot of clients even now will think, "I need to do XYZ" but it doesn't get done and it takes a conversation with somebody to say, "let's do it then" to get them to actually do it.'

The advisers also highlighted client contact as an important aspect of their business model. Each touch point with the client is an opportunity to provide a good client experience. This experience was important as it contributed the client's perception of the adviser and helped develop into the business relationship with the client. The advisers explained that they would also take into account client preferences for the method and style of communications. In some cases the adviser would specifically ask the clients preferred communication medium, whereas others would respond using the same method that the client had used to instigate the communication. The advisers commented:

'I make a point now to ask in meetings [what communication clients want].'

'It's a balance, but I find it [communication preferences] develops naturally. I don't specifically ask.'

'Every client is different, even in the same household the husband might want an email and the wife likes to receive letters.'

The main core-service encounter activities described by the advisers highlighted the need for skilful questioning and probing to encourage the client to reflect on their own circumstances and situation, often in a face-to-face meeting. They also highlighted the

ongoing need to provide reassurance and advice as the client's circumstances changed over time that was built upon empathy and trust that was established at the start of the relationship. The action of setting up a face to face meeting also appears important as this action forces the client to devote time to reviewing and discussing their investment needs, often with the adviser implementing the investment decision outcomes. Finally, the advisers try and demonstrate that they provide a tailored service to their clients, and this is illustrated through attention to their communication methods and client contact preferences.

Implementing investment decisions (Post-core service encounter)

Having established the client's needs and confirmed their investment choices and decisions the advisers proceed to action those decisions on their client's behalf. These actions may involve registering the client with investment companies, pension funds and software platforms for financial services. These activities would generate a considerable amount of correspondence and the advisers believed that it was important for this communication to be tailored to specific clients preferences to reflect their relationship with the adviser. Advisers commented:

'It [communication] should be bespoke by client, or certainly appear more bespoke.'

'It's very much a bespoke [communication] process for me but it all depends on the clients.'

'It [communication] is personalised for each person."

The advisers also identified a number of situations that involved recording information from clients. The advisers considered capturing and processing this information to be inefficient and an area that benefit from further automation. They commented:

'It's down to how you capture the information and then how you are able to recall the information. At the moment, it feels quite labour-intensive.'

'At each meeting notes are taken in various forms. For my office typing these up is the most time consuming element of client meetings.'

'We need to do more to have repeatable processes and repeatable good experiences.'

The advisers stated that in every meeting with the client, there is a need to capture information. This information is captured in various ways and the process differs between each adviser. For some advisers it may be using pen and paper, for others they dictate using smart phones or enter the information directly into forms using hand held technology, such as iPads. Most advisers saw using and manipulating this data and other data within WealthCo as an area for improvement.

Reflecting on their interactions with clients all of the advisers emphasised the importance of the overall client experience. The advisers believed that this experience was shaped by the nature of all interactions with a client and that these interactions were important, influencing the client's perception of the advisers business. The overall client experience was believed to contribute to the ongoing relationship and reinforce feelings of trust that were essential to conduct business. Advisers commented:

'It's an all-round experience from the building to everyone else who has an interaction with the client and the carpets are clean. Everything adds up everything has an impact.'

'Each point of contact with a client adds to their experience and builds on their perception of my practice.'

'All this [interactions] has a massive impact on the client journey and the client experience.'

In summary, the post-core service encounter activities described by the advisers mainly comprised of processing information recorded from the client, generating bespoke client communications and ensuring that the cumulative interaction points between the adviser and the client contributed to a high quality client experience. The

advisers believed that these information capturing and processing tasks could be more efficient through greater use of technology, so long as the service was sufficiently tailored to account for client preferences and appear personal in style. It was interesting to note that the advisers tended to refer to technology for improving information processing tasks, a transition that is well-known and well established for business process improvement.

