

Governance reports

Corporate governance – Pick n Pay Stores Limited

The Board of directors of Pick n Pay Stores Limited (the Board) and senior management are committed to the highest standards of corporate governance and take pride in our high moral and ethical business standards. The Group is committed to sound and transparent business practices. The Board is committed to complying, in all material respects, with the principles contained in the King Code of Corporate Practices and Conduct (King III), as well as to the additional requirements for good corporate governance stipulated in the JSE SRI Index. We have performed a thorough review of the implications of King III and, where appropriate, the corporate governance structure has been amended to comply with the new code, which became effective on 1 March 2010. An overview of the Group's corporate governance framework is provided below including a section dealing with the aspects of King III that are still under review.

A more comprehensive review with details of all board and committee charters, and roles and responsibilities of the Chairman, CEO and Managing Directors – is available in the Investor Relations section of our website (www.pnp.co.za).

This report applies to Pick n Pay Stores Limited and where applicable to Pick n Pay Holdings Limited. For corporate governance issues relating to Pick n Pay Holdings Limited only, refer to page 30.

Group structure

The Group is controlled by Pick n Pay Holdings Limited whose only investment is its 53.6% shareholding in Pick n Pay Stores Ltd. The Group has a flat organisational structure and overall responsibility lies with the Board. This Board appoints the CEO to be responsible for day-to-day operations of the Group and in discharging this responsibility, the CEO has split the operations of the Group into three separate divisions. The three divisions are: the Retail division, the Group Enterprises division and Franklins Australia. Each division has its own management board, to control daily operations. This flat Group structure enables local operations to take ownership of decision-making and to assume individual responsibility for their actions and success. The structure encourages personal growth and achievement, ensuring that initiative is enabled, identified and rewarded.

Enduring principles of Pick n Pay

The Board has a responsibility to ensure that the CEO and management do not depart from the following enduring principles that were applied by Raymond Ackerman while building the Group and which ensure that the spirit of Pick n Pay remains intact:

- > Consumer sovereignty
- > Striving for a flat organisational structure
- > Where appropriate, maximising decentralisation of authority to enable local control
- > Promoting from within, recruiting from outside only as an exception when specialist skills are required
- > Maintaining a discount image
- > Fighting collusion amongst suppliers, and rejecting collusion between retailers
- > Maintaining strong cash balances for buying forward on a rising market

The Board

The Board comprises seven non-executive directors and four executive directors. It is responsible for selecting a successful management team, approving corporate strategy, monitoring and assessing performance, and acting as a resource for management in matters of planning and policy. The Board is responsible for setting the governance policy and practices for the Group, and for appointing the Chairman and CEO, whose roles are separate. The Board meets four times a year to monitor the performance of the Group, its executive directors and senior management.

The Board performs an annual self-assessment of its performance and the results of this review are made available to the external auditors. The Board has a responsibility to ensure that internal controls over operations and finance have been implemented, are continuously monitored and are functioning effectively. The Board is not aware of and has not been informed of any issue that would suggest that internal controls have had a material breakdown during the financial year.

Appointment of directors

New appointments to the Board are considered by the Board as a whole, on the recommendation of the Nominations committee. When appointing a director, the Board considers the directors' ability to lead, requisite knowledge, relevant experience and independence. It is important that the appointment ensures the necessary balance of power (majority of directors to

be independent non-executives) and also introduces new skills and expertise to supplement and or replace existing skills and experience of board members.

Background and reference checks are performed by the Nominations committee before the nomination of a director. Experience of directors are presented in their CVs on pages 12 and 13. Directors serve three year terms after which they are required to retire at the AGM but may offer themselves for re-election. At the end of each three year term the director is evaluated by the Chairman and will only be put forward for re-election by mutual consent of the Chairman and the respective director.

The appointment of all directors to the Board requires shareholder approval at the AGM. On appointment to the Board a new director is required to retire and offer themselves for re-election to the Board by shareholders at the first AGM following their appointment.

Independence of non-executive directors

With the implementation of King III, all non-executive directors classified as independent will undergo an annual evaluation of their independence based on the guidelines provided by King III. Directors serving terms greater than nine years will undergo a rigorous review of their independence.

The majority of non-executive directors are independent in terms of King III. Gareth Ackerman and David Robins are not considered independent by virtue of their relationship with the Group's ultimate controlling shareholder. The remaining non-executive directors are considered independent. The Board has considered the independence of Hugh Herman, Constance Nkosi and Ben van der Ross in light of their years of service and are satisfied that their independence remains intact.

As Gareth Ackerman (non-executive Chairman) is not independent, Hugh Herman has been appointed as Lead Independent Director (LID). All members of the Board have unfettered access to the LID when required.

Leadership development

The Chairman evaluates the performance of the CEO annually, which is then discussed with the non-executive directors. The evaluation is based on objective criteria including performance of the business, accomplishment of long-term strategic objectives and management development. The CEO reports to the Board on succession planning, with a defined succession plan in place should the CEO, MDs or any of the senior management personnel need to be replaced. The CEO's

recommendation for his successor is known by the Board at all times. Succession planning is also performed across the Group to ensure continuity of the business. The CEO reports annually to the Board on the Group's programme and performance in respect of management development and employment equity.

Board committees

The Board is assisted by the following specialist committees: Audit, Risk and Compliance; Remuneration; Nominations; and Corporate Governance. Each committee has a formal charter which is reviewed annually by the Board. Detailed information on each of the committees is available from our website.

A brief outline of the role and responsibility of each committee is provided below:

Audit, Risk and Compliance committee

For details on this committee, please refer to the Audit, Risk and Compliance committee report on page 27.

Remuneration committee

For details on the composition and the role of the Remuneration committee please refer to the Remuneration report on page 29.

Nominations committee

The Nominations committee is chaired by the Chairman and members are only non-executive directors. The committee identifies and evaluates potential candidates for appointment to the Board and has strict guidelines on the qualities required of directors. These qualities include being tough-minded, independent and objective, as well as being loyal to the principles and values upon which the Group is built.

Corporate Governance committee

The Corporate Governance committee is chaired by the Chairman and other members are non-executive directors and the Company Secretary. The committee ensures that corporate governance structures are in line with national and international standards, and are both appropriate and effective.

Accountability

The CEO is responsible and accountable to the Board for all Group operations, including Franklins from July 2010. He has a formal role description (with limits

Corporate governance – Pick n Pay Stores Limited *(continued)*

of authority) from the Board, which is reviewed and reaffirmed annually. The CEO, who manages the Retail management board, appoints a managing director (MD) of Franklins and a director of Group Enterprises to assist in discharging this responsibility. The duties and responsibilities of the MD and director are also detailed in a formal role description, together with limits of authority, which are approved and reviewed annually by the CEO.

The Chairman's Executive committee (Exco), which comprises top management, helps the Board assess strategic opportunities and guides the management board's on principles of strategy and policy.

The Group's policy of decentralisation and flat organisational structure means that each region is managed autonomously. Each region has its own management team that manages operational, marketing and social responsibility budgets. Each store is responsible for its own results, responds individually to customer needs and is autonomous in its choice of social responsibility programmes.

Risk management

The Board has recognised the importance of an effective risk management process and has adopted an enterprise-wide approach to risk management. This has resulted in the Company investing in an Enterprise Risk Management (ERM) software package. Risks identified are captured and rated in the ERM package, which houses the Company's risk register.

The Board is responsible and accountable for ensuring that adequate procedures and processes are in place

to identify, assess, manage and monitor key business risks. The Board is assisted in its responsibilities by the Audit, Risk and Compliance committee, whose objective is to monitor, develop and communicate the process for managing risk across all divisions in the Group. The day-to-day responsibility for identifying, evaluating and managing risk resides with management. The risk management process, which is regularly assessed by the Audit, Risk and Compliance committee, involves a formalised system to identify and assess risk, both at a strategic and operational level. The process includes the evaluation of mitigating controls and other assurances in identifying and assessing the risks.

Risks are continually being identified and mitigated in terms of a process that involves allocating responsibility, developing action plans, and monitoring compliance with these action plans. Every employee has a role to play in this endeavour and in achieving the Group's goals and objectives. Risks are monitored and reported upon at quarterly management meetings, and in the Audit, Risk and Compliance committee meetings. The Group's annual internal audit plan incorporates the outcomes of the risk management process. Group Risk and Assurance Services (internal audit) provides a risk identification facilitation role. Management is responsible for managing risks on a daily and operational basis. The Group has developed a culture of identifying and managing risk. The internal audit plan is based on a risk-based audit approach.