Financial advisers' views on robo-advice

The advisers had varying degrees of knowledge of robo-advice. The majority of advisers did not believe it was a threat to their business. The most common reason the advisers gave for their perspective was that they thought robo-advice would be unable to deliver the high quality and personal relationship necessary for providing financial advice. The advisers highlighted that a robo-adviser service would be unlikely to be able to replicate the catalyst of a face-to-face meeting that many clients require to enable them to devote specific time to personal financial planning. The advisers also argued that a robo-adviser service would be unable to capture a sufficiently detailed understanding of client needs, as it would not be able to discuss and probe the client's personal and financial situation and set that in context. The advisers believed that there was a significant difference between a human asking questions and probing for answers compared to a person just answering questions online, as would typically be done for robo-adviser services. The advisers felt strongly that there was a need for human interaction to capture the full needs of the client. They also believed that the financial investment environment was highly complex and that the complexity was continually increasing, which robo-adviser services would struggle to reflect in their investment advice. The advisers made the following comments.

'Someone told me at least 10 years again that financial advisers would be dead because everybody would do things online. I said not they won't because nobody wakes up and thinks I really must plan how much I should pay into my pension.'

'I think that much of financial services advice and interaction is based upon relationships and there is a very small percentage of the population who don't need that.'

'They're [clients] not going to get that online [personal relationship] and they need the human interaction to do it.'

'I would say it's essential [the need for human interaction]. There is a lot of talk of robo-advice, there is so much complexity in financial services and the government only makes things worse by adding more layers, there's always going to be a need for advice and it's only going to get worse.'

However, several advisers held the view that they would benefit from greater access to more information regarding investment options and client information and viewed technology as a means to provide these improvements. For example, some advisers suggested that if a robo-adviser system could be used to support their processes and that there were benefits to the adviser and the client then such systems would be welcomed. An adviser explained:

'If we can use technology that's available to make things more efficient then great. If that results in a letter going to a client two days earlier then great.'

Overall, the advisers believed that there were sufficient differentiating factors between their service offerings compared to robo-adviser services that would ensure that robo-advisers did not pose a significant threat to their business for the foreseeable future. These views were mainly founded on their experiences of clients not being pro-active in addressing their investment planning needs without the triggering action of engaging a human financial adviser. The advisers also believed that the personal relationship between the adviser and the client, built on strong understanding, empathy and trust, was a critical aspect of the financial adviser service experience that would be extremely difficult to replicate using only an automated computer technology.

Discussion

Accenture (2015) suggest robo-advice will have a significant effect on the business model for wealth management. Where robo-advice provides an effective, low cost alternative, people will not be willing to pay the higher premiums of face to face

advice unless wealth managers can provide demonstrably better performance or provide value-added services. Davenport and Kirby (2016) argue that one way a human worker can insulate themselves from the threats presented by automation is through focusing on the skills that robots and artificial intelligence find difficult. These skills are often considered 'softer skills' such as demonstrating empathy with other people, being creative, responding to social cues, and undertaking sophisticated social interactions.

Our findings show there are several encounters during financial service client experience that draw on these softer skills as shown in Figure 2. For example, during the pre-core financial service encounter the advisers in our study spoke at length about the importance of demonstrating empathy and establishing rapport with clients to generate a sense of trust between the adviser and the client. During the core financial service encounter advisers spoke of the need to use sophisticated questioning techniques and gentle probing to get to the heart of the client's personal financial needs. They also highlighted the importance of providing reassurance and empathy, particularly when changes occurred either in the environment or in the client's personal circumstances.

At present, the robo-advice capabilities offered by online firms are basic (Accenture 2015) While the reduced costs of robo-advice are a key attractions (WSJ 2017; Metinko 2017) with many offering fees of under 1% they do not provide a detailed understanding client needs or the ability to developing longer term financial plans. At present robo-advice services are generally not sufficiently sophisticated to provide complex financial advice (Economist 2015). Thus, continuing to highlight and demonstrate the added value of the human aspects of the financial service experience may help protect financial advisers from competition from robo-advice services.