The Group's assets are insured against loss, with cover being taken out above predetermined self-insurance levels. In a disaster recovery circumstance, business continuity plans will ensure the business continues with the least amount of disruption, both from an information technology and operational viewpoint. These plans are reviewed and updated regularly.

A summary of major risks and mitigation strategies is presented in the table below:

Strategic and market risk

Risk	Risk mitigation
Brand and reputation	The Group operates within a governance philosophy that seeks to protect and enhance our brands and reputation. A core to this philosophy is built upon the continued maintenance of ethical business practices and the highest level of integrity. Recent enhancements to the Pick n Pay brand have been achieved through the new fresh Pick n Pay logos, the relaunch of private label brands, the continuous improvement of the quality of fresh foods and the Pick n Pay Express stores initiative in partnership with BP. We are aware of the constant need to differentiate the brands from competitors in terms of service offering and product range and this remains a key focus area.

Strategic and market risk (continued)

Risk	Risk mitigation
Competition	The Group continuously monitors market trends and sets its strategy accordingly to ensure that Pick n Pay remains the market leader. Two main pillars of Group strategy is to defend and grow LSM 8-10 and bring Pick n Pay to LSM 4-7. The former has been achieved by listening to our customers and providing quality products and services at affordable prices. The latter has been achieved by the conversion of Score stores into black owned Pick n Pay franchise stores and the opening of further stores in that market, both of which have allowed us to increase our share of the LSM 4-7 market. Boxer is also becoming a major player in that market.

Financial risk

Risk	Risk mitigation
Volatility of profit margins	Market conditions and its effect on profitability are continuously reviewed by management and the Board. At all times, in an increasingly competitive marketplace, the drive for unit sales growth and cost efficiencies are the primary drivers to protect profit margins. The former is driven by a focus of striving for high levels of customer satisfaction.
Going concern	The going concern of the Group is reviewed by the Board at least twice a year and includes a review of adequate levels of capital to continue operations and implement strategy.
Liquidity and credit risk	The Group's balance sheet is categorised by high levels of liquidity and a low debt ratio, supported by high levels of cash generation. Increasing credit risk as result of an expanding franchise division is closely monitored and, where appropriate, remedial action taken. The Group's working capital liquidity is supported by committed banking facilities.

Operational risk

Risk	Risk mitigation
Product quality and third-party liability	Product safety and quality is carefully scrutinised by our internal quality control and food safety technicians. Where any indications exist of a product flaw, the product is immediately uplifted and returned to the supplier. Merchandise is purchased from reputable suppliers and house brand's safety and quality is carefully scrutinised by food safety technicians. Appropriate levels of insurance are in place.
Safeguarding of assets	Group assets are insured against loss and business continuity plans are in place, where required. Surveillance cameras in place which are monitored to ensure the safeguarding of assets.
Supply chain	Pick n Pay places much emphasis on forging good relationships with suppliers to ensure that the partnership is mutually beneficial to both parties. Electronic Data Interchange has recently been put in place to improve delivery and communication levels between Pick n Pay and suppliers. Central distribution has been embarked upon via Longmeadow to improve lead times and product quality, which falls in line with our longer-term strategy of moving towards regional central distribution.
Sustainable food supply	The Group is well aware of the effects of climate change on food supply and supports initiatives that promote sustainable food supply. Examples of this are our involvement with South African Sustainable Seafood Initiative and our extensive involvement in farming enterprise development.

Legislative risk

Risk	Risk mitigation
Compliance with legislation	Pick n Pay has an in-house compliance officer to monitor and assess impacts of legislation on the business. This department makes use of external specialists where necessary. Each region has a risk and compliance manager whose responsibility it is to ensure compliance with current and impending legislation.

Corporate governance – Pick n Pay Stores Limited *(continued)*

Code of conduct

The Group has endorsed a comprehensive code of conduct founded on the highest levels of honesty, integrity and respect. All employees are expected to comply with the code at all times. The Board confirms that systems and procedures have been implemented to entrench the values and ethics laid down in the code of conduct, and to monitor compliance with the code.

All new staff members receive training on the code of conduct at induction. These values are continuously instilled through ongoing communication and training. A function of the Human Resources division is to monitor compliance with the code across the Group, to follow up complaints, to review disciplinary measures and the outcomes thereof, and to ensure the consistent application of disciplinary measures.

Further information on our code is available on our website.

Dealing in Group company shares

All dealings in Pick n Pay Holdings Limited and Pick n Pay Stores Limited shares by both Company and subsidiary company directors (where required by the JSE) and the

Company Secretary are reported on the JSE Limited Securities Exchange News Service (SENS) within 48 hours of the trade having been made. Before these trades are entered into they must be preapproved by duly authorised directors of the company concerned.

In addition to the above JSE regulated approval process, all sales of Pick n Pay Group shares must be approved internally as follows:

- > The Chairman, by the lead non-executive director.
- > The CEO and other directors of the Board, by the Chairman.
- > Exco members, by the Chairman and the CEO.
- > Management board members and other senior executives, by the CEO and Head of Human Resources, respectively.

All employees and Group entities are not permitted to trade in the Group's shares during "closed periods" which start at the close of business on the last day of each financial reporting period and end with the publication of the respective result on SENS.

Party political support

While it is our policy to support social initiatives across party lines, we do not support any individual political party, financially or otherwise.

Directors' attendance at board meetings

Director	21 April 2009	12 June 2009	20 Oct 2009	22 Feb 2010	AGM 12 June 2009
RD Ackerman (Chairman to 1 March 2010)	P	P	P	P	P
GM Ackerman (Chairman from 1 March 2010)	P	P	P	P	P
NP Badminton (CEO)	P	P	P	P	P
W Ackerman	P	P	P	P	P
DG Cope (CFO)	P	P	P	P	P
HS Herman	P	P	P	P	P
C Nkosi	P	P	P	P	P
D Robins	P	P	P	P	P
BJ van der Ross	P	P	P	P	P
RSJ van Rensburg (appointed 30 June 2009)	—	—	P	P	—
J van Rooyen	P	P	P	P	P

P = Present

Aspects of King III under review

Over the next financial year the Board will consider application of the following King III proposals:

- > Whether the Board's performance will be evaluated independently.
- > The disclosure of the remuneration of the top 3 executives from 1 March 2010 (other than directors) in the Remuneration report.
- > Whether independent assurance of the sustainability report is required.
- > Whether internal audit will be the subject of an independent quality review. However we do perform an internal quality self-assessment using a toolkit developed by the Institute of Internal Auditors.



Audit, Risk and Compliance committee's report

This committee is chaired by and comprises only independent non-executive directors. In accordance with the requirements of the Corporate Laws Amendment Act No. 24 of 2006, members of the committee are appointed annually by the Board for the ensuing financial year and in compliance with King III will also be appointed by shareholders at the AGM.

The committee has a fixed mandate (terms of reference) which is reviewed and approved by the Board annually.



The composition of the committee and meeting attendance is as follows:

Committee member	Qualification	Date appointed	20 April 2009	19 Oct 2009
J van Rooyen (Chairman)	CA(SA)	June 2007	P	P
RSJ van Rensburg	CA(SA)	June 2009	—	P
BJ van der Ross	Attorney	June 2003	P	P

P = Present

The committee's general responsibilities include:

- > acting as a liaison between the external auditors and the Board;
- > the annual nomination of the external auditor for appointment at the AGM. Based on our review of the performance and independence of the external auditor, we recommend their reappointment at the AGM;
- > the annual determination of the scope of audit and non-audit services which the external auditors may provide to the Group;
- > the approval of the remuneration of the external auditors and assessment of their performance;
- > an annual assessment of the independence of the external auditors. The committee confirms that it is satisfied with the independence of the Group's external auditors and the designated auditor;
- > the receipt of and appropriate handling of any complaint relating to the accounting practices and internal audit of the Group or to the content or auditing of its financial statements, or to any related matter; and
- > performing other functions as determined by the Board.

Audit, Risk and Compliance committee's report *(continued)*

In respect of internal control, and internal audit, (through consultation with internal and external auditors); the committee:

- > reviews and approves the internal audit charter and audit plans and evaluates the independence, effectiveness and performance of the internal audit function and compliance with its mandate;
- > reviews the Group's systems of internal control, including financial controls, ensuring that management is adhering to and continually improving these controls. The committee confirms that it is satisfied that the Group has adequate internal controls in place, commensurate with its operations;
- > reviews significant issues raised by the internal audit process; and
- > reviews policies and procedures for preventing and detecting fraud.