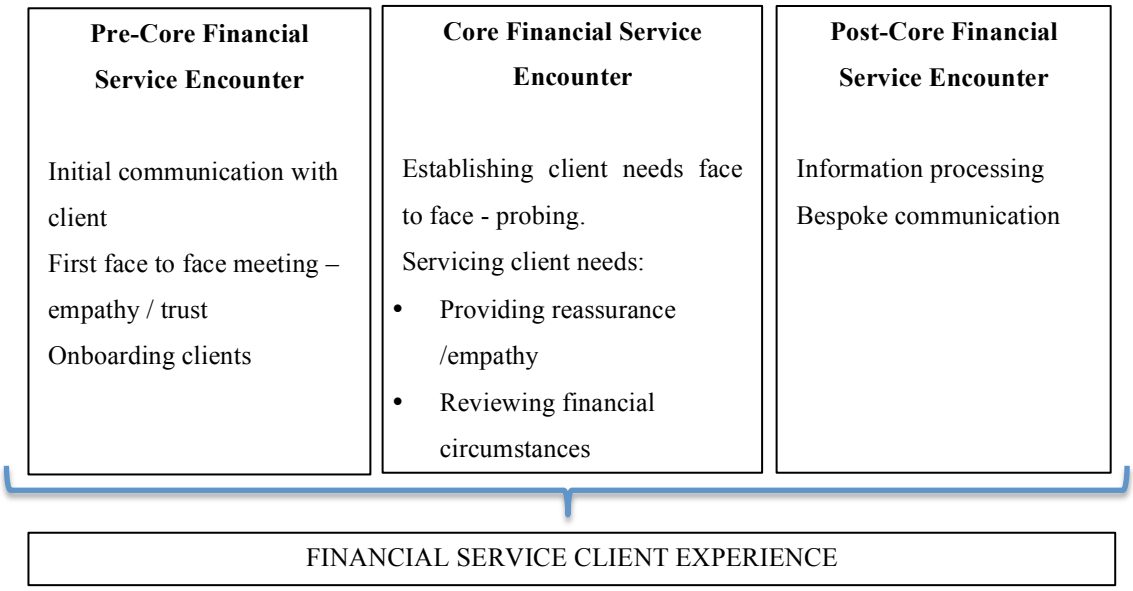


Figure 2. Summary of Financial Service Encounters at WealthCo (Voorhees et al. 2017)

However, there were several service encounter activities that may well be suitable for future automation. These activities include providing bespoke communications to clients, faster information processing and providing advisers with more investment information from which to derive their advice. Many of these activities could support the financial adviser through removing routine and mundane tasks that are still important in maintaining a high quality client experience. Thus, while human financial advisers are likely to remain important for wealth management firms, new technologies such as robo-advice services will offer new capabilities that wealth management firms may need to embrace. For example, there are an emerging number of firms that offer hybrid services pairing computerized services with hand-holding from human advisers. In these firms, the computers are used to capture and analyse data and derive market analysis to allow the human financial adviser to focus on the interaction with the client, the overall goal of the financial investment and the design of the portfolio (WSJ 2016). These observations suggest that while some automation of some tasks formerly performed by human financial advisers is likely, there remain a significant number of high order soft skills that favour human workers. The findings of this study suggest the role of the human financial adviser is more likely to be augmented by new technology, rather than substituted by the new technology (Larivière et al. 2017).

Conclusions

Wealth management firms need to think strategically about how they wish to design the service encounter with their clients. With the emergence of new powerful technologies such as artificial intelligence and robotics managers need to decide on the balance between human and technological inputs. These options may range from full technology-driven service encounters to full human driven encounters (Larivière et al. 2017). Managers need to carefully analyse the critical value adding features of the financial advice service encounter and whether these features are easily codified or not. This analysis will need to consider the client, the type of financial service and the stage of the customer journey (DeKeyser et al. 2015). The preferred combination of technology–human capabilities is likely to evolve over time as technology becomes more sophisticated and some commentators believe that focusing on softer cognitive tasks will only protect human workers for a relatively short time. However, as Frey & Osborne (2017) observe, it may be that technology may not always be the preferred option because of its creative and social limits.

While this exploratory study has provided a number of new insights into the potential impacts of robo-advice in financial services it is subject to several limitations. The sample size is small and only comprises of wealth managers from a single firm in the UK. Although the advisers that were interviewed were drawn from a range of different sizes of business, and from different regions in the UK, it is acknowledged that studies with a greater number of participants or in different national contexts would be beneficial. It is also acknowledged that the client perspective is not captured in this study. Thus, the next stage of this study will involve collecting data from client experiences of using financial advisers and robo-adviser services to provide a fuller understanding of the potential impacts of robo-advice.

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