In respect of risk management (through consultation with internal and external auditors), the committee:

- > ensures that management's processes and procedures are adequate to identify, assess, manage and monitor enterprise-wide risks; and
- > reviews tax and technology risks, in particular how they are managed.

The committee discharges its Board responsibilities by:

- > meeting at least twice a year to review the Group's financial results, to receive and review reports from

both the internal and external auditors, and to meet with management to review their progress on identifying and addressing key risk areas within the business;

- > reporting to the Board at the next meeting, which is always held within a week of the respective committee meeting;
- > meeting separately with the internal and external auditors to confirm that they are receiving the full cooperation of management; and
- > the committee Chairman meeting regularly with key executives to keep abreast of emerging issues.

The committee discharges all Audit committee responsibilities of all subsidiary companies within the Group. To help it discharges this responsibility to a Financial Review committee, chaired by the CFO, which reviews in detail the results of all material operating subsidiary companies with the external auditors and management of the respective subsidiary. This review committee reports its findings to the Group Audit, Risk and Compliance committee.

The external and internal auditors have unrestricted access to the committee and all of its members throughout the year.

Each year the committee must consider and be satisfied of the appropriateness of the expertise, experience and adequacy of the finance function and in particular the Chief Finance Officer and senior finance team.

In respect of the above, the committee is satisfied that the Company's finance function and in particular its CFO, Dennis Cope, possess the appropriate level of expertise and experience to fulfil its responsibilities to the Board and the Group.



Remuneration report

This report sets out the Group's remuneration philosophy, the implementation thereof and the guidelines and assumptions used when determining senior executives' pay packages. The report and the recommendations of the Remuneration committee have been approved by the Board and will be submitted to shareholders for consideration at the AGM. For detailed disclosure of the remuneration of directors please refer to page 54.

Remuneration committee

The Remuneration committee, which meets at least twice a year, is chaired by an independent non-executive director and comprises only non-executive directors. The committee is responsible for reviewing and recommending the remuneration of executive and non-executive directors and senior management, to the Board. The Remuneration committee bases its recommendations upon the achievement of certain Key Performance Indicators (KPIs) by senior executives and prevailing market conditions.

Remuneration committee meetings attendance

Director	20 April 2009	19 Oct 2009
HS Herman (Chairman)	P	P
GM Ackerman	P	P
BJ van der Ross	P	P

P = Present

Non-executive directors' fees

In respect of non-executive directors, the Remuneration committee proposes fees to be paid for the membership of the Board and board committees. Such fees are market related, commensurate with the time required to undertake their duties and are approved by the Board and shareholders. Such remuneration is not linked to the performance of the Group or its share performance.



Fees for the current year and proposed for next year are as follows:

	Proposed 2011 R	2010 R
Chairman of the Board	3 000 000	1 500
Lead non-executive director	95 000	88 000
Member of the Board	280 000	265 000
Chairman of the Audit, Risk and Compliance committee	235 000	220 000
Member of the Audit, Risk and Compliance committee	95 000	88 000
Chairman of the Remuneration committee	120 000	110 000
Member of the Remuneration committee	60 000	55 000
Member of the Nominations committee	53 000	50 000

Remuneration philosophy

The Group's philosophy is to remunerate its employees fairly in relation to the market and nature of services they provide. Employees may attract above market related remuneration in order to retain skills and experience. The Remuneration committee ensures that an appropriate portion of senior executives' remuneration is performance related. The committee considers KPIs when setting executive director and senior management's short-term incentives. In addition to cash remuneration (base pay, retirement and medical fund contributions, performance bonus, other fringe benefits), employees are afforded the opportunity to participate in Group share schemes, which align the interests of management to that of shareholders.

Remuneration report *(continued)*

Base pay

The Remuneration committee reviews the salaries of executive directors and senior management annually. They reflect the relative skill, experience, contribution by and performance of the individual.

Retirement and medical

Pick n Pay contributes a total of 16.48% of salary towards retirement funding of executive directors and employees. In addition, the Company also contributes to the medical scheme.

Performance bonus

Performance bonuses awarded to management are based on the Group and individual performance in achieving KPI targets such as budgets set by the Board, growth in headline earnings per share and milestones attached to the implementation of Group strategy.

Other fringe benefits

Executive directors and management are granted the use of a company vehicle which includes service and maintenance, fuel and insurance. Vehicle bands vary according to management levels. Management have the choice of accepting a car allowance in lieu of a company car which value is determined by the vehicle band associated to their level of management.

Share option scheme

All permanent employees participate in the Group's share option scheme. Share options are allocated for both years of service and status within the Group. It is the Group's philosophy to recognise all employees and to reward employees with a part ownership. Status share options have vesting conditions relating to years of service and can only be exercised when the vesting conditions are met. For further information on share schemes offered by the Group please refer to page 57.

The value of share options awarded to management is dependent on their level of seniority and the influence they may have over Group performance and strategy implementation. All options granted to executive directors and senior management are approved by the Remuneration committee and where appropriate may be linked to the attainment of certain share price growth hurdles. For further information regarding share options granted to directors refer pages 55 and 56.

Corporate governance – Pick n Pay Holdings Limited

This report considers the corporate governance of Pick n Pay Holdings Limited which is the controlling company of Pick n Pay Stores Limited. Please note that only principles specific to Pick n Pay Holdings Limited are dealt with here as the majority of the principles have already been discussed in the Pick n Pay Stores Limited Corporate Governance report above.

Directors

The Board comprises five directors who are all non-executive. In addition, there are three alternate directors who are available to step in for a non-executive director should the need arise. Three of the five non-executive directors are also non-executive directors of Pick n Pay Stores Limited and two directors are considered independent, which independence has been thoroughly scrutinised given their years of service on the Board.

As the Chairman, Raymond Ackerman, is not independent, Hugh Herman has been appointed as the Lead Independent Director (LID). All members of the board have unfettered access to the LID when required.

Appointment of directors

The process of appointment followed is the same as disclosed for Pick n Pay Stores Limited.

On appointment to the Pick n Pay Holdings Limited Board (the Board) a new director is required to retire and offer themselves for re-election to the Board by shareholders at the first AGM following their original appointment.

Board committees

The Board has appointed a separate Audit committee consisting of independent non-executive directors but it does not have separate Remuneration, Risk, Nomination and Corporate Governance committees as the tasks relating to these committees are undertaken by the Board as a whole.

Audit committee

The responsibilities of this committee are the same as those set out in the Audit, Risk and Compliance committee for Pick n Pay Stores Limited, except limited to its sole investment in Pick n Pay Stores Limited. The committee meets twice a year to review the results of the Group, to ensure that the governance processes in place for the Group are adequate and to ensure that the carrying value of its investment is recoverable. These findings are reported to the Board within one week of the meetings. Refer to page 31 for attendance of members at meetings.

Remuneration report

No separate Remuneration report is presented as the only remuneration paid by the Company is director's remuneration which is approved by the Board as a whole.

Fees for the current year and proposed for next year are as follows:

	Proposed 2011 R	2010 R
Member of the board not serving on the Pick n Pay Stores Limited Board	53 000	50 000

Aspects of King III under review

Over the next financial year the Group will consider application of the following King III proposals:

- > The Pick n Pay Holdings Limited Board of directors currently does not comply with the minimum requirement of two executive directors per King III. In this regard, the Company has been granted dispensation by the JSE as it is felt that there would be little benefit obtained from the appointment of executive directors as the Company has no material operating activities other than the receipt of and payment of dividends and assessment of the carrying value of its only investment in Pick n Pay Stores Limited.
- > The majority of the directors are not independent and the structure is currently under review by the Board.
- > The appointment of a third member of the audit committee.

Directors' attendance at meetings

Board meetings

Director	21 April 2009	12 June 2009	20 Oct 2009	22 Feb 2010	AGM 12 June 2009
GM Ackerman (Chairman to 1 March 2010)	P	P	P	P	P
RD Ackerman (Chairman from 1 March 2010)	P	P	P	P	P
W Ackerman	P	P	P	A	P
RP de Wet	P	P	P	P	P
HS Herman	P	P	P	P	P

Audit committee meetings

Director	Qualification	Date appointed	20 April 2009	19 Oct 2009
RP de Wet (Chairman)	CA(SA)	June 2008	P	P
HS Herman	Attorney	June 2008	P	P

P = Present

A = Apology

